Amal Jyothi College of Engineering

Kanjirapally, Kottayam Dist., Kerala 686518

Affiliated to Mahatma Gandhi University, Kottayam, and

Approved by All India Council for Technical Education, New Delhi

SELF - STUDY REPORT

Submitted to

National Assessment and Accreditation Council (NAAC), Bangalore

March 2015

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PREFACE

Amal Jyothi College of Engineering (AJCE), Kanjirapally, Kottayam Dst., Kerala, approved by the AICTE and affiliated to Mahatma Gandhi University, Kottayam, was founded in 2001 and is managed by the Catholic Diocese of Kanjirapally. The institution is the realization of the vision of the Management to provide quality engineering education to aspiring students of Kerala, particularly from the eastern regions of the State with a good percentage of the population belonging to minority communities. The College is nestled in the green highlands of Kottayam district famous for rubber plantations. The calm and quite ambience of the College is ideal for academic pursuits. Banking on the divine direction of the Sacred Heart of Jesus and the benefaction of Mother Mary, the College champions her commitment to molding full-fledged engineers to drive the country through the twenty-first century.

The far sighted educational vision of the Management has given a sense of direction to the development of the College over the years. AJCE strives to realize its vision of becoming 'a transformational leader in engineering education, facilitating and celebrating the holistic blossoming of life in abundance'. The institution's growth is guided by the spirit of being a 'learning organization' which incorporates the praxis of Prayer, Reflection and Action in various processes. Amal Jyothi College has seven strands of distinction which interweave to make it *a college extraordinaire.*

The Spiritual Ethos: Catholic spirituality animates the campus which has four centers of learning-the College Chapel, the Library, classrooms and the laboratories. The hostels are managed by dedicated priests and nuns meticulously helping the inculcation of a humane value system. The institution is free of party politics and has a history of being a zero-strike campus. It admits students irrespective of their caste, creed or locality, the prime criterion being academic merit.

Syllabus Supplements & Skill Building: The syllabus prescribed by the University is complemented and supplemented by additional inputs by the College by way of add-on courses, trainings and skill development programs.

Social Commitment and Community Involvement: Amal Jyothi, as an organizational citizen of India, inculcates social commitment in her students and simultaneously contributes to the local community through Campus-Community partnerships, outreach programmes, critical interventions in social issues, like Child Rights and Safety, Community College etc.

Academic Quality and Facilities: AJCE ensures quality in student-centric teaching and learning, producing commendable results at the University level and promoting research culture among the faculty and students. The College has excellent facilities to enable this: Wi-Fi and technology-enabled classrooms, ergonomically designed classrooms and furniture, networked computer labs

with systems, and the central library with books and journals, Network Resource Centre, staff rooms with computers and reprographic facility, Audio – Visual conferencing facility, Discussion rooms, Guest House, Hostels for gents and ladies accommodating approximately 2300 students etc.

Teacher-Student Relationship: Students are cared for at a personal level and this has paved the way for a warm relationship between students and teachers. Academic and personal support/ mentoring are given to the students on the campus. The majority of teachers of the College are between 30 and 40 years of age, which helps them to easily build a healthy rapport with the youngsters.

Activity-filled Vibrant Campus: AJCE is a happening campus offering the learning community with a wide range of extra-curricular activities to choose from. There are Clubs (technical and cultural), student associations, NSS, sport fests, tournaments, festivals and celebrations, campaigns and many other common initiatives and schemes by the students, for the students.

Climate: The College, cradled in the lap of nature's luxury, is located on the eastern side of central Kerala, in a misty location where the temperature ranges from 20^0 C to 35^0 C. The sprawling rubber plantations in the region give an ideal green locale conducive for learning. Nature exquisitely complements the institutional climate of AJCE.

The process of NAAC accreditation has significantly influenced the continuous quality enhancement of Amal Jyothi. Taking the clue from the revised NAAC Manual for Self – Study Report, AJCE has enhanced the quality improvement processes on the campus from a systems perspective. The various systems evolved by the IQAC are at different phases of implementation. Through these quality assurance systems which sustain and enhance quality, by getting new programs sanctioned by the Government/University, and by taking steps to attain Autonomous Status, AJCE is progressively improving her capability to achieve her vision, viz., to be a centre of excellence in technical higher education. The AJCE family - the Students, the Teaching and Administrative staff, other stakeholders and the Management of the College - is working together to live up to the motto 'Information, Formation and Transformation'.

With the decision to go for accreditation by the NAAC, Amal Jyothi is taking another significant stride on her path of excellence. The College, under the leadership of the Principal, has formed seven Criterion Committees and a Steering Committee to lead the process of accreditation. The accreditation process has been a reflective exercise throwing light on the strengths of the institution and also on the areas which need further improvement. This retrospection has helped Amal Jyothi to rededicate herself to build on her strengths, to explore new pastures for development, and to transform problems into prospects.

EXECUTIVE SUMMARY

1. Curricular Aspects

The Vision of Amal Jyothi College of Engineering (AJCE) is to be a centre of excellence in technical higher education, research and support services, capable of making significant contribution to individual and societal empowerment. The vision, mission and the objectives of AJCE are widely presented through the college website, official blog and numerous college publications. The curriculum implementation process of the institution starts with an Annual Academic Planning and Calendar for the year, which are strictly followed. Several procedural and practical supports are provided by the institution in the course of curriculum planning and implementation. Preparation of Course Plan, Engagement of Course coordinators, Class teachers and Mentors, appointment of a Controller of Examination, Industry/agency internships, Networking and signing MoUs with international universities and national level non-government organizations, assignment of projects to senior students and engagement of a host of practitioners/experts as Senior Faculty are some of the strategies for effective curriculum implementation at the College. Timetables, course plans and portions covered daily are entered in the Academic Enterprise Solution (AES) software which is developed in-house. The AES monitors the student attendance and progress in teaching and is accessible to all the stakeholders. Several faculty members contribute in the curriculum designing at the University level by being members of different Boards of Study. The College offers nine Undergraduate (B. Tech.) programs, eight Post-Graduate (M. Tech.) programmes and MCA in three streams, all under self-funded streams. The lacunae in the University curriculum are identified through a need assessment process and are dealt with by offering add-on courses, training programmes and entrepreneurial and creative engagements. Periodic reviews at the department level ensure the achievement of curriculum objectives.

2. Teaching-Learning and Evaluation

The admission process at AJCE is transparent and merit based. All seats are in the self-funded stream. 50% of B. Tech. seats (General Merit) are filled as per the State Government norms through CAP (Centralized Admission Process) and the rank list is published in the Government website. The other 50 % seats consist of Community and Management Quota which is filled as per the College policy of inclusion and merit based admission. Merit is based on Kerala Engineering and Medical (KEAM) entrance conducted by the State Government. Admission to M. Tech. is based on marks scored in the qualifying Examinations and GATE score/DTE Rank list. Admission to MCA course is based on the marks scored in the qualifying examination. Both advanced and slow learners are identified, with advanced learners given higher challenges and slow learners remedial support. Academic Enterprise Solution (AES) software at AJCE serves as a launching ground for academic planning, teaching-learning organization, scheduling evaluation

and overall planning. The IQAC team spearheads the quality initiatives in all aspects of teaching, learning and evaluation. Student–centric pedagogies are progressively adopted and ICT is increasingly integrated in the teaching-learning process. Several activities are planned and implemented for fostering critical thinking, creative and innovative engagements and developing scientific temper among students. The College provides an academic ambience for the growth of each student and offers excellent learning resource support for the achievement of optimal learning outcomes. The quality of teaching-learning process is evaluated by the course/class teacher and HOD at the department level and through interim audit by a team led by the Principal at the College level. The feedback taken is considered for the next year's academic planning. With regard to teacher quality, 7 percent of the faculty holds Ph.D. as the highest degree; 3 percent hold M. Phil., 83 percent hold M. Tech. and the rest 7 percent have Post Graduate degrees (M. Sc., M.A. or M.B.A. in Science, Humanities or Management). 44 percent of the teachers are ladies. The Faculty Development Policy of AJCE delineates provisions for enhancing teacher quality. Conscious efforts are made to identify growth needs and the same is used for planning faculty development programs. The College has a Faculty Development policy to streamline its faculty development activities. The policy aims at faculty empowerment for continuous improvement in teaching-learning, research, consultancy and extension, thereby transforming faculty members into Thought Leaders and AJCE into a Knowledge Centre.

3. Research, Consultancy and Extension

In order to foster a research culture, AJCE has instituted several incentives and support systems for conducting research studies and their output in terms of publications, patents and technology transfers. Commendable weightage is given to research output while identifying the best students and teachers. Financing students and teachers for implementation of research projects, publication of students' research etc. are some of the strategies utilized to encourage students and teachers. The College has spent about Rs.34 lakhs in the last five years, which is about one percent of its budget for research and project-related activities. The institution's collaboration with other national and international Universities and institutions is aimed at the promotion of joint research. An online Research Methodology course called 'Steps 2 Research' has been organized jointly with the IIT Bombay for PhD scholars. This was attended by participants from over 50 institutions in the country. During the assessment period, two DST research projects and two KSCSTE projects have been completed and 25 minor projects from different agencies are at different stages of completion. The College has given financial support to 57 student projects during the period. Amal Jyothi provides adequate research infrastructure including databases, Data Analysis Softwares, etc. Ten faculty members are recognized research guides of different universities and about fifteen faculty members are pursuing Ph. D. at different Universities/institutions. The Centre for Research and Extension in Sustainable Technology (CREST) is a Department that brings all R&D, consultancy and extension activities of AJCE under one umbrella, directed by Dean, Research. CREST with its five arms promotes student

projects, conducts annual project ideas contest, provides technical consultancy and design services to industries, computer-based projects and trainings, promotes national and international research collaborations, promotes research in nanomaterials etc. The College has a well-defined consultancy policy and provides technical consultancy and design services to industries, institutions and the general public. The areas of expertise of each faculty are announced through the college website. The policy frame work of Research, Consultancy and Extension envisions the development of the college into a top notch knowledge center which shares its knowledge and expertise with various stakeholders like related industries/ organizations/ institutions and communities.

4. Infrastructure and Learning Resources

The Master Plan of the College gives direction to the spatial/infrastructural planning and development in synchronization with the academic growth. AJCE provides excellent infrastructure required for an Engineering College. She enjoys technology-enabled learning spaces, network resource center, host of laboratories for various engineering disciplines, computer labs, language labs and a host of other facilities within the campus. Facilities for sports, physical fitness, health care, gymnasium, indoor and outdoor games and yoga are available. Hostel facilities are provided for men and women. A well-stocked, spacious central library with browsing facilities and numerous other services is available to students and members of staff. It houses 39080 volumes and subscribes 132 print journals. In addition, the library has a collection of 370 e-books and subscribes 262 e-journals. About 1200 computers and several licensed ssoftware are available in various labs for students. The campus is Wi-Fi enabled for the benefit of students and the faculty. The College possesses one main auditorium with a capacity of around 1000, and several smaller auditoria for the conduct of various functions like seminars, workshops, meetings etc. Extended lab and library working hours is another feature. Back-up generator of capacity 650 kW and a 100 kW solar power station are installed in the campus. For maintenance, monitoring and upkeep of the infrastructure an *Online Tracking System* is being experimented with. A well maintained, eco-friendly, plastic and litter-free campus is a unique feature of AJCE.

5. Student Support and Progression

College Calendar, prospectus and handbooks help in the dissemination of information regarding the support systems available to students. Students get the financial benefits declared by the Government from time to time. Over the last four years, 1001 students received scholarships worth Rs. 447.205 lakh and among them, 270 students received free-ships worth Rs. 35.23 lakhs from the College funds. A range of facilities such as health insurance coverage, first aid, fitness centre, support for slow learners, coaching for competitive exams, sports, games, entrepreneurial efforts and so on are available to students. Three professional Counselors are also present on the

campus. Support like career guidance and placement services, grievance redressal and other welfare measures are also made available to all students.

Data from the last four years shows an increase in the pass percentage of students. The dropout rates are negligible. AJCE is a happening campus, bustling with a variety of curricular, co-curricular and extracurricular activities. The College has an active Students' Council. The involvement of students in the IQAC team, library committee, department review meetings, 15 clubs and 9 departmental associations, best class evaluation committee, etc., make the campus vibrant. AJCE Alumni Association is very active and a warm rapport is maintained through Annual meetings, Alumni Blog, College website and Social media e-groups.

6. Governance and Leadership

The vision and the mission statements and objectives of the College give a long term perspective to its constituents and are pursued with a missionary zeal. The IQAC, under the leadership of the Manager and the Principal, has evolved and integrated the Amal Jyothi Quality Assurance System (AQAS) frame work for quality assurance, review and continuous improvement and brought it to its present and highly commendable level since its inception just over a decade ago. The review mechanisms of teaching- learning process are embedded in the AQAS, which is a framework for developing, implementing, monitoring and evaluating policies and plans of AJCE. *Vision 2025*, the Master Plan, is a collective focused dream which delineates the College's strategic steps to become a transformational leader in higher education. Operational autonomy in academic and administrative affairs is provided by delegating authority to Heads of each Department. Planning, scheduling and budgeting of activities are done at the department level following a participatory decision making process. The multifaceted stakeholder feedback system and external audit are tools to facilitate the flow of information for institutional review by the Management. The College level Grievance Redressal mechanism consists of a five-member team of which two are ladies, with the College Union Chairman representing the students.

The Faculty Development Policy reflects the Management's commitment to develop and transform teachers into thought leaders and to make Amal Jyothi a top-class knowledge center. As part of the performance management system, feedback data on faculty is drawn from the feedback system. The Personal and Professional Excellence Plan (PEP) offers a comprehensive format for self-appraisal of the members of staff. It helps them to identify individual areas of growth and to work towards it.

The IQAC spearheads quality initiatives in the College and makes efforts to convert AJCE as a learning organization by adopting a system of self-regulated continuous feedback and standards. Several suggestions by the IQAC have been approved and implemented by the Management. The IQAC has formed ten committees based on the NAAC criteria involving all faculty and administrative staff. The Students' Council Chairman is a member of IQAC as the student representative.

7. Innovations and Best Practices

Amal Jyothi College of Engineering has developed an environmental policy which states its commitment to protect and sustain ecological resources and their equilibrium, particularly within the campus. Conscious efforts are taken to inculcate a sense of responsibility towards the environment among students. For instance, Sustainability Focus is included as one of the graduate attributes. The environmental policy of the College underpins its commitment to environmental protection. The steps taken for making the AJCE campus environment friendly are: Various Energy conservation initiatives, Maximum use of renewable energy, Water harvesting, Check dam construction, Efforts for Carbon neutrality, Tree plantation cum gardening, Waste Management, Minimum use of paper, Plastic and litter-free campus etc.

A host of innovations are being implemented on the campus adding dynamism to the educational processes. AJCE has introduced many innovations in academics, student support, teaching quality assurance, personality development, institutional linkages, administration and other levels of college functioning to enable students to shape themselves in this fast changing educational scenario. All these make AJCE a unique college in every respect. Five best practices which have significantly contributed to the achievement of the institutional objectives and quality improvement are: Inculcation of Research Culture among the Faculty members and students, Student Mentoring Programme, Online Students' Feedback System, Academic Enterprise Solution (AES) and AJCE Educational Charitable Society (AJECS).

SWOC Analysis of the College

Strengths

- The vision, mission and objectives of Amal Jyothi College of Engineering are framed in clear terms.
- Committed management, faculty and staff for ensuring quality in every aspect of technical education.
- All academic programmes leading to professional degrees.
- Excellent infrastructure facilities, including classrooms, laboratories, library and other support facilities
- Very good ambience for teaching, learning, research and other curricular and extra-curricular activities
- Policies, systems and procedures in place for all the activities.
- Academic collaborations with reputed universities abroad and with NGOs at national and regional levels.
- Senior academicians serving as HODs and Directors of Academic departments and Centers
- Amal Jyothi Quality Assurance System (AQAS) being implemented for continuous improvement

- Curricular, co-curricular and extra-curricular programmes aimed at the holistic development of students.
- Institutional Commitment to develop avenues and networks for community-oriented activities.
- Financial support given to economically weak students.
- Conducive physical learning environment with state-of-the-art infrastructure.
- Mostly residential academic programmes; nearly 80% of students staying in hostels.
- Well-maintained hostels managed by dedicated priests and nuns.
- Young faculty profile (30 - 40 years in age)
- Salubrious climate and a happening campus
- Special efforts made to impart value education.
- Presence of multi-skilled and multi-talented students on campus.
- High level of discipline

Weaknesses

- The affiliated system which limits academic freedom of the College.
- Absence of family accommodation facility for staff on the campus.
- Lack of school and other facilities for the children of staff.
- Remoteness of the College from cities and facilities such as airport and railway connection

Opportunities

- Pro-active Management, committed faculty/staff and good quality students
- High rating of the College among engineering colleges in Kerala
- Well-positioned alumni across the globe who carry their alma mater in their hearts.
- MoU signed with 2 international universities and a number of national organizations and industries.
- Pleasant climate and exotic scenic beauty.
- Opportunities to design unconventional add-on courses and training programmes.
- Goodwill among industries, organizations and local communities.
- The newly approved autonomy policy of the Government.
- Opportunities to attract research funding from the Central and State government agencies

Challenges

- Continue attracting good students to the College in spite of the presence of a large number of engineering colleges in the State.
- Maintain the present high ranking among engineering colleges and to scale greater heights

- Attract and retain expert faculty at all levels
- Make a mark at the national level in the realm of research with high impact publications, patents and technology transfers
- Media and peer-group influence negatively affecting the academic orientation of students.
- Lack of autonomy inhibiting implementation of innovative academic programmes and administrative practices.
- Maintain excellence in engineering education despite the remote geographic location of the College.

PROFILE OF THE COLLEGE

1. **Name and address of the college:**

Name	Amal Jyothi College of Engineering
Address	Koovappally P.O.,
City	Kanjirappally, Kottayam Dst.
State	KERALA
Pin	686518
Website	www.amaljyothi.ac.in

2. **Address for communication:** Same as Above

Designation	Name	Telephone with STD code	Email and Mobile
Principal	Fr. Dr. Jose Kannampuzha	O: 04828-305503 R: 04828 251136	principal@amaljyothi.ac.in M: 09447870275
Vice Principal	--	--	--
Steering Committee Coordinator	Dr. Jacob Philip	O: 04828-305555/305 500	jacobphilip@amaljyothi.ac.in M: 09447762471

3. **Status of the Institution:**

Affiliated College	√
Constituent College	
Any other (specify)	

4. **Type of Institution: (By Gender)**

i. For Men	
ii. For Women	
iii. Coeducation	√

Type of Institution: (By shift)

i. Regular	√
ii. Day	
iii. Evening	

5. **Is it a recognized minority institution?**   Yes

6. Source of funding:

Government	
Grant-in-aid	
Self-financing	√
Any other [Bank Loan]	√

7.

a. Date of establishment of the college	27/06/2001
b. University to which the college is affiliated/ or which governs the college (If it is a constituent college):	Mahatma Gandhi University, Kottayam, Kerala

c. Details of UGC recognition: Not Applicable

Under Section	Date, Month & Year	Remarks(If any)
i.2(f)	N/A	Nil
ii.12(B)	N/A	Nil

(Enclose the Certificate of recognition u⁄s 2 (f) and12 (B) of the UGC Act)

d. **Details of recognition/approval by statutory/regulatory bodies other than UGC** (AICTE, NCTE, MCI, DCI, PCI, RCI etc)

Under Section /clause	Recognition/Approval details Institution/ Dept./Programme	Day/ Month/ Year	Validity	Remarks
i. 10(u) of AICTE act 1987	Electrical & Electronics Engg.	19/07/2008	3 yrs	NBA accredited
ii. 10(u) of AICTE act 1987	Electronics & Communication Engg.	19/07/2008	3 yrs	NBA accredited

(Enclose the recognition/approval letter)

8. **Does the affiliating University Act provide for conferment of autonomy?**
(As recognized by the UGC) on its affiliated colleges?

Yes [√]   No [ ]

If yes, has the College applied for availing the autonomous status?

Yes [√]   No [ ]

On 26 October 2013 the College applied for NOC for Autonomous status to the Government of Kerala. However, Govt. of Kerala is yet to take decision on it.

9. Is the college recognized?

    a. by UGC as a College with Potential for Excellence (CPE)?

Yes ☐   No ☑

    If yes, date of recognition:

    b. for its performance by any other governmental agency?

Yes ☑   No ☐

    If yes, Name of the agency NBA (AICTE) and

        Date of recognition: 19/07/2008 (dd/mm/yyyy)

10. Location of the campus and area in sq. mts:

Location*	Rural
Campus area in sq.mts.	2.63×10^5 sq. mts. (65 Acres)
Built up area in sq.mts.	1,20,180 sq. mts.

(*Urban, Semi-urban, Rural, Tribal, Hilly Area, Any other, specify)

11. **Facilities available on the campus (**Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities, provide information on the facilities covered under the agreement.

• **Auditorium/seminar complex with infrastructural facilities (✓)**

☐ **Sports facilities**

    ∗   Play ground   ☑

    ∗   Swimming pool   ☐

    ∗   Gymnasium   ☑

☐ **Hostel**

    Boys' hostel
        i.   Number of hostels   : 1 (Santhom Hostel for Boys)
        ii.   Number of inmates   : 1200
        iii.   Facilities (mention available facilities):
                Dining Hall, Chapel, Basketball court, Power Laundry, Waste water treatment plant, Wi-Fi internet connectivity, Central Kitchen

    Girls' hostel

    i. Number of hostels   : 1 (Amala Hostel for Girls)
    ii. Number of inmates   : 1200
    iii. Facilities Available:
Dining Hall, Chapel, Basketball court, Power Laundry, Waste water treatment plant, Drinking water filters, Newspapers to all the rooms, Telephone connection to all the rooms, Wi-Fi internet connectivity, Central Kitchen

∗ Working Women's hostel (A few rooms in the Girl's hostel are reserved for the faculty and staff)

☐	Residential facilities for teaching & non- teaching staff	√
☐☐	Cafeteria	√
☐	Health Centre	√

(First aid, Inpatient, Outpatient, Emergency care facility, Ambulance

Health Centre staff)

Holy Cross Hospital, a 30 bedded hospital, is just 100 meters away from the hostels.

Mary Queens Hospital, Kanjirappally, a 250 bedded one, with all modern facilities and

Ambulance service, is just 4 km away

Qualified Doctor	Full time	√	Part time	
Qualified Nurse	Full time	√	Part time	

- **Facilities like banking, post office, bookshops:**

  ➢ Extension counter and ATM of South Indian Bank and ATM of Federal Bank Ltd operate in the campus. Post box is provided at the main gate of the campus. Post office is situated 1 km away, at Koovappally. Stationery and books required by students are made available through the College Store. Reprographic Centre attached to the Central Library caters to the requirements of photocopying, scanning, binding reports etc.

- **Transport facilities to cater to the needs of students and staff:**
  ➢ About 80% of the students are hostellers and are staying in the two campus hostels at walking distance. 2 Nos. of 50-seated buses ply to the nearest main bus station at Kanjirappally for transporting staff and students in the mornings and evenings. Moreover, the college is located by the of the busy Kanjirappally-Erumely road with public transport buses plying very frequently.

- Animal House: N/A

- Biological waste disposal — Waste water Treatment plant is attached to the hostels.
- Generator or other facility for management/regulation of Electric supply and Voltage

The electrical power supply demand of the college is met through HT service connection from Kerala State Electricity Board, captive power generation and a 100 kVA solar power plant.

HT Service Connection

Voltage level at the point of commencement of supply is 11 kV. A 500 kVA transformer is available to step down the voltage from 11 kV to 440 V. Automatic tap changer is provided with the transformer to maintain rated voltage all over the college campus. Also 120 kVAR capacitor bank is in continuous service to compensate for voltage drop due to low power factor electrical equipments.

Captive Power Generation

There are three diesel generating sets of capacities 380 kVA, 160 kVA and 82.5 kVA. All the three DG sets are functioning with interlocking facility and auto changeover facility with (Auto Mains Failure) AMF system. Time delay in restoration of failed power supply is only 30 seconds.

100 kVA Solar Power Plant

Prime motive of the institution is to produce green energy for meeting the in-house power demand as much as possible. A 100 kVA solar power plant is in service since April 2013. Recorded maximum power production of the solar plant is 98 kW and energy yield is 551 units per day. Solar power plant is Grid Interactive type.

☐☐Solid waste management facility | √ |
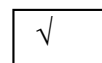
☐☐ Waste water management | √ |
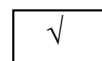
☐☐ Water harvesting | √ |
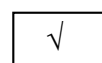
12. Details of programmes offered by the college (Give data for current academic year)

Sl. No.	Programme Level	Name of the Programme / Course	Duration in Semesters	Entry Qualification	Medium of instruction	Sanctioned /approved Student strength	No. of Students admitted
1	Under Graduate	B. Tech AUE	8	+2	English	240	209
		B. Tech CE	8	+2	English	480	487
		B. Tech CSE	8	+2	English	420	406
		B. Tech CHE	8	+2	English	60	63
		B. Tech ECE	8	+2	English	480	473
		B. Tech EEE	8	+2	English	240	221
		B. Tech IT	8	+2	English	240	180
		B. Tech ME	8	+2	English	450	454
		B. Tech MTG	8	+2	English	120	50
2	Post-Graduate	M. Tech CE (Str Eng & Cons Mngmt)	4	B. Tech	English	48	48
		M. Tech CE (Comp aided Str. Eng)	4	B. Tech.	English	48	48
		M. Tech CSE	4	B. Tech	English	48	36
		M. Tech Comm. Engg.	4	B. Tech	English	48	48
		M. Tech Power Electronics & Power Syst.	4	B. Tech	English	36	33
		M. Tech Energy Sys.	4	B. Tech	English	48	48
		M. Tech MD	4	B. Tech	English	36	20
		MCA (3 Streams)	4/6/10	BCA/+ 2	English	180	163

13. Does the college offer self-financed programmes?

Yes ☑   No ☐

If yes, how many?   UG: All 9; PG: All 8

14. New Programmes introduced in the college during the last five years if any?

Yes	√	No		Number	10

15. **List the departments**: (respond if applicable only and do not list facilities like Library, Physical Educations departments, unless they are also offering academic degree awarding programme. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty/ Dept.	Programmes	UG	PG	Research
Engineering	Dept. of Automobile Engg	√		
Engineering	Dept. of Chemical Engg	√		
Engineering	Dept. of Civil Engg.	√	√	
Engineering	Dept. of Computer Science Engg.	√	√	
Engineering	Dept. of Electronics & Communication Engg.	√	√	
Engineering	Dept. of Electrical & Electronics Engg.	√	√	
Engineering	Dept. of Information Technology	√		
Engineering	Dept. of Mechanical Engg.	√	√	
Engineering	Dept. of Metallurgy Engg.	√		
Computer Application	Dept. of Computer Applications		√	
Basic Sciences				√
Humanities				

16. **Number of programme offered under (Programme means a degree course like** BA, BSc, MA, M Com…)

    a.   Annual system   Nil

    b.   Semester system   17

    c.   Trimester system   Nil

17. **Number of programmes with**

    a.   Choice Based Credit System

    b.   Inter/Multidisciplinary Approach

    c   Any other   17

18. **Does the college offer UG and/or PG programme in Teacher Education?**

    Yes   No √

If yes,

a. Year of Introduction of the programme (s): N/A
(dd/mm/yyyy) and number of   batches that completed the programme:

b. NCTE recognition details (if applicable)

Notification No. : N/A   Date: N/A
Validity: N/A

c. Is the institution opting for assessment and accreditation of Teacher Education programme   separately?

Yes ☐   No ☑

19.   Does the college offer UG or PG programme in Physical Education?

Yes ☐   No ☑

If yes, a. Year of Introduction of the Programme(s)…………………(dd/mm/yyyy) and the number of batches that completed the programme ☐

b. NCTE recognition details (if applicable)

Notification No.: N/A   Date: N/A   Validity: N/A

c. Is the institution opting for assessment and accreditation of Physical Education programme separately?

Yes ☐   No ☑

20.   Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Tech	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University /State Government Recruited	0	0	0	0	0	0	0	0	0	0
Yet to recruit	0	0	0	0	0	0	0	0	0	0
Sanctioned by the Management/society or other authorized bodies Recruited	21	4	3	2	104	94	27	11	59	12
Yet to recruit	0	0	0	0	0	0	0	0	0	0

*M-Male*F-Female

21.   Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
Permanent teachers							
D.Sc./D. Litt							
Ph.D.	9	1	1	2	2	1	16
M. Phil		0			2	6	8
PG	12	3			102	87	204
Temporary teachers							
Ph.D.							
M. Phil.							
PG							
Part-time teachers							
Ph.D.							
M. Phil.							
PG	3	1					

22. Number of Visiting Faculty/Guest Faculty engaged with the College.
Hum- 3,   CE - 1

23. Furnish the number of students admitted to the college during last four Academic years.

Categories	2011-12		2012-13		2013-14		2014-15	
	M	F	M	F	M	F	M	F
SC	1	1	10	6	15	8	19	13
ST	0	0	0	0	1	0	0	1
OBC	48	51	90	74	100	66	108	106
General	327	286	323	292	384	289	383	309
Others	0	0	0	0	0	0	0	0

24. Students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph. D.	Total
Students from Kerala	606	223	0	0	829
Students from other states of India	0	0	0	0	0
NRI students	110	0	0	0	110
Foreign students	0	0	0	0	0
Total	716	223	0	0	939

25. **Dropout rate in UG and PG (average of the last two batches)**

UG: 3.72%   PG: 2.38 %

26. **Unit cost of Education**

(Unit cost=total annual recurring expenditure (actual) divided by total

Number of students enrolled)

a) **Including the salary component**

| Rs. 54205/- |

b) **Excluding the salary component**

| Rs. 18621/- |

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes [ ]   No [√]

If yes,
a) Is it a registered centre for offering distance education programme of another university?

Yes [ ]   No [√]

b) Name of the University which has granted such registration.

[ ]

c) Number of programme offered

[ ]

d) Programmes carry the recognition of the Distance Education Council.

Yes [ ]   No [ ]

28. Provide Teacher-student ratio for each of the programme/course offered:

Course Name	Teacher –Student ratio
B. Tech	1:15
M. Tech	1:12
MCA	1:15

29.   Is the college applying for?

Accreditation: Cycle1 $\boxed{√}$ Cycle 2 $\boxed{}$ Cycle 3 $\boxed{}$

Re Assessment:- $\boxed{}$

30.   Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle1: ....   Accreditation Outcome/Result ....

Cycle2: ....   Accreditation Outcome/Result

Cycle3: Accreditation Outcome/Result

*Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an Annexure.

31.   Number of working days during the last academic year.

$\boxed{\text{220 Days}}$

32.   Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged, excluding the examination days)

$\boxed{\text{190 Days}}$

33. Date of establishment of Internal Quality Assurance Cell (IQAC): 01 July 2014

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC: Not Applicable

35. Other relevant data (not covered above) the college would like to include

NIL

CRITERIA-WISE ANALYTICAL

REPORTS

CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

1.1.1 Vision, Mission and Objectives of the College and the Modes of Dissemination

1. Vision

To be a centre of excellence in technical higher education, research and support services, capable of making significant contribution to individual and societal empowerment.

2. Mission

To create technically qualified world-class professionals with social commitment through career-oriented courses conducted by high-profile faculty, complemented with globally interactive learning processes and leading-edge technology.

3. Institutional Objectives

Amal Jyothi College of Engineering (AJCE) has committed objectives to excel in higher education through diversity in courses offered with expansion of infrastructure and perfection in teaching to:

- Mould our graduates to meet the global needs
- Promote value-based education to students by developing them to be recognized and responsible persons through mentoring, counseling and providing proper guidance.
- Augment students' employability skills by improving their command of English language and providing soft skills training.
- Boost the competency of students to prepare them to face the challenges of the changing world.
- Encourage industry-academia interactions and establish a full-fledged research centre for R&D activities in various engineering disciplines.

4. Dissemination process of the Vision, Mission and Objectives of the College

The Vision, Mission and the Objectives of AJCE are communicated to the stakeholders by various means as follows.

- The vision and mission statements are displayed in the main reception area of the college and at strategic locations in each building, and prominent locations in the departments.
- They are also communicated through various media like college website, prospectus, college calendar, college newsletter (Amalites), departmental brochures and student diary.
- They are also highlighted during the student and faculty induction/orientation programmes, parent-teacher meetings and other important socio-cultural gatherings.
- They are emphasized during meetings by the Manager and the Principal with faculties and staff.

1.1.2 Development and deployment of action plans for proper Curriculum Implementation

For effective implementation of the curriculum, AJCE systematically designs and develops effective action plans. Since AJCE is affiliated to Mahatma Gandhi University, it follows the curriculum prescribed by the university. To meet the global challenges we have included additional training programs in our planning. We are governed by the decisions and guidelines framed by the governing body, advisory body and academic council of the College. The major plans in all aspects are discussed in these higher level committees and are dispensed and discussed even down to the bottommost stakeholders through various levels of meetings and the opinions are considered before implementing the same. We have biweekly (usually alternate Wednesday afternoons) Academic Council meetings chaired by the Principal to discuss the various academic and administrative matters of the College. It discusses the actions implemented and things pending to be done and also suggests methods to improve them. In this meeting Deans and the Heads of core Departments (HODs) and other allied departments are actively involved. In general, the following action plans are implemented.

- Curriculum prescribed by the university is meticulously followed.
- From the scheme, subjects are allotted to the faculty based on their specialization by the Head of the department well in advance and they are asked to submit the detailed course plan including the course outcome, its mapping with the program outcome, assessment schedule, assignment schedule and examination questions.
- Predefined college calendar and academic calendar are given to the faculty and students.
- Timetable is prepared and published in advance. It includes additional courses.
- Principal's meeting with the HODs and the Faculty at the beginning of every month
- Regular meetings of the HOD with members of the faculty to develop academic plans based on the number of available days
- Each member of the faculty maintains the lesson plans and course file which are reviewed by the respective HOD and the Principal

- Dean Academic reviews the weekly academic progress report by each faculty member and monitors the progress of the syllabus
- Timetables, course plans and daily covered portions are entered in the Academic Enterprise Solution (AES) software which is developed in-house. AES monitors the student attendance and progress in teaching and is accessible to all stakeholders.
- Unexpected loss in working days is compensated by working on available Saturdays.
- Class teachers, mentors and student counselors ensure good attendance and class performance.
- After each internal examination, results and the performance are evaluated in class committees, department meetings and the Academic Council and remedial measures are initiated.
- Parents are informed about the performance of students by phone, email etc., and parent-teacher meetings are convened during each semester.
- LCD Projectors are provided in each class room.
- Evenly distributed regular assignments, class tests, internal examinations and quizzes
- Central/Departmental Library and e-resources
- Industrial visits/Educational tours are conducted
- Arranging remedial classes for academically weak students to raise their academic performance.
- Cash awards to semester toppers of each class
- Toppers in University Examinations are awarded merit certificates under Director's / Principal's honors list.

1.1.3 Support to faculty members for optimum Implementation of Curriculum and for Improving Teaching Practices

1. Support from the University

Affiliation and approval of the course are given by the university. Curriculum, Scheme, Schedule, Syllabus including course objectives, total credit, text books /reference books to be followed and the evaluation pattern are also provided by university. Academic calendar and examination calendar are prepared and published. End semester examination is conducted and the degree is offered by the university. The University encourages the teaching staff to attend syllabus revision meetings, examination board meetings and centralized valuation camps.

2. Support from AJCE

Subjects are allotted well in advance. Proper guidance is given to prepare the course plan, allowing flexibility in handling the subjects including the assessment schedule, evaluation and internal marks. Teachers are permitted to attend Faculty Development Programmes (FDP) in various subjects to enable them to effectively translate the curriculum in such a manner that the students will readily grasp the finer points in addition to the routine aspects of the subject. The college organizes FDPs funded by the College as well as by the AICTE etc. Teachers with 100% results are acknowledged and motivated through financial incentives and citations at public meetings. All Faculty members are encouraged to apply for the funding projects, publishing papers and attending international conferences and various academic programs inside and outside the campus. During faculty appraisal, the results, teaching aids and the number of FDP attended are considered. The best faculty is awarded at various cadre levels.

For effective teaching AJCE provides the following:
- Academic calendar, timetable, schedule of activity including internal exams and evaluation pattern are given well in advance.
- Good ambience and well ventilated class rooms equipped with LCD Projectors
- Uninterrupted power supply and solar power
- Seminar rooms in each department to conduct of guest lectures, seminars etc
- Induction programs for the newly joined members of different faculties
- Compulsory English speaking on the campus by staff and students
- Wi-Fi in the entire campus and hostels
- Personal computers/printers to staff and also in the departmental staff rooms with internet facilities
- College transport for faculty members and students
- Well equipped labs
- Awards to teachers for securing 100% pass in their subject
- Conduct of Faculty Development Programmes (FDP), Workshops, Seminars, Refresher courses, Ekalavya (an e-Outreach program in collaboration with IIT, Bombay; details given in 1.4.4) etc
- Freedom to close monitoring of the students and interaction with parents.

1.1.4 Institutional Initiatives for Effective Curriculum Delivery and Transaction

For effective curriculum delivery, the following initiatives were taken up by AJCE:
- Publication of the semester timetable in advance
- Advance course preparation by the faculty depending on available time

- Weekly workload monitoring.
- AES software to monitor the progress of the course
- Issue of student journal to record the day to day activities by each student
- Regular Class tests, Assignments, Quizzes.
- Examination Cell in each department
- Library with NPTEL video lectures
- Mentor for every 20 students
- Regular monitoring of class attendance and teacher-parent-student interaction
- Counseling and remedial classes for weak students
- Scholarships to meritorious and needy students
- Scholarships worth Rupees 1.8 crore for top ranking students by the AJCE management
- Interim/semester student feedback on teacher quality.
- Students are encouraged to do research and funded innovative project work under I^2U and IEDC.
- Uninterrupted power supply backed by solar and diesel generators provided during working hours.

1.1.5 Institutional Interaction with Beneficiaries for Effective Implementation of the Curriculum

To supplement the knowledge of students beyond the syllabus and to gain knowledge on the recent trends, the following actions are taken up by AJCE:

- Prior to the commencement of the course, the curriculum is discussed with students and parents.
- Students' progress is intimated to parents frequently.
- Class committee meetings are conducted and their views are also considered for the improvement process.
- Annual general body and semester-wise, class-wise PTA meetings are conducted.
- Regular guest lectures and seminars by eminent personalities from industry and academia.
- Faculty members are encouraged to become members of various professional bodies
- Sponsored projects funded by Research Organizations
- Live projects based on the need of industries are undertaken
- Students are sent for training/project work to industries or research labs as part of industry-academia interaction.
- Collaboration with national and foreign Universities
- MoU with Industry and other research institutions, for academic collaboration

- AJCE has a Placement Cell which networks and interacts with the representatives of industry. The HR managers and industry professionals regularly visit the campus to interact with the students on career challenges, opportunities and for recruitments.
- The following institutions have inducted our students: TCS, Infosys, Accenture, UST Global, IBS, Cogniszant, HCL, Verizone, Birlasoft, Satvam, Spectrum, Wipro, Siemens, Omnex, Huawei, Sube, Syntel, MRF, NTPC, Indian Navy, Indian Air Force, Gulfar, South Indian Bank, Everest, L&T etc

1.1.6 Institutional Contribution to the Development of Curriculum by the University

Based on the stakeholders' feedback and the decision of the Academic Council, new courses are suggested and got approved by the Board of Studies of the University. The mechanisms for obtaining feedback from the stakeholders are:

Feedback from Students
Regular feedback from students is obtained in the middle of each semester in standard online format. Interim feedback is collected at random from 10 students in each class by the HOD.

Feedback from Alumni

Feedback from the alumni is taken during the annual alumni meet in December every year or whenever they visit the campus to collect their certificates, testimonials and recommendation letters etc.

Feedback from Parents
Feedback from parents is taken during the PTA meetings held in each semester or their visit to the College.

Feedback from Recruiters / Industries
The feedback is collected from the employers and industries during the placement interviews, visit of faculty to industries for evaluation of student projects and during project interactions.

Curriculum is designed based on need-based assessment from the feedback of stakeholders and the mechanisms used in the design and development of curriculum are based on the inputs from other national technology institutions and current technologies. During syllabus revision meetings of the University our faculty also attend the meetings and our views also are considered.

New Courses added to MG University curriculum under our initiative are:
- B. Tech – Metallurgy
- B. Tech – Chemical Engineering
- M. Tech – Nanotechnology
- M. Tech – Energy Systems
- M. Tech – Power Electronics and Power Systems
- M. Tech – Communication Engineering
- M. Tech – Construction Management & Structural Engineering

1.1.7 Institutional Efforts and Process of Designing Supplementary courses at the College

AJCE offers a good number of add-on courses highly useful to students and the local community to enrich their competence in the challenging job market. Curriculum for the courses is designed and developed on need-based assessment. The following are a few of them:
- Post SSLC and post diploma skill development programmes in collaboration with industries with the approval of the Department of Technical Education (DTE).
- Training technicians and supervisors as per industry requirement.
- Curriculum developed for the following courses
  - LabView
  - Communication skills
  - CNC Machining
  - CAD
  - Total Station
  - ASNT Level II Certification
  - Aptitude training

1.1.8 Implementation of Curriculum and ensuring the Achievement of stated Objectives

The institution ensures that the stated curriculum objectives are achieved through:
Formal systems for review:
The HOD verifies the course plan submitted well in advance, and monitors its progress regularly and weekly update is given to the Dean (Academic). From the students' journal, interaction with the students identifies the gap between the planning and its implementation.
Evaluation procedures aligned with course objectives:
Interim feedback from selected students, and the end of semester feedback and meeting with the principal
Collecting Feedback:

Discussed in the Academic Council regarding shortfalls in planning and suggests improvements.
Support Mechanisms for enhancing student achievement:

The mechanism for measuring the course objectives are:
- Percentage of pass
- Number of placement by campus recruitment
- Number of students employed within one year of passing out
- Number of students engaged in entrepreneurship.
- Number of students opted for higher education

1.2 Academic Flexibility

1.2.1 Certificate/ Diploma /Skill Development Courses Offered at AJCE

Certificate Programmes

In order to equip the students with confidence and competence and to prepare them for their career-building, knowledge enhancement and improvement in quality of their life, various value-added certification courses are offered by various departments.

Skill Development Programmes
- English Fluency Course- BEC (Business English Certification),IELTS
- Foreign Language Course – German
- Instrumental Music classes
- Karate/Yoga classes
- Cookery courses

Technical Skill Development courses
- Amal Jyothi Driving Academy
- ASNT Level II Certification
- Finishing School
- Spoken Tutorials

1.2.2 Twinning/Dual Degree programmes
- We have introduced Dual degree MCA, integrating BCA and MCA in the College.

1.2.3 Institutional Provisions for Academic Flexibility

Range of Core / Elective options offered by the University and those opted by the college

AJCE offers 9 four-year Bachelor of Engineering programmes, 8 M. Tech programmes and MCA (in three streams). Each program has mandatory core courses and selected elective courses. Electives are chosen based on the students' interest, industry requirements etc. The College has no choice in the core or elective offered by the University. However we can offer the elective as per the students and industrial needs.

- Students have options to choose any elective from the given list of electives in 6th, 7th and 8th semesters.
- Students have the option to choose a global elective from the given list in the 8th semester.

Choice-based Credit System and Range of Subject Options

- We have semester based credit systems. Options are available only for choosing electives from the list

  - **Courses offered in modular form**
    The courses are offered in 5 modules

  - **Credit transfer and accumulation facility**
    Credit earned from the first semester to the 8th semester is used for awarding the degree, following University regulations in this regard.

  - **Lateral and vertical mobility within and across programs and courses**
    - At the end of the first year students have option to migrate to other departments.
    - Students have options to do interdisciplinary projects with guides from other departments.
    - MCA Lateral Entry (Direct admission to 3rd semester for BCA/B. Sc Students)

  - **Enrichment courses**
    - Option to do internship / industry project in leading national research agencies and industries during the final semester in lieu of doing projects within the department.
    - Tie up with Oracle Academy (CSE Department) - To provide virtual training through Oracle websites
    - Civil Service Academy
    - Soft Skill Development programmes
    - Technical Skill Development programmes
    - Management Development programmes
    - Regular Industry visit for familiarizing with industry practices
    - Entrepreneurship Awareness camps
    - Patent and IPR awareness programs.

1.2.4 AJCE's Self-financed Programmes

Courses offered and Admission Formalities
- All the courses offered by the College are self-financing programmes.
- The policies regarding admission are governed by the State Government rules and those framed by the Management.

Curriculum and Fee structure
- Curriculum is prescribed the university. Fee structure is fixed as per Management decision with the approval of James Committee constituted by the State government/ management.

Qualification of Faculty members and salary

- Teacher qualification and salary are as per the norms of UGC/AICTE

1.2.5 Career enhancing Skill-based Programmes

The following career enhancement programs are currently offered at AJCE.

No	Programmes and Systems for Skill Development	Beneficiaries
1	Foreign language classes	Regional & Global
2	English Fluency Course	Regional & Global
3	Entrepreneurship Awareness Camps	Regional & Global
4	Add on Courses	Regional & Global
5	Aptitude training	All stake holders
6	Career guidance and placement training	All stake holders

1.2.6 Endeavors to converge face-to-face and Distance Modes of Education

The University does not provide provisions or flexibility to combine the conventional face to face mode of education with distance mode of education

1.3 Curriculum Enrichment

1.3.1 Efforts to Supplement University's Curriculum integrating AJCE's Goals

Curricular Additions

The following courses have been added to the affiliating University by the efforts of our College

No	Year	PG/UG	Course
	2009	PG	Communication Engineering
1	2009	PG	Power Electronics and Power Systems
2	2012	PG	Construction Management & Structural Engineering
3	2012	UG	Metallurgy
4	2013	PG	Energy Systems
5	2013	UG	Chemical Engineering
6	2014	PG	Nanotechnology

Co-curricular Supplements

- The University curriculum is followed.
- The faculty members complement the university curriculum with material to help students to be aware of the latest advances in the subjects.
- Gust/Invited talks, Assignments and Seminars
- Industrial visits

Extra-curricular Accompaniments

The following technical/non-technical events are conducted regularly for the students

- ➢ **Talent Eve** (organized by students)

- ➢ **Azure** (Technical, managerial and cultural fest organized by students - a platform to steer creative minds among youth)

- ➢ **Arena (**a four-day inter-engineering college Basketball tournament has been held in the College stadium every year since 2007**)**

- ➢ **Departmental Fests** (organized by each department)

- ➢ **Yuva Mastermind in technical partnership with Malayala Manorama** (Project contest for engineering students all over Kerala, and school students at high school and higher secondary school levels, held every year)

- ➢ **Engineers' Day**

- **National Science Day celebration** (National Science day on February 28 celebrated with lectures, science contests etc.)

- **Agon – CSE** (Interschool Quiz & Essay Contest organized every year by the Computer Science & Engineering Department

- **Club Activities** (Technical Clubs functioning in all Departments organize technical activities)

- **Tournaments**

- **Photography contest**

1.3.2 Augment Employability by enriching Learning Experiences

The institution facilitates the following programs to enhance learning experiences to meet the needs of the employment market

- ✓ **Industrial visits**

- ✓ **Add-on-courses beyond syllabi**

- ✓ **Aptitude Training in specific areas**

- ✓ **Micro, mini and major projects at three consecutive years**

- ✓ **Social service activities**

1.3.3 Integration of Crosscutting issues into the Curriculum

A few relevant events/programs and activities in this aspect on the campus are listed below:

Climate and Environment Issues
- Tree plantation
- Rain water harvesting
- In house vegetable cultivation
- Sewage treatment plant / water reuse
- Bio-gas plant
- Plastic free campus
- Green campus the whole year round

Human Rights & Social Awareness Programmes
- Legal awareness classes
- Anti-ragging cell

      o   Women's Cell
      o   Street play at Kanjirappally Private Bus Stand
      o   A candle-lit vigil to express solidarity with the Delhi rape victim.
      o   Anti-drug campaign

ICT Application for curriculum enrichment
- ✓ E-resources
- ✓ NPTEL video lectures
- ✓ GATE coaching (on-line mode)
- ✓ Open Source courseware
- ✓ LATEX training
- ✓ D-Space
- ✓ Wi-Fi enabled campus
- ✓ Dedicated OFC 60 Mbps
- ✓ AES (Academic Enterprise Solution)
- ✓ Use Massive Open Online Course (Mooc) in Moodle Platform

Gender Issues
- Anti-Ragging Cell and Grievance Redressal Cell are active on the campus.
- Women's Grievance Cell is monitoring issues related to gender equality.
- Women counselors
- Women's hostel on the campus
- Girls' retiring room on the campus
- Health club facilities for ladies and gents separately
- Ladies basketball team
- Equal representation to women in all student councils
- Ladies representation in PTA

1.3.4 Value-added Courses /Enrichment Programmes for Holistic Development of Students

Amal Jyothi has taken several steps to facilitate the full flowering of every student on its rolls. A list of such initiatives is given below.

Inculcation of Moral and Ethical Values

- Annual retreats for students and staff
- Holy Mass on First Friday of every month in the College Chapel
- Daily Mass and evening prayers in College hostels
- Morning Prayer before the start of the classes.

- Visit to old age homes, Blood donation, AIDS/Cancer awareness camps
- Amal Jyothi Educational and Charitable Society
- Support to Orphanages
- Financial support to critically ill persons
- Eco-friendly and plastic-free environment
- Celebrations of Onam, Christmas, New Year etc. to emphasize India's cultural heritage
- Staff tour
- Family get-together
- Campus blessing at the beginning of every academic year
- Student development scholarship fund instituted by the staff
- Voluntary contribution to AJECS
- Value based messages in strategic places on the campus
- A prayer hall for all communities

Life Skills Development Compatible to Employability

- Add- on Courses
- Recognizes the importance of life skills. AJCE organizes annual cultural, co-curricular and sports activities towards development life skills
- Activities of Jesus Youth
- Debate
- Personality development classes
- Amal Jyothi Institute of Civil Services
- IEEE Project presentation in conferences/paper presentations in contests organized at various colleges

Career Readiness

- Coaching for GATE Examination
- Placement training
- Amal Jyothi Institute of Civil Services
- Industrial training / internship
- Choice of electives
- Interaction with alumni
- IEDC (Innovation and Entrepreneurship Development Centre)
- Invited talks by eminent personalities from Industry / Academia
- On-line placement training (IPSR)
- Department Training and Placement Cell
- Campus recruitment by various companies like TCS, CTS, UST, Indian Navy, Omnex etc.
- TCS, CTS and UST have accredited the College for annual placement

Community Orientation Training

- Compulsory community service
- Lectures on different social issues.
- NSS camps
- Social survey on waste management
- Energy auditing
- Computer training for local community

Social and Charitable Outreaches

AJECS (Amal Jyothi Educational and Charitable Society) Activities

- House construction by AJECS
- Financial support for needy students and the public
- Compulsory community service
- Visit and interaction with old-age homes and orphanages

1.3.5 Enrichment of Curriculum through Feedback from Stakeholders

- Based on the feedback from stakeholders and the decision taken by the Academic Council of the College, new curriculum for new courses are designed by the faculty of the College and put up for the approval of the Board of Studies of the University.
- GATE coaching
- Foreign language courses
- Add- on Courses

1.3.6 Monitoring and evaluating AJCE's Enrichment Programmes

Feedbacks from students, parents, alumni and industry are obtained, analyzed and corrective measures are taken. The monitoring and evaluation of quality enrichment programs are done at the Department level. A faculty member is assigned to coordinate the enrichment programmes. The Coordinator monitors the implementation of each programme, its scheme of evaluation, conduct of examinations, announcing of results, collecting feedback and issuing certificates to students. The Principal conducts periodic reviews of the same.

1.4 Feedback System

1.4.1 AJCE's Contribution to the Design and Development of Curriculum prepared by the University

Members of the AJCE faculty are represented in the syllabus revision meetings of the affiliating university. Based on the feedback from stakeholders and the decision taken by the Academic Council of the College, new curriculums for new courses are designed by the faculty of the College and put up for approval of the Board of Studies of the University.

The faculty of AJCE has been instrumental in introducing the following courses in the College with the approval of the University. The curriculum for these courses has been designed by the faculty of the College and got approved by the respective Boards of Studies and Academic Council of M. G. University.

- B. Tech in Metallurgy
- B. Tech. in Chemical Engineering
- M. Tech in Communication Engineering
- M. Tech in Power Electronics and Power Systems
- M. Tech. in Construction Management and Structural Engineering
- M. Tech in Energy Systems
- M. Tech. in Nanotechnology

1.4.2 AJCE's Stakeholder Feedback System

All the teaching departments of the College collect feedback from the various stakeholders-students, alumni, industry, NGOs/agencies, academicians and parents. The feedback is discussed at Departmental reviews and used for bringing about changes in curriculum and its transaction. The general areas covered in the feedback are (i) Curriculum (ii) Teaching, Learning and Evaluation (iii) Infrastructure facilities (iv) Student support (v) Governance and Leadership

➢ **Students' feedback**

Feedback from students is received from the automated feedback on Courses and teachers, Exit Surveys, Department meetings in which students participate, Departmental Student Association meetings and during semi-formal and informal occasions (Open House and Walk and Talk).

➢ **Alumni feedback**

Alumni feedback is collected through online surveys, e- group interactions, Facebook groups, alumni website interactions and during alumni meets.

➢ **Feedback from parents**

Regular feedback is collected from parents during PTA meetings which are held class wise and commonly during course commencement and ending. Interactions during informal visits by the parents to the departments also give valuable insights.

➢ **Employability assessment from Industries/Companies**

Industry feedback is gathered during Industry Visits, Industry internship of students, Industry-Academia Interface arranged in different cities, industry experts visiting the campus,

Interaction with Experts from Industry who are members of the Board of Studies, faculty visits to industries as part of internship supervision etc

➢ **Faculty feedback**

Academicians who are invited to the campus, either as guest faculty or for lectures, provide valuable feedback on curriculum components and delivery. The academic tie-ups of the College with foreign universities, Interactions with the faculty in related disciplines in M.G. University and other universities also serve as sources of feedback on Curriculum, Research and related aspects.

➢ **Feedback from others**

Feedback from NGOs and other agencies is obtained in connection with student field work and other activities.

1.4.3 New programmes and Courses at AJCE and their Rationale

The following table describes the various new programmes added to the University Curriculum at the behest of AJCE.

No	Year	Details	Scheme	Intake
1	2009	Communication Engineering	M. Tech	24
2	2009	Power Electronics and Power Systems	M. Tech	18
3	2012	Metallurgy	B. Tech	60
4	2012	Construction Management and Structural Engineering	M. Tech	24
5	2013	Chemical Engineering	B. Tech	60
6	2013	Energy Systems	M. Tech	24
7	2014	Nanotechnology	M. Tech	24

Rationale

- To meet the changing industry demands
- To develop manpower with specialized skills in specialized fields of engineering and technology
- To encourage research and development among the younger generation in frontline areas of technology and science

1.4.4 Curricular Aspects: Other Relevant Information

AJCE has initiated several programs to develop research and innovation among students. A brief outline of these initiatives is given below:

A. R&D, Extension, Consultancy and Student Projects

Centre for Research and Extension in Sustainable Technology (CREST) is a Department that brings all R&D, consultancy and extension activities of Amal Jyothi College of Engineering under one umbrella, directed by Dean, Research. CREST currently has the following five arms:

Innovation and Entrepreneurship Development Center (IEDC)

- Conducts annual project ideas contest for students, called Innovation Ideas Unleashed (I^2U).
- Winning project ideas financially supported by the College and the Government
- A few Projects that won the top places in the All-India Innovation Hub project contest held in Kolkata are:
  1. Password Security System 2007 – First
  2. Electronic Wheelchair 2008 – First
  3. Solar Power-based Computerized Irrigation System 2009 – First
  4. Robot for Bore well Rescue 2010 – (2nd place)
  5. Cocobot – Coconut Plucking Robot 2011 (2nd place)
  6. E-diagnoser 2012 – First
  7. Xerobot- A Multi-purpose Automation Robot 2013 -Second prize
  8. Virtual-I 2014 - First ,
  9. Automatic Lemonade Machine 2014- Second

- Organizes more than 40 Technical and General Clubs to enable students to learn current technology trends and job-oriented skills, beyond the normal curriculum.
- One-hour time slot allotted for club activities in the weekly timetable.
- Five student projects supported each year by NSTEDB all to the tune of Rs. 1 lakh for product development

Amal Jyothi Consultancy and Technical Services (ACTS)

- Provides technical consultancy and design services to industries, institutions and the general public. Team led by Mr. Zacharia Mathew, a Mumbai-based well known machine design expert and industrialist.
- A few Ongoing/Completed Projects are listed below:

1. Development of an automated rubber tapping machine, funded by Rubber Research Institute of India
2. Intelligent Light Dimmer for Automobiles, funded by Govt. of Kerala
3. Coconut Plucking Robot
4. Land survey works using Total Station
5. Training in Total Station-based computerized survey

Amal Jyothi Business Computing Division (ABCD)

- Undertakes new ventures related to Business Process Outsourcing (BPO), software development, computer-based training etc
- Ongoing/completed projects:
  1. Document clipping BPO for X-AGO, The Netherlands
  2. Campus automation project Academic Enterprise Solutions with Claveland Technologies

Amal Jyothi Centre for Advanced Research (ACAR)

- Promotes inter-disciplinary faculty and student research leading to Ph. D theses, publications and funded R&D projects
- Publishes ACAR technical reports
- Promotes national/international collaborations. MOUs signed with UOIT Canada, Deakin University, Australia.

Amal Jyothi Centre for Nanoscience and Technology (ACeNT)

- Promotes research in nanomaterials
- Two ongoing funded projects in this area are:
  1. Development of Novel poly(vinyl alcohol) Nanocomposite Membranes for the Pervaporation Separation of Aqueous Organic Liquid Mixtures (Rs. 13.2 lakh, KSCSTE)
  2. Development of High Performance Chloroprene Rubber/graphene nanocomposites (Rs. 19.4 lakh, DST)

B. Ekalavya e-OUTREACH

Amal Jyothi is selected as one of the e-OUTREACH Programme Remote Centers of the Indian Institute of Technology (IIT) Bombay. This is an important initiative taken by IIT Bombay to work with engineering colleges in the country to enhance teaching skills of faculty colleagues in core engineering and science subjects, under the project, "Empowerment of Students & Teachers through Synchronous & Asynchronous Instruction." This initiative is a part of the

National Mission on Education through Information and Communication Technology (ICT), supported by the Ministry of Human Resource Development. Under this project, IIT Bombay conducts two-week ISTE workshops through distance mode using the EDUSAT network of ISRO and the AVIEW software using internet, for live transmission at various remote centers across the country, during vacation periods in summer and winter.

C. Mission REACH

Mission REACH is a totally objective driven and relevance – oriented programme, and therefore transcends the confines of conventional subjects and budgetary ceiling. The Mission is reaching out to be geographically spread out across India thereby creating mini-power houses of knowledge and excellence that dot the entire expanse of the country. Today's liberalized economic world order is witnessing a silent competition for sustenance and excellence in almost every sector of the economy. Focusing on such competition at both national and global levels, the Technology Information, Forecasting & Assessment council (TIFAC) of the Department of Science & Technology (DST) launched Mission REACH in the year 2000 – a mission embedded in its 'Technology Vision 2020'. Amal Jyothi College of Engineering is one among the newly selected TIFAC-COREs along with the other four colleges in different parts of India. AJCE is the only engineering college in Kerala to be sanctioned a TIFAC-CORE.

D. Technopreneur Promotion Programme (TePP)

To promote R&D activities of Amal Jyothi, IEDC of the College is arranging a project funding scheme (TePP) in association with Techno Park, Trivandrum, and the Govt. of India.

Eligibility:

- Indian students having nascent creative ideas.
- Independent innovators exploring innovative ideas before applying for TPF.

Scope & Support:

- TS (TePP Support) is for micro budget innovations, to help convert ideas into demonstrable models.
- TS is also given as initial support to those aspiring to seek later a larger grant under TePP Project Fund (TPF), after successful completion of TS project.
- Selected projects will be provided financial support as stipend to foray into unknown areas of science and technology.
- Support can also be used to explore new concepts through lab-scale demonstrations and computer simulations based on math models
- Maximum support under this category is Rs. 75,000/- subject to 90% of approved project cost.

Mechanism:

- Initially, the proposals will be screened for completeness at the point of receipt, by the coordinators of TOCs (TePP Outreach Centers).
- The proposals, after initial Screening are evaluated by the Technology angels working with the TOC.
- Complete and evaluated proposals will be discussed in the TMC (TUC Monitoring Committee) and those recommended for support by TMC will be submitted to TSC (TePP Screening Committee).
- The innovator will be given an opportunity to make a presentation to the TMC.
- Finally, sanction will be released to those that are approved by the department. The applicant has to sign the "Terms & Conditions" prior to the actual release of grants-in-aid.
- The first release is based on assessment of need by TePP official and subsequent releases are based on assessment by project monitoring committee/ concerned TUC. Each of approved projects will be monitored by TUC/ other network partner by including technical expert(s). TUC will be periodically reporting the project status to the TSC.
- Project completion/ closure will be reported to TSC for feedback and record.

Limiting Conditions:

- Pure software development projects and academic research projects are not eligible.
- The support is not an award or a prize. The financial support is provided for the work to be undertaken.
- Students will have to provide a `No Objection Certificate' from the head of their institutions, on the institutions' letterhead along with their application.
- The applicant has to be a single person. When a group of students want to pursue the project, there has to be an agreement among the group about the lead applicant. Though financial support can be given only to the single applicant by name, letters of commendation can be given by the department to all the students of the team, after successful completion of the project.

E. Research Collaboration with other Institutions

- AJCE has research collaboration with many institutions in India and abroad. MoU for collaborative programmes has been signed with the University of Ontario Institute of Technology, Canada; Deakin University, Australia; Dr. MGR University, Chennai. A MoU with SRM University, Chennai is in process.
- AJCE collaborates with M. G. University, Kottayam; VIT University, Vellore; Cochin University of Science and Technology, Cochin, and other institutions for research. Many faculty members of AJCE currently do Ph. D. at these institutions.

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 Admission Process

The College ensures publicity in admission process through the following measures:-

Advertisements through
1. Regional Newspapers
2. College Website
3. Controller of Entrance Examination (Government of Kerala) prospectus and Website
4. University Website
5. Social Media
6. Bulletins and magazines published by the college (Amalites Digest, College brochure)
7. Local Cable Network
8. College blog
9. Campaigns in schools and colleges offering feeder courses
10. Distribution of brochures and fliers
11. Participation in educational fairs
12. Word of mouth by Alumni, Parents and Benefactors.
13. Announcements in Local Parishes

The College ensures transparency in the admission process through the following measures:-
1. Applications are to be submitted online. Rank list and counseling schedule are published in website.
2. Admission is done on the basis of merit
3. Admission process is available online (Real time); allotment can be viewed online.
4. All members of the College are involved in the admission process.
5. 50% seats are filled by the Government through CAP (Centralized Admission Process) and the rank list is published in the Government website.
6. 50 % seats consist of Community Merit and Management Quota which are filled on the basis of the admission policy of the College (15% NRI seat and 35% on merit basis)

2.1.2 Criteria for Admission

All admissions to the institution are done following the norms approved by the Government of Kerala

Govt. Aided – UG and PG Programmes

As ours is a self-financed institution we do not have any aided course/program.

Un-Aided

All admissions to the institution are done following the University / State Government norms.

Un-aided Undergraduate & Post Graduate programmes:

B. Tech.:

1. 50% seats (General Merit) are filled as per the / State Government norms through CAP (Centralized Admission Process) and the rank list is published in the Government website.

2. 50 % seats consist of Community and Management Quota which is filled as per the College policy of inclusion and merit based admission. Merit is based on Kerala Engineering and Medical (KEAM) entrance conducted by the Commissioner for Entrance Examinations, Govt. of Kerala.

M. Tech.:

1. M. Tech admission is based on marks of the Qualifying Examinations, GATE score./DTE Rank list

MCA:

1. Admissions are based on the marks scored in the qualifying examination.

2.1.3 Entry Level Marks – A Comparison with Colleges in Kottayam District, Kerala

The minimum and maximum percentages of marks/grade point averages for admission at entry level for each of the programmes offered by the college are as follows.

UG Courses: Entry level Marks (Percentage)

UG Courses	2010-11		2011-12		2012-13		2013-14		2014-15	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
AUE	51.33	88.17	60	86	59.4	95.61	59.8	90.33	50	85.1
CE	54	97	53	98	61	94.2	60.58	94.58	56	93.88
CSE	58	89	65	99.16	69.6	96.2	63.83	96.17	55.87	92.38
ECE	57	95	64	98.5	58.6	98.18	63.4	97.92	54	97
EEE	57	95	61	97.77	66	91.83	63.2	94.75	53.12	93.88
IT	52	86	57	96	70.6	88.92	65	92.5	54.25	89
ME	52	97.67	68	96.66	64.2	96.52	62.17	97.58	55.63	94.88
MT	NA	NA	NA	NA	68.2	90.83	68.4	83.83	55.5	91
CHE	NA	NA	NA	NA	NA	NA	72.8	93.80	62.75	95.87

PG Courses: Entry level Grade point averages (Ten-point scale)

PG Courses	2010-11		2011-12		2012-13		2013-14		2014-15	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Communication Engineering	6.8	8.4	6.4	8.2	6.64	8.48	6.4	8.8	6.5	8.72
Computer Science& Engineering	NA	NA	6.6	8.1	6.4	8.7	6.3	8.6	6.9	8.3
Energy Systems	NA	NA	NA	NA	NA	NA	6.7	8.3	6.6	8.5
Machine Design	6.0	8.0	6.3	7.9	6.5	7.76	6.9	8.46	7.3	8.5
Power Electronics and Power Systems	6.5	8.8	6.5	8.5	6.1	8.8	6.5	8.6	7.0	9.0
Structural Engineering and Construction Management	NA	NA	NA	NA	6.8	8.4	6.29	9.04	6.4	9.21
Computer aided Structural Engineering	NA	NA	NA	NA	NA	NA	NA	NA	6.6	8.08

Comparisons of the last ranks of students admitted to different courses in AJCE with a few other colleges in central Kerala, affiliated to the same University as AJCE, are given in the following bar diagrams

AUE (B. Tech. Automobile Engineering)
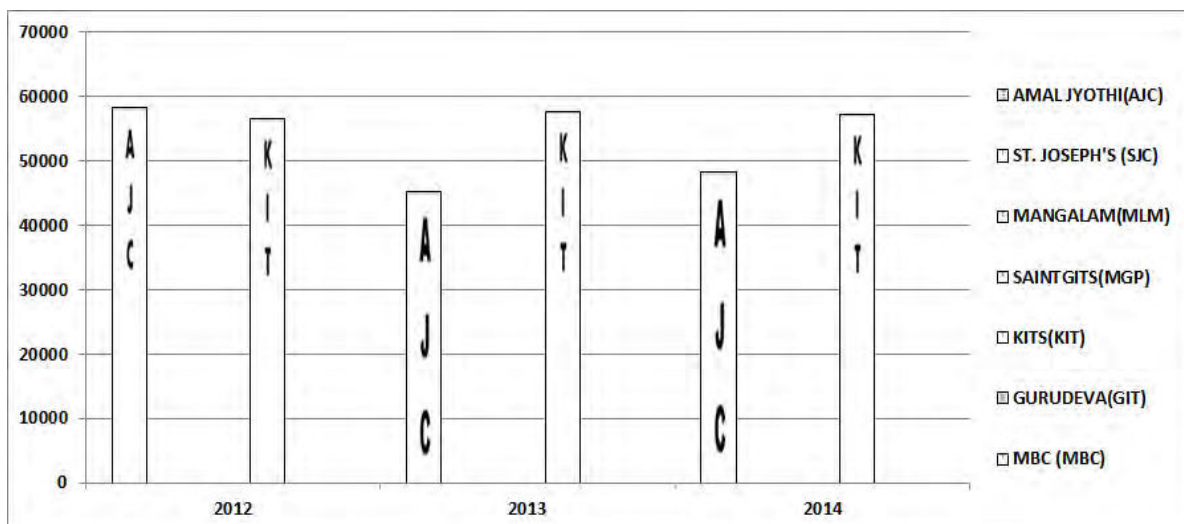
CE (B. Tech. Civil Engineering)
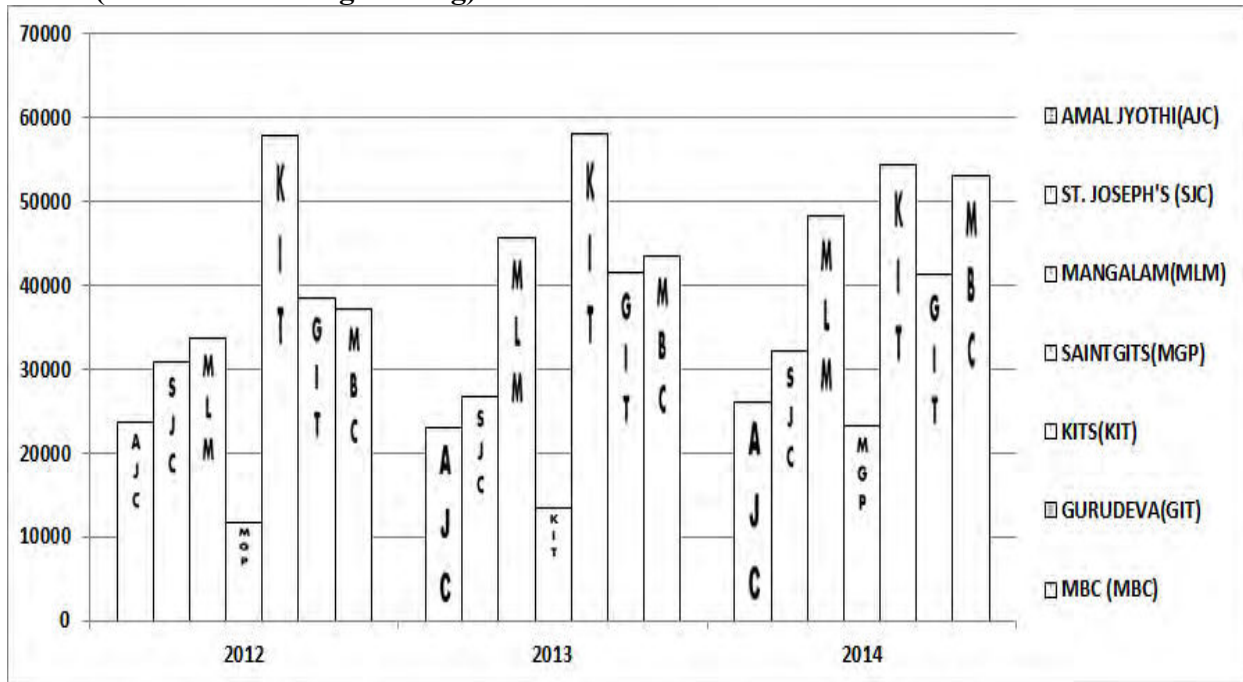
CHE (B. Tech. Chemical Engineering)
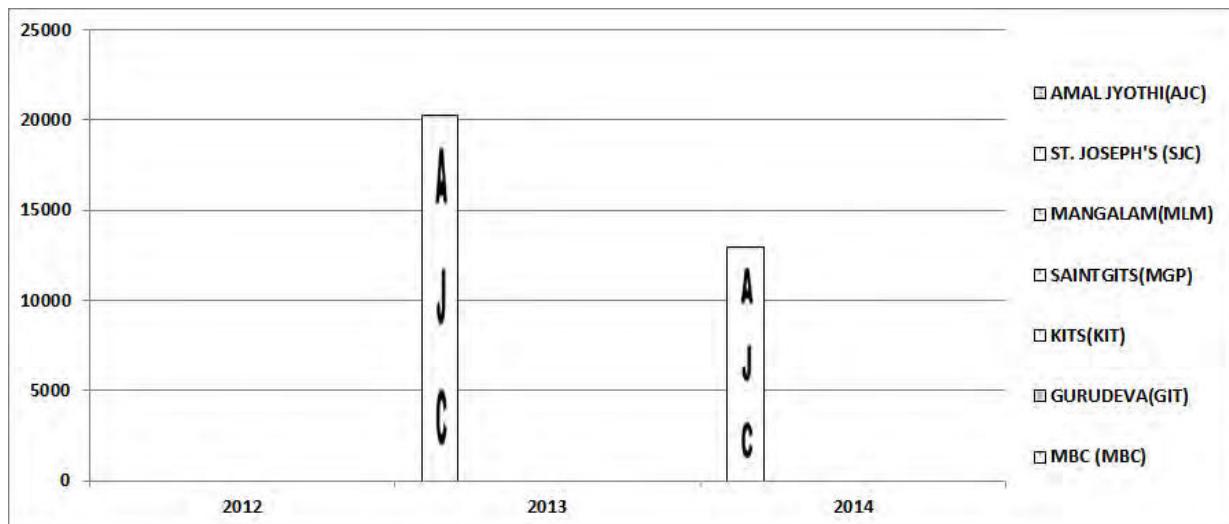
CSE (B. Tech. Computer Science & Engineering)
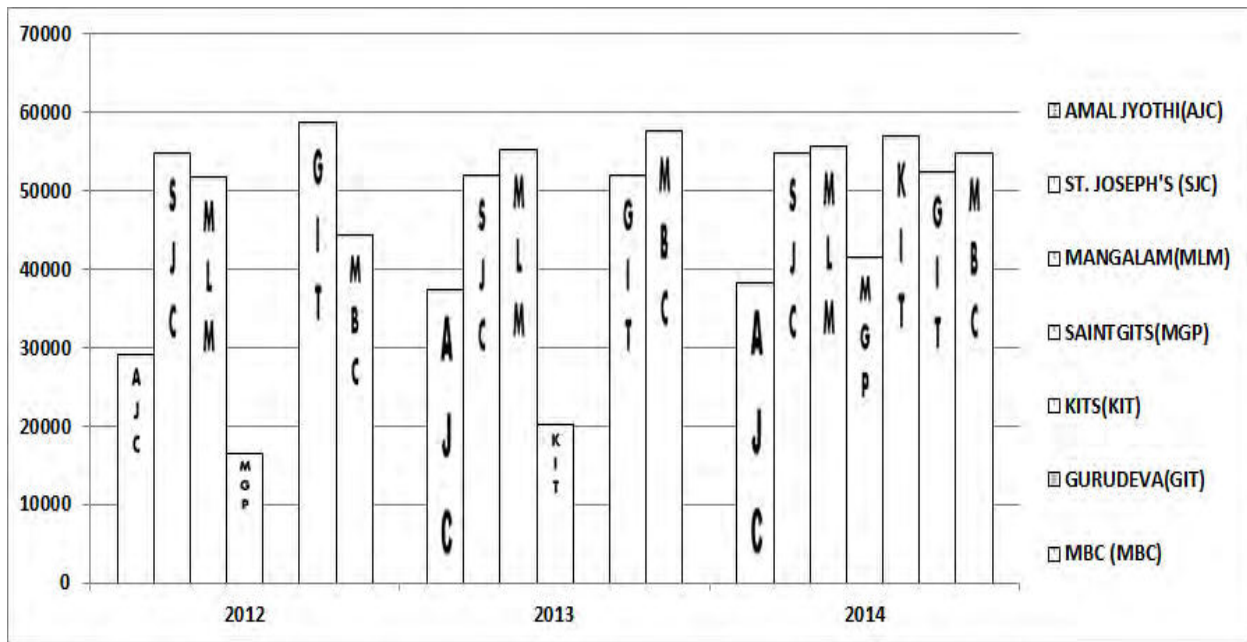
EEE (B. Tech. Electrical & Electronics Engineering)
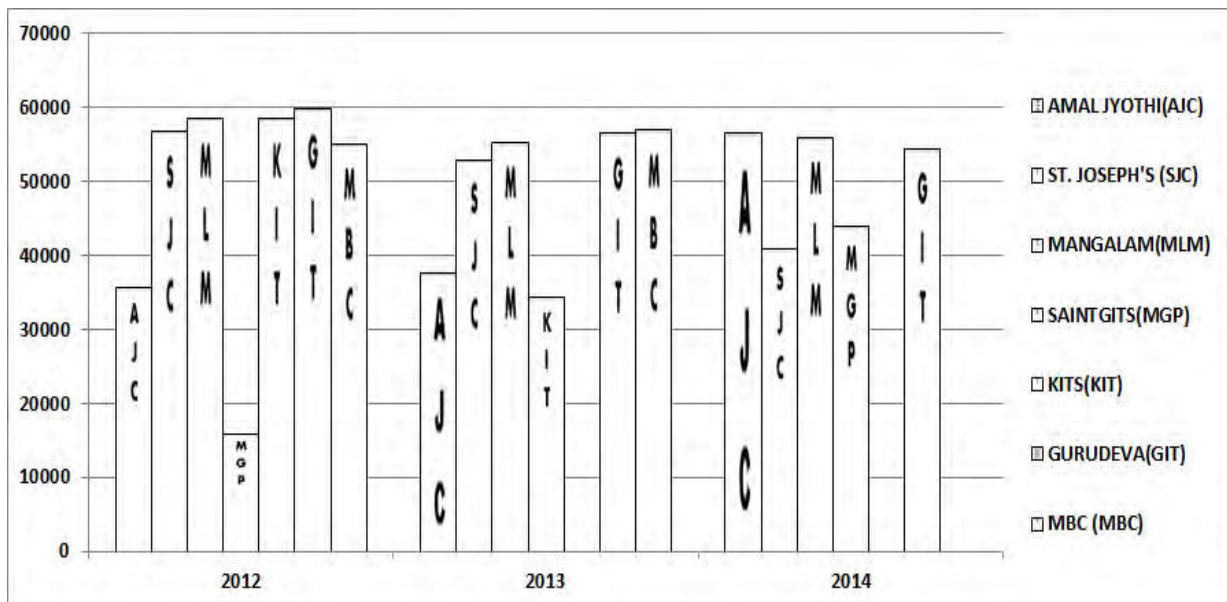
ECE (B. Tech. Electronics & Communication Engineering)
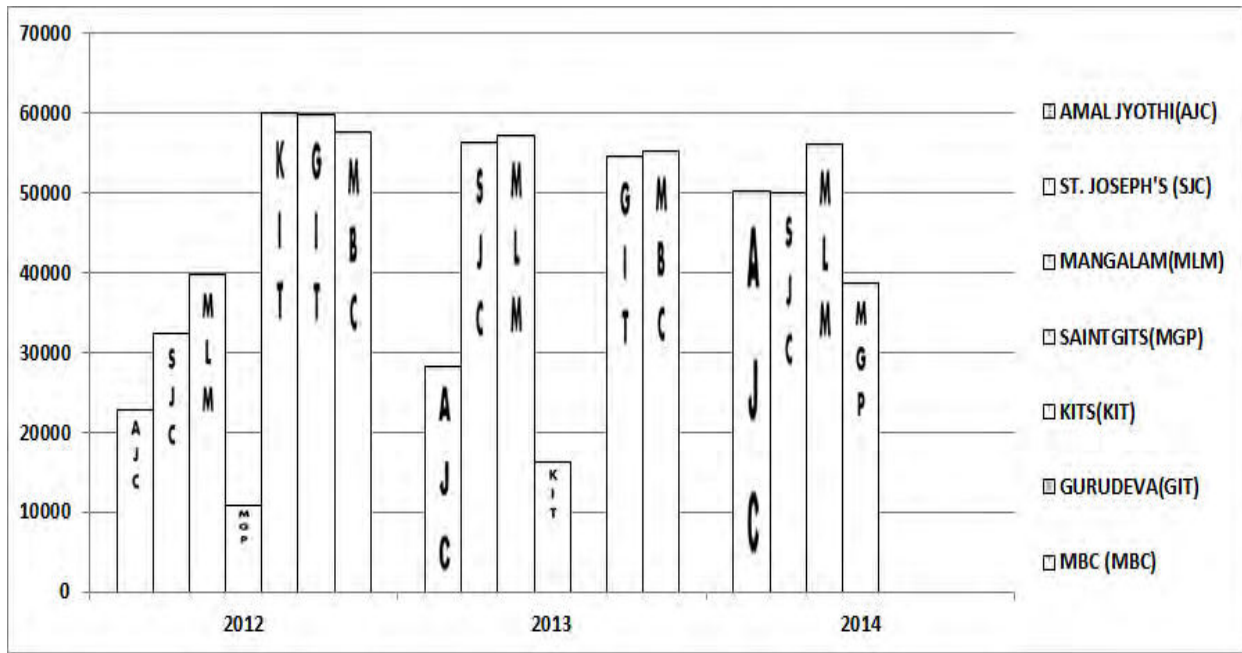
IT (B. Tech. Information Technology)
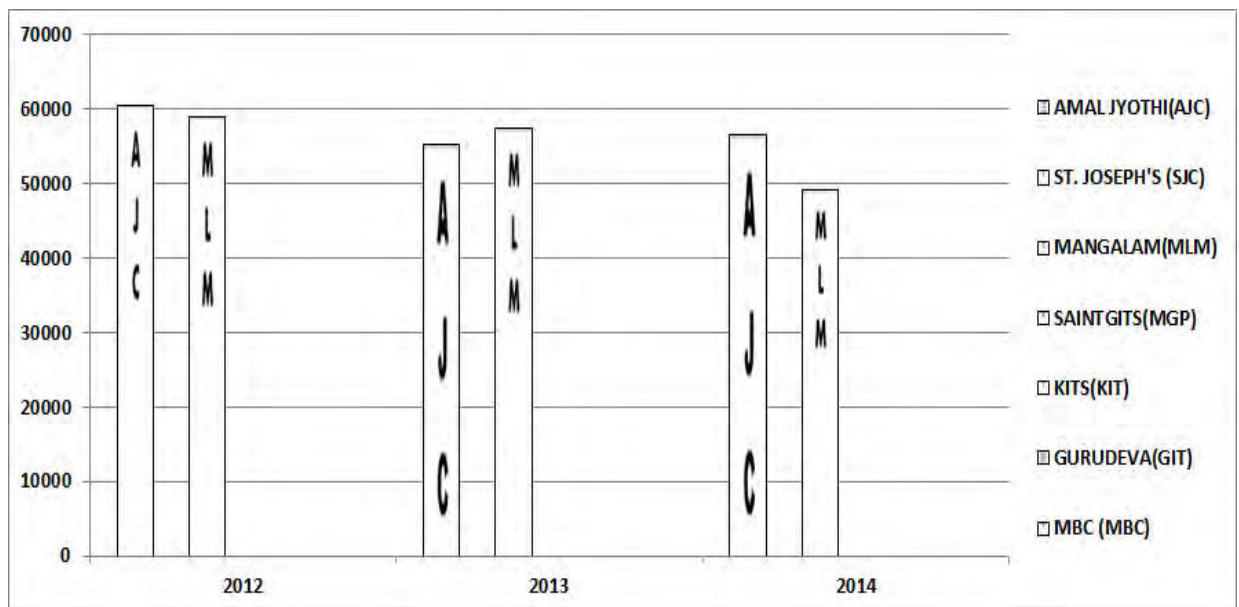
ME (B. Tech. Mechanical Engineering)
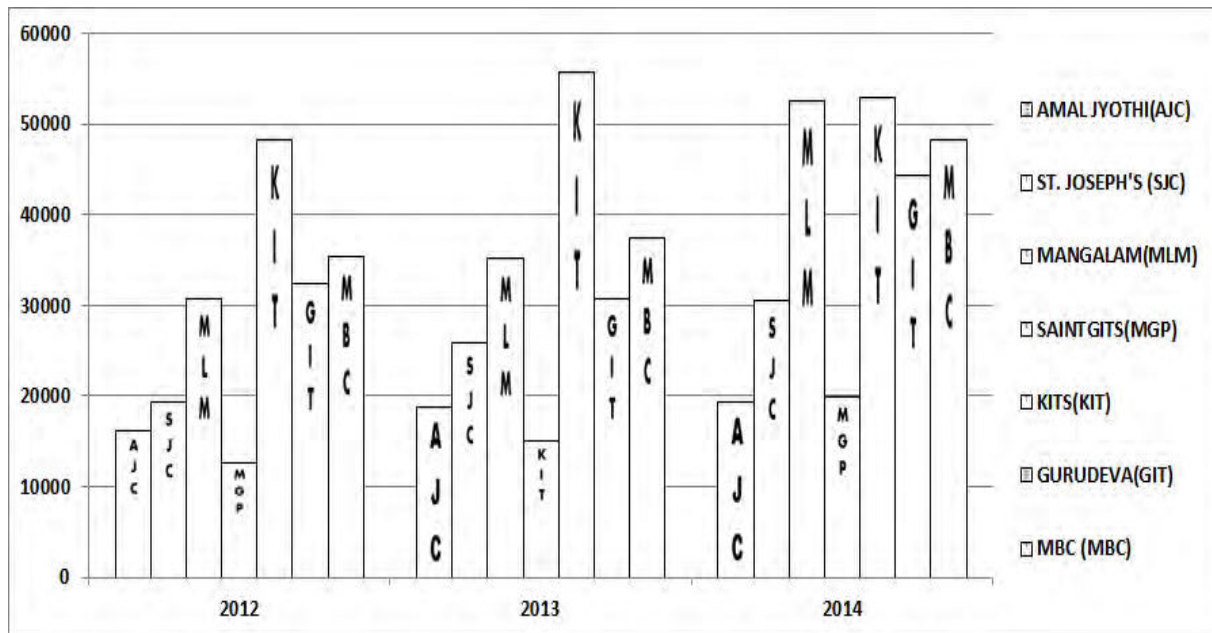
MTG (B. Tech. Metallurgy)
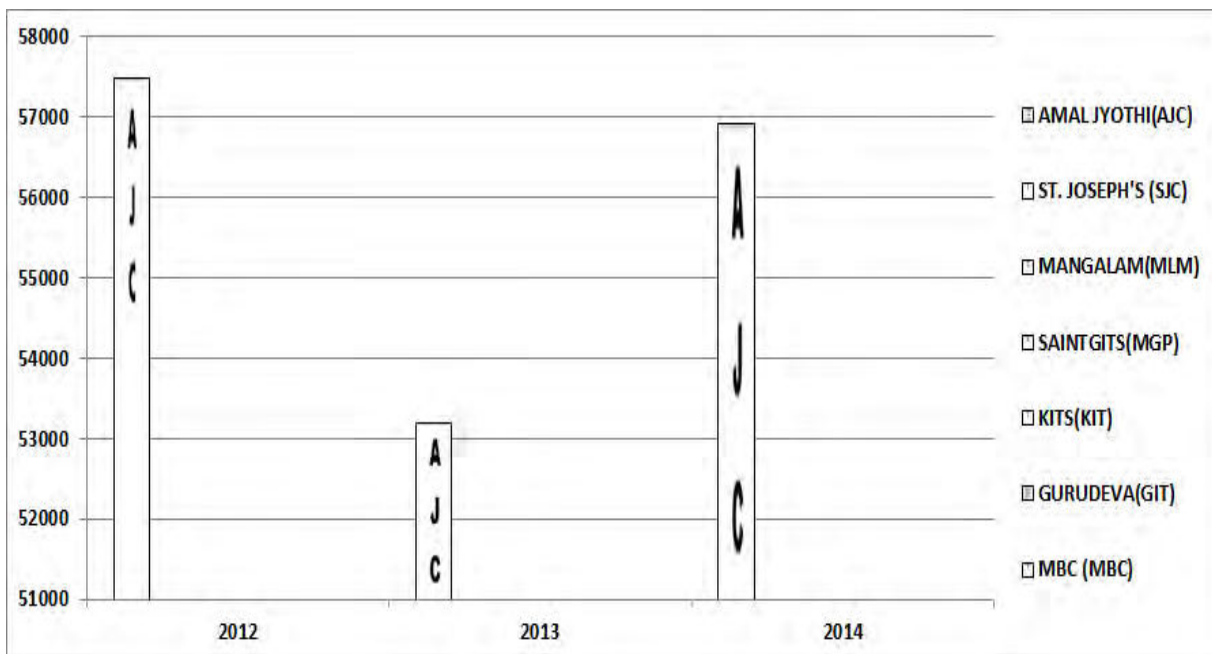
2.1.4 Review of Student Profiles and Admission Process

Student profile entries are updated on a regular basis and verified periodically. The female – male ratio of the College admission statistics shows that both genders give nearly half amount of representation of the student population in the College. The Community based intake on Other Backward Castes (OBC) and Scheduled Caste/Scheduled Tribe (SC/ST) in UG and PG level courses satisfies the reservation percentage decided by the College management and its concerns. It is found that there is a higher intake of students from SC/ST communities in the UG departments. Students from nearby locality are having a

higher percentage number in admissions to UG and PG courses. Students are more likely to be natives from central districts of Kerala.

The statistical measures conducted by various departments during admission procedures for many years have helped the College to understand the profile of the students seeking admission to the institution. Amal Jyothi has taken the following steps to enhance the inclusion of SC/ST/OBC and local students:

1. The College has taken conscious efforts to bring the local and underprivileged community closer through the Campus-Community Extension activities such as National Service Scheme (NSS), Child Welfare Activities for different orphanages and schools, Blood donation camps under Rural Health programme, and Awareness programmes against drugs and abortion under Jesus Youth.

2. Admission campaign members and faculty visit various colleges in the central districts of Kerala and conduct seminars on career motivation for post graduate programmes. The information brochures of the College and the programmes offered are also distributed. The campaign continues over these years of admission.

3. Scroll news advertisements in local channels, distributing brochures and leaflets in local schools and colleges, students organizing programmes and seminars in schools on career prospects, faculty and Principal's visits to institutions in various districts of Kerala etc. are other initiatives taken by the College.

4. Individual departmental activities such as quiz competitions have been organized for students in local schools

5. The College administration facilitates the prompt distribution of scholarships and free-ships to SC/ST/OBC and other deserving students. In addition to this, the Management has instituted endowments and financial support funds which are distributed on merit-cum-needs basis.

6. 'AZURE' – The Youth Cultural and Technical Festival organized by the College student community on intercollegiate basis helps to enhance access and acceptability at intercollegiate level.

7. Merit Scholarship & Tuition fee waiver are provided to meritorious students

2.1.5   Strategies Ensuring impartial Inclusion and Diversity in Admission

The Admission Policy of the institution states its commitment to equity, inclusion and diversity in all programmes. The following are the salient features of these strategies:

Seat Availability for SC/ST/OBC students

Access for SC/ST/ OBC students:

1. As per Government norms, 10 % of the total seats are reserved for students belonging to SC/ST community. Unfilled vacancies, if any, are repeatedly published in newspapers to attract such students
Fee concession as per Kumara Pillai Commission Report (KPCR) of the State Government is provided to OBC students

Seat Availability for Women

Access for Women

1. No distinction is made between men and women for admission to various courses offered by the College. About 50% of the students of Amal Jyothi are women.
2. Hostel facility for 1250 female student inmates is provided in the Women's hostel of the College.
3. A Women's Cell is functioning in the College under female faculty members meant for female student empowerment.
4. The College provides adequate facilities such as rest rooms, dressing room, waiting room, make-up room and a Gymnasium for girls under the supervision of a Women Wellness Team.

Seat Availability for the Differently abled

Differently abled

1. Special equipment and furniture are provided to differently-abled students on need basis.
2. Special care vehicle passages between different blocks within the campus.
3. Special care and counseling are offered.
4. The College has instituted endowments for differently-abled students.
5. Library books issued upon request are sent to their seats.
6. Extended time and provision of scribe and peer escort for examinations

Admissions for Economically Weaker Sections

Access for economically weaker sections

1. College level endowments and scholarships provided
2. Hostel and mess fee concession/free-ship provided
3. Tuition Fee waiver
4. Book lending facility
5. Free books and study materials

Admissions for Minority Community

Admission for Minority Community
1. 40% of the seats are reserved for students from minority community
2. They are provided with scholarships and endowments

Other Access offering Initiatives

Other Initiatives
1. Free food and accommodation to students admitted in sports quota.
2. Financial assistance to deserving students for higher studies
3. Students who secure top ranks in the CEE list are provided fee concessions, free food and accommodation, including hostel facility.
4. Government fees to high ranking students.

2.1.6   Programme-wise Trends in Demand Ratio
The demand ratios of various programmes offered by the institution are given below.

UG Course	2010-11			2011-12			2012-13			2013-14			2014-15		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
AU	63	63	1:1	46	46	1:1	53	53	1:1	53	53	1:1	55	55	1:1
CE	405	95	4:1	319	90	3.5:1	275	125	2.2:1	302	124	2.5:1	302	125	2.4:1
CSE	266	94	3:1	311	93	3.3:1	243	91	2.7:1	286	111	2.6:1	277	126	2.2:1
ECE	745	126	6:1	670	124	5.4:1	448	123	3.6:1	286	106	2.7:1	192	119	1.6:1
EEE	160	63	2.5:1	132	61	2:1	94	55	1.7:1	97	49	2:1	82	49	1.7:1
IT	58	58	1:1	56	56	1:1	47	47	1:1	29	29	1:1	25	25	1:1
ME	877	94	9:1	780	126	6.2:1	598	123	4.9:1	603	124	5:1	501	126	4:1
MT	NA	NA	NA	NA	NA	NA	28	28	1:1	26	26	1:1	28	28	1:1
CHE										82	63	1.3:1	128	63	2:1

PG Course	2011-12			2012-13			2013-14			2014-15		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
Commun. Eng (ECE)	-	24		125	24	5.2:1	121	24	5:1	45	18	2.5:1
Com Sci & Eng (CSE)	18	18	1:1	122	18	7:1	69	24	3:1	17	12	1.4:1
Energy Sys (ECE)	NA	NA	NA	NA	NA	NA	125	24	5.2:1	40	5	8:1
Machine Des (ME)	23	12	2:1	26	14	1.9:1	23	7	3.3:1	6	5	1.2:1
Power Electronics & Power Syst (EEE)	-	18	-	130	18	7,2:1	125	18	7:1	70	9	7.8:1
Struct Eng & Constr Manag (CE)	-	-	-	51	24	2.1:1	75	24	3:1	53	23	2.3:1
CIVIL (CASE)										9	9	1:1

PG Course	2010-13			2011-14			2012-15			2013-16			2014-17		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
MCA	80	59	1.4:1	90	60	1.5:1	120	60	2:1	120	59	2:1	258	145	1.8:1

2.2   Catering to Student Diversity

2.2.1 Needs of Differently abled Students

The college has set apart 3% of seats for differently abled students as per Government norms. There exists a tuition fee waiver scheme from women / economically backward / physically handicapped meritorious students.

2.2.2   Assessment in terms of knowledge and skills based on the needs of the Students

We plan to conduct tests on mathematical ability, communicative English, aptitude tests etc. before commencement of the regular programme.

2.2.3   Strategies to Enable Students to Cope with the Programme of their Choice (Bridge/Remedial/ Add-on/Enrichment Courses etc)

The following strategies are taken up by the institution for enabling the students to cope with the programme of their choice by overcoming the knowledge gap

Bridge Courses are offered in Basic Language Skills, as well as

1. Mathematics, Engineering Graphics, Engineering Mechanics etc. during the initial days of the commencement of the programme.
2. Enrichment programmes are offered by various departments of the College.

Remedial programme and informal tutorial sessions are offered by the faculty for students who require additional academic support.

Course specific special assignments, field visits and industrial visits also help students to gain confidence in their subject.

Peer teaching and collaborative learning are encouraged to tide over subject-related difficulties experienced by the students.

2.2.4 Sensitization of staff and students on issues such as gender, inclusion, environment, etc.

The College is increasingly aware of the need for developing sensitiveness on cross cutting issues such as Child rights, RTI, Climate Change, Biodiversity, Energy conservation, Gender, Inclusive Practices, Food

Safety, and Environment. Women Cell of the College take initiatives to formulate a Gender Policy for the campus.

2.2.5 Catering to special Educational / Learning needs of Advanced Learners

The class teacher and the individual course faculty assess the academic performance of students based on assignments, seminars, classroom discussions and internal assessment tests. Their performance in co-curricular and extracurricular activities is also considered in order to identify advanced learners. The College adopts the following measures to give higher challenges to the learning needs of such students:

- ❖ Advanced learners are given opportunity to do 'live software projects [Example: in-house software developed for result analysis, graduate attributes etc.]
- ❖ Advanced learners are selected for regular coaching/orientation for:
  - ▪ GATE
  - ▪ Civil Service
- ❖ Depute them to attend seminars and workshops on and off the campus
- ❖ Exposure to entrepreneurship development initiatives
- ❖ Opportunities to interview VIPs, Industry experts and celebrities
- ❖ Facilitates participation in State/National level   project contests like the All India Innovation Hub project contest, Kolkata, National Level Project contests like Tech Top, University and Inter-University youth festivals etc.
- ❖ Selected as Group leaders and Resource persons in Peer Group learning
- ❖ Opportunity to be office-bearers of different Clubs and Associations
- ❖ Advanced learners from PG classes are given opportunities to take classes at UG level
- ❖ Meritorious students are recognized and given proficiency awards

2.2.6 Institutional efforts to prevent dropout of Students with Special Needs

Data about students at risk of drop-out are collected through the following ways:
1. Daily attendance monitoring system
2. Performance in class test, internal and model exam.
3. Observing their class room participation.
4. Feedback from hostel wardens.
5. Student profile and entry level score analysis.
6. Involvement in extracurricular and co-curricular activities.
7. Mark lists of all exams conducted in the College are sent to parents.
8. Formal and informal teacher- student interaction, especially of class teachers.
9. Feedbacks from external trainers also give information about student performance.
10. Student Diary
11. Academic journal maintained by teachers

The collected data are discussed in department level staff meetings and the following measures are initiated to prevent drop out:

Academic Support
1. Remedial Classes
2. Peer teaching
3. Tutorial sessions

Financial Support

Facilitates availability of various scholarships offered by the Government through a coordinator at college level.

1. College has constituted various scholarships through Alumni, parents and well wishers
2. **Facilitates the financial support through Amal Jyothi Educational & Charitable Society (AJECS)**

   Psycho-Social Support

1. Active Individual and Group Mentoring is provided
2. Constant Parent-Teacher interaction
3. Emotional support through counseling by professional counselors.

2.3 Teaching-Learning Process

2.3.1 The Wheel of Teaching – Learning and Evaluation Process in AJCE

The College strictly follows an academic calendar. The calendar is made available before the beginning of every Semester, which helps the students, parents and teachers to plan their academic year. Each department functions according the teaching plan and course plan prepared at the department level. The course work is distributed to every faculty member by the head of the department. The faculty members follow a lesson plan which consists of the details regarding institutional objectives to be achieved, details of contents to be covered, the types of teaching aids and the logistics to be used inside the class room.

At the end of each semester the department staff meeting is convened to review the past years' activities. The level of accomplishment of the previous years' plans is critically reviewed and gaps identified. Based on a review of findings and suggestions from the faculty and students, a department level plan for the next semester is prepared. The plan includes Course allocation, teaching learning schedule, preparation of course plan by individual faculty, Schedule of Add-on, Bridge, Remedial and enrichment courses, proposed dates for seminars, Fests, training activities and Review schedules.

Feedback on faculty and curriculum delivery are collected through an automated process. The consolidated feedback is communicated to the individual faculty by the Principal.

- Schedule of exams
- Assignments to be given
- Tutorial
- Remedial classes

2.3.2 IQAC's Contribution to improving the Teaching-Learning Process

IQAC provides the development and application of quality benchmarks/parameters for the various academic and administrative activities of the institution. It imparts knowledge through team work and persistent efforts. It also promotes art of infrastructure through collaborations with research and consultancy. These activities also promote good relationship with the industries and society in appointing experienced and expert faculty to upgrade their expertise in their concerned areas. It also guarantees timely, efficient and progressive performance of academic as well as financial tasks.

IQAC contributes in the following ways to improve Teaching-learning process in the College.

- ❖ Systems have been developed for result analysis and Graduate Attributes analysis.
- ❖ Sets standards for various processes and monitors the academic planning and implementation process

- ❖ Supports the management in task clarifications, timeline and quality measures.
- ❖ Coordinates Internal Audit and Retrospect.
- ❖ Plans and executes staff quality improvement programmes (Trainings, workshops, mentoring etc.)
- ❖ Facilitates automation of various teaching learning evaluation systems.
- ❖ Advises various committees such as Library committee, IT committee, Research committee etc. of the College.
- ❖ Internal examination Bench marking
- ❖ Periodic review of the documentation system.

2.3.3 Methods used to make Learning more Student-Centric

Amal Jyothi always supports teachers with many services for making the learning efficient. The College provides a Central Library with all the latest books and journals which the faculty can use effectively and provide comprehensive information to students. Students are motivated to use the library independently which can enhance their skills and knowledge. Apart from this, the College is providing seminar halls where the students can participate in group discussions, debates and seminars. The institution and faculty members support and encourage every student to make use of internet, computers and latest technologies in the market to upgrade themselves in their respective field of study.

Infrastructure

1. 24/7 internet access with Wi-Fi connectivity
2. Smart class room with Audio visual aids
3. AES Software Language Computer Lab

Learning resources:

1. Reputed Journals from IEEE, ACM, Springer etc
2. Online Database of Digital Video
3. Licensed Soft wares

2.3.4 Efforts to Transform students into life-long learners and innovators

In tune with AJCE's vision of being a transformational leader in education, conscious efforts are taken in the academic and allied activities of the college to nurture critical thinking, creativity and scientific temper among students. Strategies adopted in this regard, though not mutually exclusive, are enumerated:

Nurturing Critical Thinking
To enrich their critical thinking, we make them participate in GDs, debates and seminars which helps them to think and explore new ideas.

Inculcating Creativity and Innovation
The institution motivates the students to make them original thinkers. The faculty members motivate the students to participate in youth festival and cultural activities to encourage the artistic temper in them.

Nurturing Scientific temper

To nurture the students' scientific temper, they are involved in practical sessions and hands-on experience in labs. There are motivated to submit papers in various international and national journals and conferences so that they can get a chance to get the feedback from the experts and eminent professionals in their area of study.

They are also encouraged to submit research proposals to internal and external agencies in the College like I^{2}U and IEDC, KSCSTE, DST etc for obtaining funding for their research ideas. Due to these types of activities the students can think on their own, and do at themselves better which will be useful for them in their career.

Micro, mini and major projects

Every student in AJCE does three projects during their course. Each student is assigned a Micro project during third semester, a Mini project during fifth semester and a Main project during seventh and eighth semesters. Students have the freedom to select projects of their choice in consultation with teachers. Execution of these projects by themselves goes a long way in developing independent thinking, organizing various elements of work in the project and finding solutions to problems they face. These projects inculcate creativity and innovative mind among students. AJCE thinks that execution of these projects will help to transform students in to life-long learners and innovators.

Technology-Business Incubator (TBI), sponsored by DST

A Technology-Business Incubator (TBI) has been sanctioned to Amal Jyothi by the DST in 2014-15, with the following objectives:
  ➢ Creation of Technology-Based incubates on continuous basis
  ➢ Help to create value-added jobs and services
  ➢ Introduction of entrepreneurial culture among students and common people.
  ➢ Create effective networking for the development of technology-based start-ups
  ➢ Develop internationally accepted technologies
  ➢ Promote students to come up with commercially viable curriculum projects
  ➢ Create student entrepreneurs
  ➢ Create awareness about Technology Incubation and Commercialization of R & D products and processes.
  ➢ Promote small and medium industries.

An overriding objective of the venture is to achieve a transformation of minds of students from being job-seekers to being entrepreneurs themselves, utilizing the theoretical and practical knowledge they gained in the College.

The TBI will initiate a stronger industry-academia-consumer linkage where ideas can flow to and fro through the three stakeholder groups so that everyone benefits. The industry will benefit from technological developments initiated by the TBI as well as qualified students who have an innovative mind to join their workforce. Academia will stand to gain from its constant interaction with industry, and consumers will gain from the innovations that are rolled out through the association.

The thrust areas identified for the functioning of TBI at AJCE are:

- Rural Technology
- Green Technology
- Information Technology
- Artificial Intelligence

Automation of traditional systems through technology up-gradation is the only way to uplift the rural population. Development of interdisciplinary technologies is essential for their overall development. In this region we have identified two categories of people; technical experts and technically skilled people. We are concentrating for start-ups that can incorporate both categories. The envisaged activities of the TBI are:

- Promote students to come up with commercially viable curriculum projects
- Equip students to create start-ups during the study period
- Counseling for various possible investment avenues
- Online and off-line campaigns to educate college students and common people about available opportunities.
- Separate Web campaigns and on-line promotions for creating awareness and attracting potential candidates.
- Innovation promotional programmes for school and college students
- Organize innovation expos
- Provide laboratories, testing and R&D facilities and human resources for R&D developments.
- Financial support to school and college students for the development of innovative projects
- Awards for potential innovators
- Organize seminars/workshops on innovation and entrepreneurship.
- Organize special training programmes for college and school teachers
- Associating with various governmental and nongovernmental organizations for spreading the message and attracting right people for starting new ventures
- Technology development / up-gradation
- Prototype development
- Preparation of business plan (covering market, technology and financial attractiveness)
- Mentoring to start-ups
- Patent Facilitation Support to deserving inventions.
- Enabling Technology Transfer
- Co-incubation with interested colleges
- Introduction to banks / venture capitalists
- Linkages with Technology & Business Institutions across the globe

Targeted beneficiaries of TBI scheme are general public and the students

Job-oriented skill development programme, sponsored by Volvo-Eicher

In a first-of-its kind venture for an engineering college in Kerala, AJCE has signed up with the globally-renowned Volvo- Eicher Commercial Vehicles Ltd (VECVL) for a job-oriented skill development centre.

Accordingly, the Amal Jyothi-Eicher Center for Automobile Technology, sponsored by VECVL, which is a joint venture between the Swedish auto giant Volvo group and Eicher Motors, will be established in the Amal Jyothi campus.

An MoU on this was signed by Mr. Vinod Aggarval, CEO of the company and Rev. Dr. Jose Kannampuza, Principal, AJCE. This will be the first heavy-duty automobile training centre in Kerala run by an engineering college in association with a globally reputed automobile manufacturer.

The skill development centre will be a boon for the faculty and students to update themselves on the latest developments in automobile technology and to have a hands-on experience in the best-of-its-class automobile technology in the world. It also offers a wonderful opportunity for scores of unemployed youth with class 10/12 education to be trained for job-oriented courses in the automobile sector.

The Centre will familiarize trainees in the most scientific way of repair, maintenance and overhauling of commercial vehicles. The College has earmarked a space of 900 m^2 to the Centre for state-of-the-art classrooms, workshop and library.

VECVL will train the trainers and conduct regular follow-up programmes for the faculty to update them on developments in the field of automobile technology. It will also provide study materials and training equipment for the course.

The course will blend theory and practical sessions for nine months and VECVL will provide a 3-month internship at their plant and dealerships.

2.3.5   Technological Support for Effective Teaching- Learning

Modern multi-media teaching aids like LCD projectors, Internet enabled computer systems are usually employed in classroom instructions as well as other student learning experiences. Students are also encouraged to use computer software packages for meaningful analysis of the experimental data collected/acquired by them. They are provided with videos suitable for their course of study and are encouraged to watch them.

Other facilities and technology supporting/ enhancing facilities that help to improve the quality of Teaching- Learning process are:
1. E-learning resources, Staff and student enrichment programmes
2. Reputed Journals
3. Networked Computer labs
4. Audio Visual room, Discussion room in the Library
5. Language lab
6. Wi-Fi abled class rooms & LCD Projectors in all classrooms
7. Licensed Softwares
8. Seminars and workshops organized for the faculty and students
9. Ekalavya Outreach. AJCE is one of the e-OUTREACH Programme remote centers of IIT Bombay. This is an important initiative taken by IIT Bombay to work with engineering colleges in the country to enhance teaching skills of faculty members in core engineering and science subjects.

10. QEEE workshops (Quality Enhancement in Engineering Education, the MHRD scheme being conducted on-line though A-view in tie up with IIT Bombay)

11. Spoken tutorials

2.3.6 Exposure to Advanced Pedagogies and Skill Development

The institution organizes workshops and seminars by eminent professionals in their respective areas in which the student community and the faculty actively participate to reap their benefits. The faculty members are advised to attend the FDP programmes aimed at developing their knowledge and skills. Several   programs were conducted for the students the same objective. Educational and industrial tours are also conducted by the college management. The faculty and students have been actively participating in the national and international conferences in recent years.

The College provides training to both faculty and students in the use of technology and internet resources. Inputs on internet searching strategies, training in MS office software, using referencing software etc. are provided to students as bridge programmes and special training.

The College often organizes national and international conferences on latest developments in engineering and science. These provide an exposure to students on the latest developments in technology and science.

2.3.7 Support and Guidance for Learners at AJCE

The Teaching-Learning process in AJCE is bolstered by insightful interventions by the staff to help the students identify and overcome the difficulties experienced during the learning process. These interventions take the form of mentoring support by the faculty mentors, psycho-social counseling by a resident counsellor, academic advice and support by the course faculty and empathetic support by the teaching staff.

Mentoring by faculty mentor

For every 20 students there is a faculty mentor who helps the students to get over their difficulties during learning. The students can approach the respective mentor for discussions any time and explain their difficulties. Effective mentoring is provided by faculty members.
AJCE organizes mentor training programmes to impart training to the faculty to become effective mentors. Experts from outside are invited to impart training to mentors. Details are given in Sections 2.4.3 & 2.4.4

Academic counseling

Counsellors /advisors are assigned to each class or group of students for their academic and personal guidance. This type of activity is being done by all departments in accordance with the guidance given by the HOD. Academic mentoring is done by the faculty. The main duty of this advisor or counsellor is to carefully monitor the student activities like regularity of attendance, participation in seminars and the performance of the students in internal and external tests and semester examinations. Students are advised with remedial classes which help to improve their caliber. The mentor acts as a true friend, philosopher and guide to the students. Almost 50% of the students with lower academic base in each class benefit from this process. The faculty interact with the students and parents. The mentoring report is maintained and monitored by the HOD and the Principal.

Psycho-Social Counseling Support

Full- time professional counsellors are available on the campus to support students with psycho-social counseling. They interact with students in routine manner, and also with parents who need counseling support.

The nature of difficulties identified during the counseling process includes interpersonal problems, academic difficulties, personality problems, family problems and adjustment problems, as well as psychological and physiological issues.

2.3.8 AJCE's Innovative Teaching-Learning Methodologies

Amal Jyothi also takes care that the faculty community need to be updated and kept themselves at the top level of current technologies and latest developments in their respective fields. They are encouraged to use computers, the library, and internet facilities to enrich their quality of teaching. The College also supports the faculty to adopt new ways, approaches and methods such as organizing conferences, seminars, workshops etc. The faculty are encouraged to attend national and international conferences and are provided with financial assistance by the college management. They share the gist of their discussions with students and faculty colleagues about the latest information related to technological developments all over the world. These criteria are looked in FAP-Annual /semester work reports and best performing faculty are recognized. The following are some of the efforts initiated to improve student learning:
- Peer evaluation of assignments
- Event management
- Article /Book publishing
- Activity assignments such as Quiz, Seminars etc.

2.3.9 Enhancement of Teaching-Learning Process through Library Resources

Amal Jyothi has a well-equipped Central library, which helps students with the latest information about books and services offered to them. The list of new entries, useful articles, and many important services are provided by the library. The catalogues from different publishers are available in the library. The heads of departments can order books from these catalogues. The collection of books, journals and some articles from the techies reflect our institution's ever growing zest for newer areas of study and research. Some faculty members have their personal publication of books, journals and conference papers which help the fellow colleagues, PG and UG students round the clock. Majority of staff effectively use the internet and they liberally share their knowledge of innovative research topics, reviews, methodology, data gathering and information output with the learners. Students are continuously encouraged by the faculty to use the library services. Each student is provided with a library card which enables them to get books from the library. The best library user is acknowledged and awarded semester wise.

Features of the Library as a resource center for teaching-learning process are:

- ❖ Network resource Centre to facilitate access to e-resources
- ❖ More than 39000 volumes in the main library
- ❖ Spacious reading hall (area 2973 sq. mts.)
- ❖ Institutional membership in N-LIST, DELNET Subscription of QUESTIA Online Database.
- ❖ Digital Library-Project Reports of Students, Previous Year Question Papers, CD mirroring, Multi Media Files of various subjects and E-articles digitalized for reference.
- ❖ CD/DVD collections – Total: 1060

- Extended library hours- (8 am-10 pm) and Discussion Room in library to facilitate group learning
- Library hours scheduled as part of regular timetable for PG students for Current Affairs Analysis, Article review, Business Quiz, Seminars, Case Study Analysis, etc.
- Library referencing made one of the requirements for class room projects, assignments, monograph preparations etc.
- Recognition of the best library user in the form of an award

2.3.10 Curriculum Completion: Challenges encountered and Measures taken to Overcome

In the semester system we normally do not get sufficient time to complete the curriculum satisfactorily. However, in our College, with proper planning and additional hours in the timetable, we complete it in the stipulated time. The faculty members manage to complete their responsibilities successfully in allowed time. The college conducts extra classes when the institution faces challenges in completing the curriculum due to strikes declared by political parties. Weekly monitoring of syllabus completion is done by Dean (Academic), who suggests remedial measures. The IQAC keeps check on the syllabus covered by the various departments on a regular basis.

2.3.11 Quality of Teaching – Learning: Monitoring and Evaluation

The Teaching, Learning and Evaluation process at AJCE follows the sequence given below:

Course plan prepared by individual faculty → Discussion of course plan in the Department → Presenting the course plan and assessment scheme to students → Implementation → Dept level review meetings Interim and final Audit → Feed Back
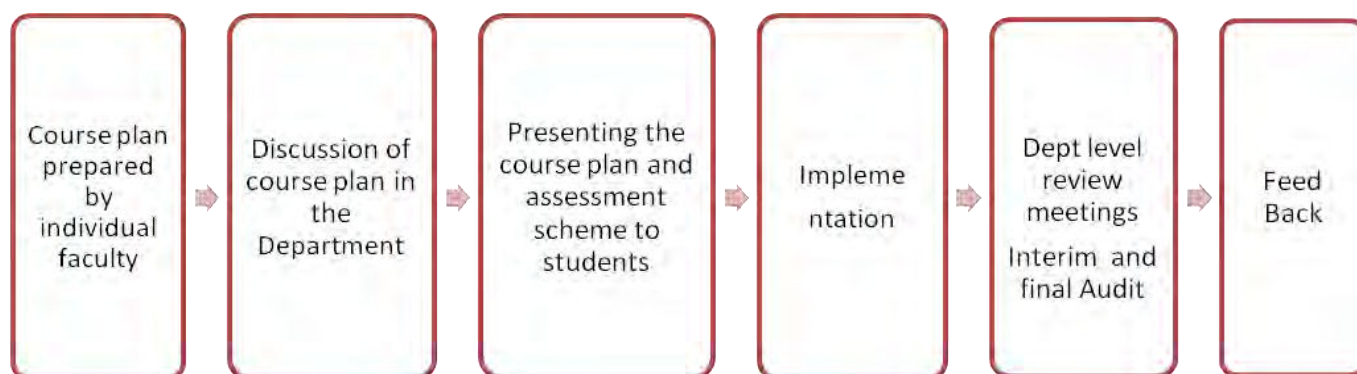
For the facilitation and monitoring of this process the following activities have been carried out over the years:

- Compliance with Academic and Exam calendar and Course plan is ensured by the Course teacher, Class teacher, HOD/ Director.

- The IQAC organizes interim Academic Audit by the team led by the Principal. The conveners of the Criterion committees are members of the team which visits each department and assesses and gives feedback on performance.

- The learning outcomes achievement is assessed through internal evaluation, results analysis in staff meetings, monitoring of class participation by Course Teachers and Class Teachers, and the supervision by the internal Controller of Examinations.

❖ Training/familiarization sessions on CBCS, Course Plan preparation, Developing and implementing Graduate Attributes are conducted.

❖ Feedback is taken from students and is communicated to the teachers by the Principal. IQAC through interaction with teachers and students also submit reports of the feedback to the principal. The institution, through house examinations, feedback from students and teachers, evaluates the quality of the teaching- learning process.

2.4 Teacher Quality

2.4.1 Strategies for Induction and Retention of Qualified and Competent Teachers

Recruitment

- Recruitment policy
  1. Vacancies shall be published in all the leading daily newspapers and in the college website
  2. The recruitment shall be as per the norms of the Government and regulatory agencies
  3. The candidate shall be interviewed by a panel consisting of the Principal, the HOD, senior faculty from the corresponding department and expert(s) in the subject.
  4. Appointments are done purely based on merit as decided by the interview board
  5. Preference is given to candidates having Ph.D. and teaching/industrial experience.

Retention

- Retention strategy
  1. Salary scales based on the 6th pay commission is provided to the faculty.
  2. A friendly and supportive environment is provided for the faculty to work in the College.
  3. Financial incentives to the faculty who secure 100% pass of the students.
  4. Financial incentive to the faculty to participate in research activities and to publish papers in International journals and conferences.
  5. Accommodation provided to the senior faculty.
  6. Accommodation provided for the junior faculty in the bachelor quarters located in the men's hostel.
  7. Encouraged to attend the faculty development programmes and workshops

2.4.2 Institutional Strategies to meet the Demand for Faculty in New Areas

1. Appoint experts (both from industry as well as academics) as HODs and senior level professors in departments
2. Support the faculty and staff to undergo training in the relevant newer areas.
3. Invite experts to deliver special technical lectures for the students and the faculty
4. Conduct symposia and AICERA, an International conference every year which is linked to a specific department in a year, with departments changing every year.

List of permanent faculty and staff

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Ph.D.	9	1	1	2	-	1	14
M. Phil	-	-	-	-	2	6	08
PG	12	3	2	-	102	87	206

Grand Total: 228

- List of Part-time faculty and staff: NIL

2.4.3 & 2.4.4 AJCE's Strategies for Faculty Development and Recharge

The College has a Faculty Development policy to streamline its faculty development activities. The policy aims at faculty empowerment for continuous improvement in teaching learning, research, consultancy and extension, thereby transforming the faculty members into Thought Leaders and AJCE into a Knowledge Centre.

During the last four years, the institution has taken up several initiatives to enhance the quality of teachers. The following are the initiatives taken by the College.

1. Special training and orientation programmes for newly joined faculty to enhance their capabilities and to draw better output
2. A Faculty Development Programme on "Entrepreneurship" which is conducted every year with the support of NSTEDB and DST for selected faculty.
3. Encouraged to attend the FDP organized in different areas, on duty leave.
4. Deputed to undergo specialized trainings.
5. Retreat arranged for staff and faculty every year
5. Faculty development programs are organized on the campus.
6. Ekalavya e-OUTREACH program jointly with IIT Bombay
7. QEEE workshops jointly with IIT Bombay

Faculty Training Programmes

AJCE believes that the entire faculty should be well-equipped to transfer their knowledge to the students. When new faculty members join they often need training to face students with confidence. For this the College organizes induction programmes and mentorship training programmes for new faculty members. The details of the programmes organized in 2014 are given below.

Induction programme for new faculty members

A week-long induction programme was organized for the new faculty members of the college and those who joined the college over the past one year. Nearly 30 faculty members attended the programme, which was held from July 7-11, 2014.

In order to ensure that the programme had a mix of in-house and external resources persons, M/s Winteg Consultancy, Chennai, was also roped in.

Over the course of the programme, faculty members were not only given an overview of the history, rules and regulations of the College; they were also apprised of the changing world of knowledge inculcation, and taken on a walking tour of the entire campus.

Teaching styles of each faculty member was videographed and professional advice was provided on what changes they could make to be more effective teachers.

Through this programme the College aimed to give the new faculty members the message that AJCE would settle for nothing less than the best practices in engineering education as well as in molding the youth of tomorrow.

The following were some of the important sessions of the induction programme.

1 Excellence in Teaching – Fr Jose Kannampuzha, Principal

2 Reaching Beyond Textbooks – Abraham Kurien, Director – AJCE Civil Services Academy

3 Teaching, Touching and the Perfect Tech Storm – How technology is altering the education landscape – Joe A Scaria, Director – Management Development Centre

4 AJCE Rules and Procedures – Tomy Joseph, Dean (Administration)

5 For a Teacher, Everything Counts – P. C Thomas, HOD – EEE

6 How AJCE Evaluates Teachers – VI Cherian, Dean (Academic)

7 Professionalism in Teaching Profession –James Jacob, Dean (Research)

8 Economy, Money & You: The Art of Giving – Joe A Scaria

9 Teaching in the Time of Gen Y & Gen Z – Victor Jose, Assistant Professor – EEE

10 Importance of Body Language – Mr. Mohammed Basheer, MD – Winteg Consultancy

11 There's nothing called a Free Lunch – Joe A Scaria

12 Presentation Skills – Mr. Mohammed Basheer

13 Emotional Maturity – Mr. Mohammed Basheer

Mentorship training programme for faculty members

AJCE held a training programme in mentoring for all faculty members designated as mentors. The programme was held over three days from August 12 to 14, 2014.

The programme itself was an offshoot of the college's conviction that for a mentoring programme to succeed, the mentors must first be trained in mentoring skills. To ensure a high quality of training for our prospective mentors, a professional company from Chennai, Winteg Consultancy, was engaged to provide the training.

Over the three days, 150 faculty members attended the various sessions of the mentoring programme. The faculty members who attended the programme were educated in the qualitative aspect and subjective part of mentoring. They were instructed how to help students in dealing with frustration and handling disappointment, besides giving them constructive criticism regarding their performance and teaching them to behave with humility and compassion.

Teachers were made aware that before sowing a seed one needs to test the ground, and that otherwise even the best hybrid seed would fail to produce a good harvest. Through the programme they could appreciate how important it was to understand the students closely, have a good rapport with them and help them raise themselves to the next level of their expectations.

Faculty training programmes organized by AJCE during 2010-2014

1. Staff Enrichment programme was conducted on 24 & 25 June 2010. Rev. Fr. Roy Kannanchira CMI (Deepika, Kottayam) led the program. Director Dr. S. Balasubramanian inaugurated the program and Manager Fr. Varghese Parinthirical delivered the Keynote Address.

2. A two-day enrichment programme for the staff led by Mr. Madhavan Nair was held on 23rd & 24th Feb. 2010

3. Faculty Development Pragramme on 'Entrepreneurship': The IEDC of the College conducted a 2-week FDP on 'Entrepreneurship' under the sponsorship of NSTDEB, Govt. of India from Nov 14 to 26, 2011. This was a new initiative from an Engineering college in Kerala on 'Entrepreneurship' .Faculties from various engineering colleges and industry participated in the programme. The prospective space tourist and industrialist Mr. Santhosh George Kulangara inaugurated the programme and eminent resource persons from industry, banking and stress management trainers etc handled the sessions. Prof. Jose Antony, Prof. Vipin B, and Prof. Ajosh Abraham were the coordinators of the program.

4. Geevarghese Titus co-ordinated 2 week ISTE workshop on "Basic Electronics" conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from 28th June to 8th July 2011. 43 participants, both external and internal, attended the course.

5. One day seminar on "Advanced Course on VLSI Design" was led by Dr. M.K Radhakrishnan , on 24th June, 2011

6. Hands-on- training on Microwave Design software AWR Studio & HFSS was organized by the ECE department for faculty members on 18.10.2011 and 09.11.2011 respectively.

7. Dr. Jippu Jacob, HOD, ME conducted a class on 'Innovation, Ideas, and Patenting' on 15.11.11 during the FDP on 'Entrepreneurship' organized by the IEDC of the College and the NSTEDB under the DST Govt. of India. Dr. Jippu Jacob led a class on 'Innovation: A Case Study' on 19.11.11 for students of S1/S2 (2011-12) participating in the 'Entrepreneurship Awareness Camp' for students.

8. International Year of Chemistry celebrations 2011: DBS organized a quiz competition for S1S2 students as part of celebrations of International Year of Chemistry in the college. Ms Kavitha Jacob, AP led the session supported by S1S2 class teachers, mentors of various clubs and faculty members of DBS.

9. Fr. Rubin Thottupuram and Mr. Punnose of CSE dept., led different sessions on "Ontology and Semantic Web" and "Neural Networks" in an STTP organized by ECE dept.

10. Rev Dr. Biju John of CSE dept. took a one day seminar on" Cloud Computing and Research Areas " for S2 M. Tech CSE students

11. A robotics workshop 'eTRIX' for S4 ECE students was conducted on 2nd and 3rd March 2012 in collaboration with THINKLABS, Mumbai and was coordinated by Mr. Anu Abraham Mathew.

12. The department of Information Technology organized a four day training programme on IBM Rational suite from 14th August to 17th August 2013, coordinated by Ms Midhuna Jyothi R, AP,IT

13. 'Creative Teaching'- ISTE e- workshop: CSE Dept. of AJCE in association with ISTE Kerala Chapter, organized a one-day ISTE e-workshop on 'Creative Teaching'on 10 Sept 2013. The programme was inaugurated by Dr. Mukta Atrey, Senior Project Manager, Ekalavya. Rev. Dr. Jose Kannampuzha, Mr. Abraham Kurien IPS (former DGP, Govt. of UP) , Prof. Dr. Sabu Thomas, Director, School of Chemical Sciences MG University and Rev. Dr. Tomy Tharayil, Director Danahalaya, Punnapra, Alappuzha handled sessions on 'Effective Teaching & Adaptive Learning', 'Communication Skills and Career Oriented Tools for Teachers', 'Teacher research lead to learning' and 'Know your students – Teacher - student relations' . Prof. Manoj T. Joy, HOD, CSE, Mr. Mathew J Joseph, AP, ME, Aby Jacob and Neethu C Sekhar, AP, CSE were the coordinators of the workshop. More than 545 participants attended the workshop in 10 remote centers all over Kerala.

14. Mentorship Training: A mentorship training programme was conducted for teachers of AJCE on 21 Sept, 2013 inaugurated by Mr. Abraham Kurian IPS, Director, Amal Jyothi Institute of Civil Services.

15. Depts. of CSE & MCA conducted a 4-day ISTE workshop for students on "Aakash Android Application Programming" (23-24Feb. and 2-3March). Prof. Manoj T Joy, HOD, and Mr. G. Krishna Lal, (AP) were the Co-coordinators

16. Faculty Development Program in Entrepreneurship: The IEDC of AJCE conducted a 2-week FDP on Entrepreneurship, sponsored by NSTEDB, Govt. of India, beginning from 5 May 2014. Sri. Abraham Kurien, IPS, formerly DGP, Uttar Pradesh, inaugurated. Sessions were led by Rev. Dr. Jose Kannampuzha, Dr. Jippu Jacob, Prof. Sherin Sam Jose, Prof. G.M. Tharakan, Head, SJCET School of Management, Pala and several entrepreneurs.

17. National Seminar on Probability Theory and its Application: Department of Basic Sciences organized a three-day National Seminar on "Probability Theory and Its Application", assisted by the National Science Academy, from 28 to 30 April, 2014. Several faculty members of AJCE participated in the seminar.

18. Dept. of IT, in association with Magnificata Hybrid Gadgets (MHG), ISEEC London and GCN Technology, Canada, organized a workshop on 'ANDROID APPLICATION AND DEVELOPMENT" during April 3-5, 2014. Prof. S J Rajan, HoD of Computer Science, St. Joseph's College, Trichy, led the sessions.

19. IBM Kerala Sector conducted a training programme on various IBM Application Developer Tools for S6 CSE on 10 March 2014.

20. Axel IT Training Division, Thodupuzha, conducted a 5-day training on Android app Development for S8 CSE from 27 Jan to 01Feb 2014

21. IPSR Solutions organized a training program on 'Cloud Computing' by Red Hat on 29 Jan. 2014.

22. CSE dept., in association with CSI- Cochin chapter and Mozilla Firefox community, Kerala conducted a workshop on 'Firefox OS App Days and WEB MAKER party' in which students developed 30 applications. Prof. Manoj T Joy and Ms. Sumy Joseph SBC, CSI, coordinated.

23. A workshop on 'Cyber Security and Information Protection' led by Mr. Joseph Ponnooly was conducted for PG students of CSE on 12 Feb 2014.

24. Dept of CSE organized an exhibition of 48 projects of S8 and S6 on April 30, 2014. The best projects were awarded prizes. Asst. Prof. S. Sruthi coordinated the activity.

25. AMACE-, Amal Jyothi MCA association for Career Enhancement, conducted a workshop on 'Google Map Maker' and 'Path Finder' for school students. Ms. Lisha Varghese (AP, MCA) was the Coordinator.

Faculty participation in training programs/workshops elsewhere and contributions

1. Mr. Toms Philip attended a seminar 'Recent Trends in Mechanical Eng Design' at SaintGits, Kottayam during 14-17 September 2010

2. Mr. Arackal Jose Mathew attended a seminar 'New Paradigm in Mechanical Engg' at SCMS, Cochin on 18 September 2010

3. Mr. Thomas Abraham attended workshop on "CNC Technologies" at SJCET, Palai during 1- 4 November 2010

4. Mr. Sunish Kumar. O.S and Mr. Muhammed Nadeer executed a project "Labview based PID controller for temperature control in a furnace used for Z-Scan experiments" at Raman Research Institute , Bangalore

5. Mr. Robins Anto and Mr Shinosh Mathew attended a workshop on 'Recent Trends in Design, and Conduct of Experiments in State-of-the-Art Electric' at Rajagiri College of Engg., Cochin

6. Ms. Elizabeth Jose and Ms. Sarin Baby attended STTP on 'Modern Trends in Power Systems' at Saint Gits College, Kottayam during 28–30 Oct. 2011

7. Mr. S. Arun and Ms. V. Reshmi attended STTP on "Electrical System Design" at Mar Baselios Engg. College Trivandrum.

8. Dr. Soney C George attended a workshop on wastewater treatment at NIT Trichy, from 29 to 31 September, 2011

9. N R Arun, Binil Gopinath, Gayathri V G and Gigi V V attended a Short term training programme at CET, Thiruvananthapuram during 21 – 26 Nov 2011

10. Ms. Bindu S Moni, AP, CSE, attended the National workshop on "Enhancing Research Skills in Information Technology" organized by School of Information Science & Technology, Kannur University during 23 - 24 Sept., 2011

11. Mr. Jinson Davis, Mr. Jerin Thomas, Ms. Shelly Shiju George and Ms. Ashji S Raj ,AP, CSE, attended a 2-week ISTE workshop on Basic Electronics from 28 June to 8 July, 2011

12. Ms. Anishamol Abraham and Ms. Anju S.S, both AP, CSE, participated in a 2-day hardware workshop on 'System Level Programming' conducted by Dept. of CSE, FISAT, Angamali on 15 and 16 Nov 2011

13. Prof. Manoj T Joy HOD, CSE, participated in National workshop on ERP mission project under NMEICT, MHRD, held at Amritapuri campus, Amrita Vishwa Vidyapeetham, Coimbatore on 13 and 14 Aug 2011.

14. Prof. Manoj T Joy served as a team member for 'Vidyalaya Appointment Committee meeting' held at Jawahar Navodaya Vidyalaya, Kottayam on 01/09/2011.

15. Prof.KG Satheeshkumar attended a five-day Faculty Empowerment program – Wipro Mission 10 X - organized by Wipro and hosted by Viswajyothi Engg. College , Vazhakulam during 9-13 Nov. 2011.

16. Profs KG Satheeshkumar, Paul Thomas, Geevarghese Titus, Liju V Oommen, and Mohammed Nadeer, attended a workshop on 'Opportunities in Sponsored Research for Academic Institutions' held at AJCE on 26 & 27Nov. 2011

17. Joms Antony attended program on "Soft Computing, Cloud Computing & Mobile Computing", sponsored by Tata Consultancy Services, TVM, from 24-25July 2011

18. Boby P Mathew and Sreeraj K S attended a national seminar on "TOPOLOGY AND ITS APPLICATIONS" at Govt College, Nattakom, Kottayam during 8-10 February 2012.

19. Ms. Bindu S Mony AP, participated in the two-week, AICTE sponsored Staff Development Programme on "Research Methodology & Advances in Computing" organized by the Dept. of MCA, Union Christian College, Aluva, May 14 – 25, 2012.

20. Mr. Santhoshkumar G S attended the SCERT training programme for economics teachers as external RP at St. George HSS, Kattappana.

21. Ms. Lisha Varghese, AP, CSE attended the two day workshop on "DRUPAL" organized by Union Christian College, Aluva in association with CDAC, Chennai.

22. Mr. Manoj T Joy, HOD, CSE & Mr. Santhoshkumar , AP, CSE attended a National level FDP on "Network simulators for research issues in wireless", BIT, Sathyamangalam from 27/02/2012 to 04/03/2012

23. Mr. Santhoshkumar , A P, CSE attended a one day workshop NPTEL at IIITMK, Technopark, Trivandrum and a one- day workshop for the implementation of National Vocational Education Qualification framework in Kerala, at CET, Trivandrum

24. Mr. Jose Antony and Mr Sree Ram H attended a short term training program on "Recent Advances in Fatigue and Fracture" organized by Govt. Engineering College Barton Hill, Thiruvanathapuram during 2-7 July 2012.

25. Mr. Joms Antony & Mr. Sudhin Joy (PG scholars) participated in the workshops on " Application Development on Aakkash" and "Building Things-that-Think" organized by ICFOSS, Technopark on 16 &17, and 22&23Feb. 2012

26. Ms. Therese Yamuna Mahesh, Geevarghese Titus, Jose J Edathala, Indu Reena Varghese and Reeju Elisa Baby attended a 2- day ISTE workshop on AAKASH for Education at AJCE on 10 and 11 of November 2012

27. Mr. Jinson Davis and Ms. LishaVarghese participated in a week long ISTE workshop conducted at College of Engg, Kidangoor from 26 Nov to 01Dec 2012, which focused on J2EE- MVC framework. The workshop was organized by CSE and IT Depts sponsored by TE-QIP.

28. Prof Manoj T Joy, attended an Akaash Coordinator workshop at IIT-Bombay on 4 & 5 of November, 2012

29. Joms Antony attended the 4th IEEE International Conference on Technologies for Education organized by IIT Bombay hosted at IIIT Hyderabad, 18-20 th July 2012

30. Joms Antony attended 2 weeks ISTE workshop on "Introduction to Research Methodologies conducted by IIT Bombay from 25 June to 4th July, 2012

31. Joms Antony attended 2 day ISTE Workshop on Writing Effective Conference papers conducted by IIT Bombay during 18-19 th February, 2012

32. Ms. Lisha Varghese (AP, CSE) led a one-day seminar for the students of St. Gregorios College of Nursing, Parumala. The seminar dealt with the importance of computers in the field of nursing and basics of MS office.

33. Mr. Juby Mathew took training classes on " E Commerce " for Company Secretary students at St. Alphonsa College, Kanjirapally on Aug 18, 2012

34. Ms Midhuna Jyothi R, AP/IT completed ten week - Virtual training & certification program on Database Design and Programming in SQL conducted by Oracle Academy and CSE dept., AJCE.

35. Dept. of CSE&MCA conducted a 4-day ISTE workshop for students on "Aakash Android Application Programming "(23-24Feb. and 2-3March, 2013). Prof. Manoj T Joy, HOD, and Mr.G.Krishna Lal, (AP) were the Co-coordinators.

36. Joms Antony attended the FOSS Young Professionals Meet (FYPM2013) supported by IEEE Kerala Section and IEEE GOLD during 27-29 September 2013, Technopark, Thiruvanthapuram.

37. Joms Antony attended the IEEE Global Humanitarian Technology Conference South East Asia Satellite (GHTCSAS 2013) supported by IEEE Kerala Section and IEEE GOLD. Aug 23 24, 2013, Technopark, Thiruvanthapuram

37. Joms Antony participated in the 5 day Workshop on "Advanced Android Programming" organized jointly by IIITMK in association with International centre for Free and Open Source Software (ICFOSS) and IEEE Computer Society Kerala section during 13-17th May 2013 at Technopark, Thiruvanthapuram

38. Joms Antony participated in the 2 days Workshop on "Building Things that Think" organized by ICFOSS, 22-23 February 2013

39. Joms Antony participated in the 2- day workshop on "Application development on Aakaash" organized by ICFOSS during 16-17 Feb 2013, Technopark, Thiruvanthapuram

Training programs attended by faculty in 2013

Name	Dept	Course/FDP/STTP	Venue	Date
Prof Manoj T Joy, Mr. Juby Mathew, Mr. G. Krishna Lal	CSE & MCA	Cloud Computing	TCS, Cochin	19th Feb.
Mr. G. S. Ajith, Mr.Jerin Thomas, Mr. V.Jayakrishna	CSE & MCA	Recent Trends in Computer Architecture	IIT Chennai	17 to 21 Dec
Mr .Jinson Davis	CSE & MCA	JAVA Fundamentals and JAVA Programming	ORACLE Academy	April 8, 9, 10.
Mr.Juby Mathew	AP, CSE	Database Design and Programming	RSET	4 to 6 April.
Mr..V. Jayakrishna, Ms .Minu George	AP, CSE	Theory Of Computation	Jyothi Engg. College	4 to 5 April
Ms. Lisha Varghese	AP, CSE		Oracle Academy	28/12/12 to 15/03/13

Mr.Victor Jose, Mr.Bobin K. Mathew	AP, EEE	Autocad for Electrical Engineers	RIT	11 to15 March
Prof. Shiju George	Director, ASCII		Idea Unleashed Contest -2013	
Prof. Thomas Varghese	AP, IT	Object Oriented Software Development using Java		
Ms. Jessy George	AP, ECE	Embedded systems and Applications	SOE, CUSAT	18 to 22 Feb
Ms. Alfin Abraham, Ms. Merin Manoj, Ms. Midhuna Jyothi R. Ms. Reshma P	AP, IT	TCS Academic Interface Programme- Cloud Computing	Info Park, Kochi	Feb19.
Mr. Thomas Varghese and Mr.Melbin Varghese John	AP, IT	LAMP (Linux Apache MySQL PHP)	LBS Institute of Technology	3 to 10th Dec. 2012
Jaison C S and Binoshi Samuvel	AP, ECE	National Conference on Contemporary Issues in Social Science and Science Research	(NCCISSSR-13) SNR Sons College, Coimbatore	28th Jan.
Akas G Kamal, Sunish Kumar O S, Binu Mathew and Ajai Mathew	AP, ECE	Matlab and Simulink for Engineering Education	Hotel Trident, Kochi	25Feb.
Binu C Pillai	AP, ECE	Coordinators Workshop	IIT Kharagpur	April 1-6
Jose J Edathala & Abubecke K.M.	AP, ECE	IEEE International conference on Information and Communication Technologies	Noorul Islam Centre for Higher Technical Nagercoil	11 and 12 April.

Training programs attended by faculty in 2014

Name	Branch	Name of Course/FDP/STTP	Venue/Date
Prof. Manoj T Joy	CSE	CYBER SECURITY	IIT-Mumbai - 16 to 22 May
Mr. Juby Mathews	MCA	A novel security-based approach of integrating group communication and navigation in android gadgets.	SJCET, PALA - 14-15 March

Mr. Juby Mathews		Design and Implementation of Secure Location and Group Communication System for Android Platform	Scientific Research and Development (IJSRD) April 2014(ISSN (online): 2321-0613).
Mr. G. Santhosh Kumar	CSE	Computer programming	IIT Mumbai - 21 to 24 April
Mr. Jinson Davis Ms. Lisha Varghese	MCA	Hands on Workshop on OpenGL	24, 25 March.
Mr. Deepu Benson, Mr. Aby Jacob	CSE	Probability Theory and Its Applications	28 to 30 April
Ms. Reshmipriya S	CSE	Computer Networking	IIT-Mumbai – 5May
Ms. Ashji S Raj, Ms. Niya Joseph		Artificial Intelligence and Robotics	TCS, Kochi. 22.04.2014
Ms. Anishamol Abraham	CSE	Network Security	VJCET, Vazhakulam, 16 to 20 May.
Ms. Tintu Alphonsa Thomas, Ms. Sumy Joseph	CSE	Big Data Analytics	RSET. 5 to 7 May.
Ms. Sharon Sunny, Ms. Anjana V, Ms. Tintu Alphonsa Thomas	CSE	IBM Rational SEED	RSET. 30Dec 2013 to 2 Jan 2014
Mr. Geevarghese Titus and Jinu Jai (PG scholar)	ECE	Artificial Intelligence and Evolutionary Algorithms in Engineering Systems	Noorul Islam Centre for Higher Education, Kumarancoil / 22nd & 23rd of April
Ms. Elza George	ECE	Analysis of Duration Patterns In Speech Using Clustering	CET, Trivandrum
Mr. Mathew George	ECE	Power and Computing Technologies	Noorul Islam Center For Higher Education, April 2014
K G Satheeshkumar, Geevarghese Titus and O.S. Sunishkumar		Current Research in Wireless and Optical Communications	College of Engineering, Kidangoor, 3 to 5-Dec
Dr. Jippu Jacob	ME	Intellectual Property Rights and Patent Drafting	CET Tvm./ Jan 3-4.

(Resource person)		Innovation	Bishop Jerome College of Engineering, Kollam, 01 March
		Innovation : *Let it ignite a fire in you*	KCAET, Thavanur. 14.05.2014
Mr. Shiju George (Resource person)	IT	Motivation on Entrepreneurship	Bishop Jerome Institute, Kollam / 1March
		Career Guidance	YUVADEEPTHI / 9th May Changanassery
Prof. Sandhya Ramakrishnan, Ms. R. Midhuna Jyothi, Mr. K.V. Raveendrakumar and Mr. M. Aneesh	IT	Careers and Opportunities in IT	St. Mary's HSS, Vellaramkunnu , Kumily-20 March
Ms. R. Midhuna Jyothi	IT	National Workshop on Image Security with Hands on training	VIT, Vellore on 22nd March
		Network Security	VJCE, Vazhakkulam, 16th May
Prof. Sandhya Ramakrishnan, Ms. R. Midhuna Jyothi	IT	Machine Intelligence	CUSAT, Kalamassery, 05 to 09 May

Joms Antony attended the 6th IEEE Conference on Technology for Education 2014 held at Amrita University, Coimbatore during 18-21 December 2014

Institutional support for faculty refresher programmes

Amal Jyothi has been supporting faculty members to attend refresher courses and training programs by providing duty leave and financial support

2.4.5 Awards and Recognition Received by Faculty Members

The awards and recognitions received by faculty members during the period of this report are outlined below.

1. Asst. Prof. Sunish Kumar O S, faculty from Department of CSE received "Dada Saheb Dr. Ambedkar National Fellowship Award-2011" for his achievements in the field of education and cultural activities. This award is given by Bharathiya Dalit Sahithya Academy, New Delhi.

2. Mr. Sherin Sam Jose, Associate Professor in AU, attended a 12 day executive program on Technology Commercialization at Texas, USA, organized by University of Texas and sponsored by the Department of S & T, Govt. of India - Sept 2012.

3. Mr. Rony Scaria, CAD Instructor, Dept. of Automobile Eng won the first place in an international online CAD contest conducted by M/s PTC, Texas, USA in April 2013.

4. Dr Jippu Jacob received Eminent Engineer award from Institution of Engineers.

5. Mr. K.J. Mathew, Asst. Prof. of Automobile Engg. - First rank and gold medal for M.Tech (Manufacturing Engineering) from VIT, Vellore - July 2013

6. Ms. Darsana P, Asst. Prof. in Electronics and Communication Engineering. - First rank and gold medal for M. Tech (Communication Engineering) from MG University, Kottayam - July 2011

7. Ms. Merene Joseph, Asst. Prof. of Electronics and Communication Engineering. - First rank and gold medal for M. Tech (Communication Engineering) from MG University, Kottayam - July 2013

8. Ms. Sreeja C, Asst. Prof. in Electrical and Electronics Engineering Engg. - First rank and gold medal for M. Tech (Power Electronics and Power Systems) from MG University, Kottayam - July 2011

9. Dr. Jippu Jacob, Professor and Head, ME, served as a Member in the Panel of Judges at the Rural Innovators Meet 2013 held during 21-23 March at the Integrated Rural Technology Centre (IRTC), Mundur, Palakkad, in collaboration with the KSCSTE.

10. Dr. Soney C George, Professor, Department of Basic Sciences has been elected Fellow of the Royal Society of Chemistry, 2014

11. Ms. Annie Maria Issac, AP of Civil Engg, was selected for a two-month summer fellowship program organised by Indian Society of Science at IIT, Bombay (2014)

12. Joms Antony, approved as external contributor for IIT Bombay Spoken tutorials in Java Intermediate track and Digital Divide track: 2014

13. Joms Antony, received the Technology for Education grant as part of T4E 6th IEEE Conference 2014

14. Joms Antony, 3rd prize in National Teachers Contest conducted as part of 6th IEEE Conference on Technology for Education 2014

15. Joms Antony, Second Prize Winner in the Open Source Hardware Projects contest conducted as a part of FOSS Young Professionals Meet 2013 (FYPM2013) supported by IEEE Kerala Section and IEEE GOLD 2013

2.4.6 Teacher Evaluation for Quality Enhancement

There is a comprehensive feedback system for the faculty as well as the staff who are teaching in the curriculum. The complete system is automated. The feedback of the student will be conveyed to the faculty by the Principal. The feedback data, along with the self-appraisal form of the teacher, will be used for the evaluation by a Faculty Appraisal Committee which consists of the Principal and the Deans. Teaching, research output and other services rendered are considered for this evaluation. The faculty has to submit a self-appraisal report which will be used for the evaluation. The recommendations from the HOD are also considered for the same. During the feedback, the principal suggests areas that require improvement and gives proper guidance. The best faculty members in different cadres are awarded yearly with certificate, mementos and cash prize.

2.5 Evaluation Process and Reforms

2.5.1 Dissemination of Evaluation Procedures to Stakeholders

Information about the evaluation processes reaches the stakeholders through various modes of dissemination. The different modes of information being disseminated to the stakeholders are

Student's evaluation scheme

Internal assessment and external assessment for academic performance are conducted. The following strategies are adopted in this matter.

(i) Student evaluation scheme and grading pattern of the university and the college are communicated to students on the very first day in the College.

(ii) The same information communicated to the parents in the first Parent Teacher Association Meeting.

(iii) The class teacher describes the evaluation in the first class

(iv) The subject teachers also discuss the evaluation scheme in the class.

(v) The detailed scheme of evaluation pattern is communicated to the students through the course plan.

(vi) Students are also provided with student handbook or academic journal.

Faculty evaluation scheme

➢ Faculty evaluation is done during the selection process and they are regularly monitored through feedbacks from the students, confidential report from the HOD and the appraisal committee monitors their performance annually.

➢ Information regarding the teacher evaluation is provided by the principal and HOD.

2.5.2   Reforms in Evaluation initiated

The University has introduced credit system for B. Tech from the Academic Year 2010-2011 onwards and for M. Tech from the academic year 2011-2012 onwards. This system favors grading system also. Teachers are acquainted with the new system regarding grading. Class teachers are directed to acquaint the students with the new system. Parents are also oriented with the system during Parent Teacher Association meetings.

Evaluation of Staff:

1. Weekly work report

2. Interact with the students in random from the semester and get their feedback and comments on how to improve the result and to build good academic environment.

3. Self-Appraisal Report by each faculty

4. Maintaining and updating the course file, work register

5. Preparation of the semester work report

6. Evaluation of each subject teacher by the students

7. Preparation of the monograph of the course and submitting them at the end of the semester to the documentation committee.

8. Prepare/ modify the lab manuals and submit them to the documentation committee.

Evaluation of Students:

1. Maintaining the class attendance register
2. Maintaining the student diary which includes, leave record of students, extracurricular activities like technical, cultural and sports activities, in addition to academic progress.
3. The student diary/journal monitored by the faculty.
4. Assignments to students such that their understanding and innovative thinking on the subject will be put to test.
5. Conduct series examinations and class tests as per the prescribed pattern.
6. Plan and inform the students about internal and external lab examinations.
7. Preparation of the internal marks as per the norms of the university.
8. Maintaining the progress card and intimating parents about the progress of the ward.
9. Proper guidance and additional coaching to weak students..

2.5.3 Implementation of Evaluation Reforms

For the effective implementation of the evaluation reforms the institution has adopted the following mechanisms:

- A Controller of Exams is appointed for both internal and external exams in the College
- Exam calendar is finalized and intimated to the students during orientation program/beginning of the semester
- Internal marks are published on time, the information is communicated to parents and uploaded to university website.
- Software is developed for analyzing results at the College level and a central Coordinator is appointed to monitor the same.
- Hard copy of internal marks and supporting documents are filed in the department.
- Benchmarking is done by IQAC in scheduling the conduct and timely evaluation of the examinations.
- Valuation of papers and dissemination of the assessment outcomes to students and parents are done in time.
- Centralized Valuation camps are organized by certain departments for internal examinations to facilitate the timely publication of results. This is done after the regular working hours
- The College has developed the Graduate Attributes through a participatory process. Linking these to the course plans and analyzing the attainment are IQAC quality initiatives on the anvil. Development of in-house software for the analysis of Graduate Attributes attainment by each student is also in process.

2.5.4 Formative and Summative Assessment Approaches at AJCE

The College ensures quality and rigor in the Formative Assessment process by adhering to the University and institutional norms and assigning the responsibility of coordinating and monitoring it to the Internal Controller of Examinations. The Course Grade is assessed from assignments and class tests given to each student. The summative assessment is done by the University.

The Course Plan is a major instrument which outlines the scheme and schedule of internal assessment in each course.

Result evaluation by the subject teacher after the first class test is conducted and the weaker students are identified. Class teacher consolidate the marks and interacts with the weak students. Meritorious students are acknowledged / rewarded

Some Positive Outcomes of the approach
- The top performing students who secure more than 8 SGPA are honored by being placed in the Director's and those above 7.5 SGPA in the Principal's Honors.
- GEM of AJCE is awarded to the best outgoing student.
- CROWN of AJCE is awarded to the overall topper in academics
- Cash award to each branch topper.

2.5.5 Internal Assessment Standards

For the internal assessment in all courses the institution strictly follows the norms set by the University like weightage for attendance, test papers, assignments, seminars, viva voce etc. Creative assignments which facilitate self-directed learning are given. In evaluating seminars, skill in communication is also a major criterion.

In order to ensure transparency in internal assessment the following measures have been adopted:

- ❖ Publishing internal marks /Grades in the dept. notice boards prior to uploading the mark list in the University website. Students can verify their marks under each criterion.
- ❖ The criteria of evaluation of various methods are given along with the course plan
- ❖ If a student has any assessment-related grievance, she/he can approach the three-tier Academic Grievance Redressal Cell of the College (Course Faculty ⇨Class Teacher ⇨HOD).

2.5.6 AJCE's Graduate Attributes

Graduate attributes are attained through the program outcome and evaluated through the direct and indirect assessment methods. The following are the **Graduate Attributes (GA) of AJCE**.

1. Engineering Knowledge
2. Problem Analysis
3. Design/ Development of Solutions to problems
4. Investigations of Complex Problems
5. Modern tool usage
6. Understanding of the Role of Engineers in Society
7. Concerns for Environment and Sustainability
8. Response to Ethics in Life and Social Issues
9. Capability for Individual and Team Work
10. Good Communication Skills
11. Efficient Project Management and Finance
12. Motivation for Lifelong Learning

Graduate Attributes are attained through the various activities designed and implemented in the College such as:

- ❖ Workshops, seminars, skill development programmes

- ❖ Industry-academia Interface
- ❖ Co-curricular and extracurricular activities
- ❖ Activities of clubs and associations
- ❖ Sports and games
- ❖ Finishing school and PD programme
- ❖ Activities of Departmental Students' Association and the College Union
- ❖ Resurgence education and value clarification sessions
- ❖ Campus Community activities and outreach programmes

2.5.7   Academic Grievance Redressal

Grievances on account of abnormalities in internal marks, are corrected at the College level. At university level it is approached through the proper channel. Revaluation, out of syllabus questions and mass failure can be represented to the university through proper channel and they take corrective actions. Students can represent their grievances in the class committee, to class teachers, to the counsellor, to the HOD, to the Principal or to the Manager directly or through proper channel as per the case.

For the disposal of grievances related to evaluation, a three- tier system is in place at the College.
Level 1- Individual Course Faculty
Level-2- Class teacher and HoD (Department level Grievance redressal)
Level-3- College level Redressal Cell

2.6 Student performance and Learning Outcomes

2.6.1   Institutional Learning Outcomes and their Dissemination

To achieve the vision through mission, mission through Program Educational Objectives (PEO), PEO through the Program Outcomes (PO) and PO through Course Outcomes (CO) have been formulated for each Department and the same approved by the Academic Council. HODs and Deans have taken initiatives to refine the existing practice by developing institutional learning outcomes in the form of Graduate Attributes.

The attributes developed were assessed using the software developed by the College for the 2014 outgoing batch. Graduate attributes are periodically reviewed and changes suggested based on experience are implemented.

The institution has published its Graduate Attributes (GA), CO, PO and PEO for each Department through the following media to reach its stakeholders:

- Official website of the college
- AES – Uploading the Graduate Attributes and Course Plan in AES
- Interaction by the Principal/Dean Academic and Dean R&D/HOD/Class teacher/individual course faculty with students and parents.

2.6.2   Students' performance and Progression Monitoring

The monitoring of student performance and progression begins by documenting the entry-level marks/grade of all new admissions in the office. The Head of the department along with the class teacher and course faculty monitors student progression through semester-wise formative and summative

evaluations, students diary, mentors report, best class evaluation and semester wise class reports. The overall performance of the students is communicated to the parents during class wise PTA meetings for weak students, through mobile phone or through mails from the corresponding Class teachers. The results of internal examinations are communicated to parents periodically and if the performance falls below a particular level they are called in.

Program-wise and aggregate pass percentages during the period of this report are given in the Table below.

Table: Program-wise pass percentage of students during the period of the report

Course	2009-10	2010-11	2011-12	2012-13	2013-14
B. Tech. Auto	N/A	N/A	N/A	11.76	8.06
B. Tech. Civil	50	74.6	75.8	82.5	82
B. Tech. Mech.	27.69	41.93	51.61	57.29	82.75
B. Tech.EEE	27.87	58.47	68.34	78.60	40
B. Tech. ECE	73.22	86.92	83.73	73.02	75
B. Tech. Chem.	N/A	N/A	N/A	N/A	N/A
B. Tech. CSE	61.90	87.50	88.71	66.67	58.89
B. Tech. IT	77.00	84.13	71.19	47.83	32
B. Tech. Mett.	N/A	N/A	N/A	N/A	N/A
M. Tech. Mech.	50	64	73	100	N/A
M. Tech. Civil	N/A	N/A	N/A	N/A	N/A
M. Tech. ECE	N/A	94.4	100	95.83	N/A
M. Tech. EEE	N/A	94.44	70.58	94.44	N/A
M. Tech. CSE	NA	NA	NA	100	100
B. Tech. Aggregate	52.95	72.26	73.23	59.67	54.1
M. Tech. Aggregate	50	84.3	81.2	96.2	N/A

The branch-wise and aggregate pass percentages over the years are plotted in the following diagrams.

B Tech

M. Tech. Dept. – wise

M Tech & B Tech Aggregate

- B. Tech. Aggregate
- M. Tech. Aggreg…

Year	2009-10	2010-11	2011-12	2012-13
B. Tech. Aggregate	52.95	72.26	73.23	59.67
M. Tech. Aggregate	50	84.3	81.2	96.2
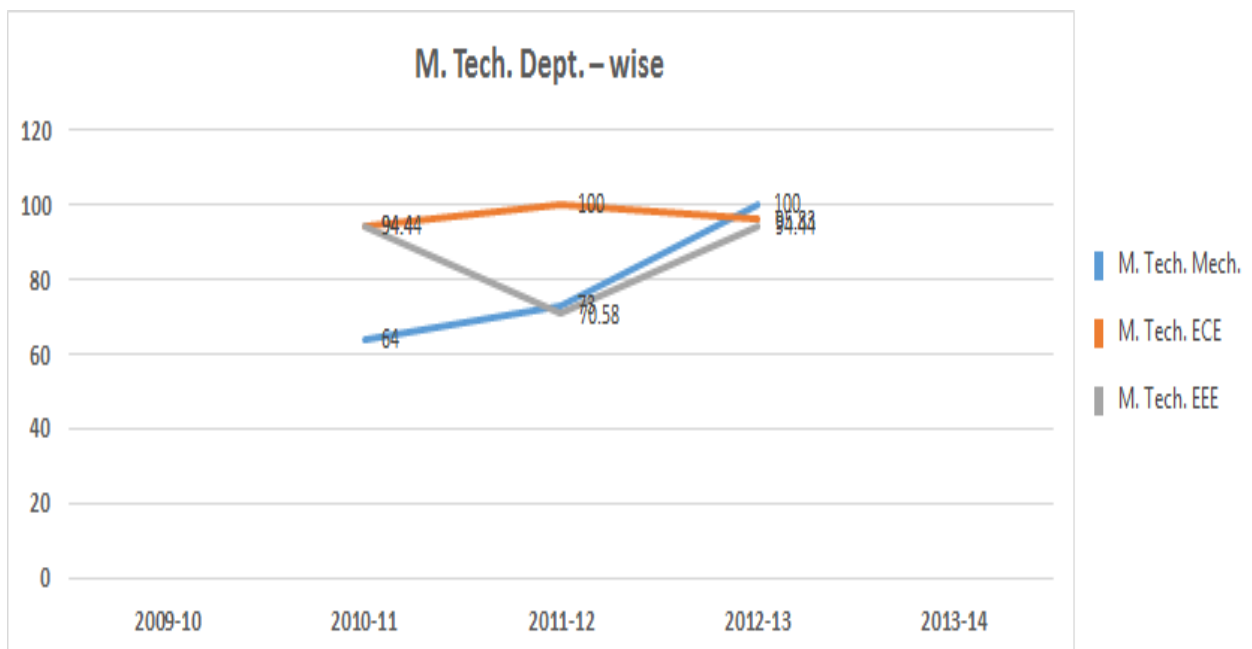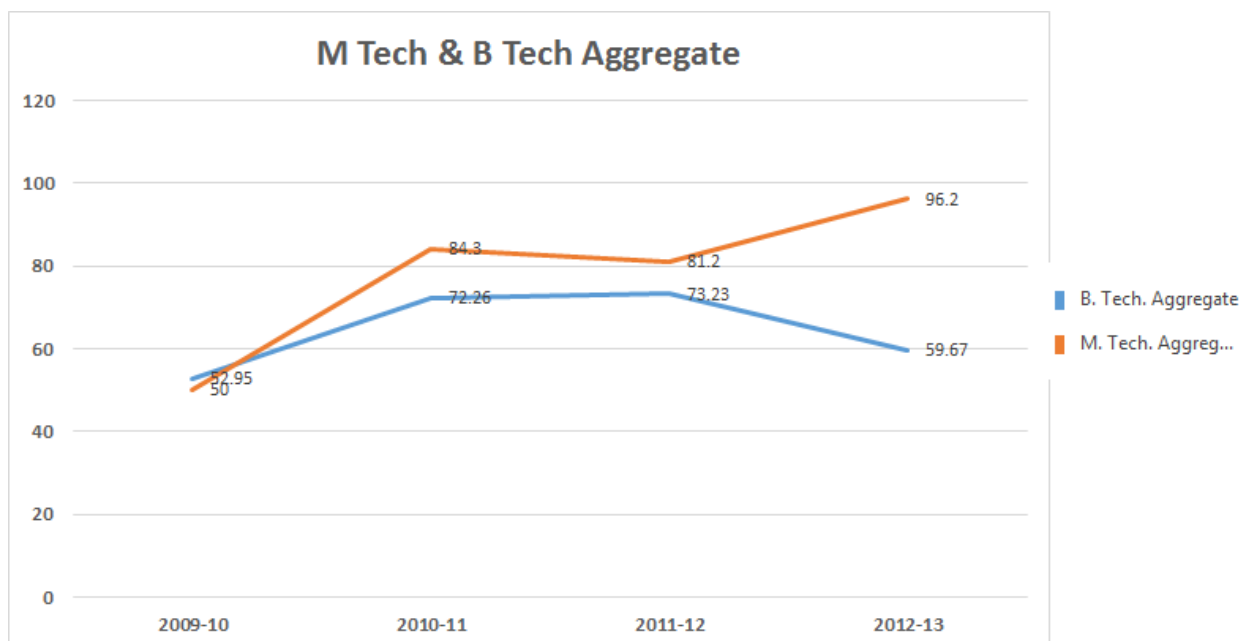
2.6.3 Assessment Strategies Achieving Learning Outcomes

The teaching, learning and assessment strategies of the institution are part of the Curriculum Implementation Process and are structured into five stages to facilitate the achievement of the intended learning outcomes:

Stage I: Planning at Department level

This includes Subject Allocation to each Faculty member, Preparation of Graduate Attribute linked Course Plan by the individual faculty, Submission of the Course Plan to the HOD and uploading at AES (Academic Enterprise Solutions). Student-centric teaching-learning pedagogies such as collaborative learning, NTPL video lecturing, demo-model studies, Model Simulations, Library assignments as well as internet assignments, case studies, field visits, experiential learning etc. are incorporated in the Course Plan.

Stage II: Course Delivery

Lecturing hours and Tutoring hours for individual faculty are scheduled based on the course credits. Additional required hours are compensated on Saturdays. Weak students' training by the faculty based on course credit is also made available.

Stage III: Outside Trainings

The department ensures that each and every student is actively participating in industrial trainings, social service schemes, CAD training programs, GATE coaching classes from external mediators etc. Regular feedback about the different courses is also taken on timely basis.

Stage IV: Evaluation and Feedback

Course evaluation is done according to the evaluation procedure developed and included in the Course Plan using AES software by the end of the course and interim feedback collected through the concerned HoDs. This is in alignment to the course outcomes. Formative and Summative evaluations are done

during the semester. The results are analyzed and communicated to the students and parents. Remedial teaching is provided as and when needed.

Stage V: Departmental Review

The department reviews the courses, transactions and the achievement of course objectives. Interim feedbacks are taken by the HODs to ensure effective achievement of the course objectives. Department wise PTA meetings are also arranged to make sure the attainment of the selected objective. A Class committee is also formed which helps to have better student-teacher interaction to ensure fruitful attainment of the course objectives.

2.6.4 Socio-Economic Relevance of Academic Programmes at AJCE

Specific steps are taken by the College to make the academic programmes offered socially and economically relevant. They include:

Student placement initiatives taken:

- The College has a Career & Placement cell which organizes Career Orientation programme, Online placement training and aptitude tests for the students
- The College has a Management and a Civil Service Institute which provides better training for interviews, group discussion, group tasks etc.
- College Placement Cell has arranged placement drive including many companies such as UST Global, TCS, TES, WIPRO, CTS, Infosys etc. during the middle session of the final semester
- Each Department of Amal Jyothi has its own placement cell which arranges different management level trainings for making the students capable of attaining placements
- Placement brochures are prepared and sent to reputed organizations by individual departments for facilitating placements
- Tata Consultancy Services has selected Amal Jyothi as an institutional partner for campus placement programmes
- The College has appointed a Public Relations Officer, Soft Skill Trainers and a Liaison Officer for coordinating placements in various Departments in developing communication and soft skills and aptitude among students through Orientations and trainings on Research Methodology
- Instituting Student Research Awards such as IEDC, I^2U etc. for the best research projects identified.
- Selecting Student Research papers for publication in AICERA, IJSART, the College Academic Journal with ISBN

Research Aptitude is developed among students through

The College encourages students to undertake research works. Research Center functions under the leadership of Dean, Research & Development. It conducts Innovations Ideas Unleashed (I^2U) Contest among Amal Jyothi students community. They are asked to submit project proposals and the selected projects have been financially supported for implementation. Separate fund is earmarked in the college budget for R & D activities of students. Students are encouraged to participate in project contests conducted at different places and our students have brought several prizes to the institute. They have been motivated by giving the grace marks. Students are guided to present papers in conferences, Journal publication also is supported.

The College fosters Innovation & Entrepreneurship among students through the following ways:

- Department Student Association activities like Department Fests, setting up Exhibitions and Sales stalls during celebrations, etc.
- Support to students to attend seminars and workshops on Entrepreneurship, Technical symposia etc.
- Innovations Ideas Unleashed (I^{2}U) Contest.

Social Initiatives are encouraged by the college through activities such as

- National Service Scheme (2 Units)
- Outreach programme
- Students magazines

2.6.5 Student Performance Analysis and Follow-up Action Plan

The College gathers data on student performance and learning outcomes through Semester wise formative and summative result analysis, Feedback on students received from professional trainers hired from outside, Analyzing the progression of Students to higher education and/or job placements, Assessing the performance of students in placement drives, Studying the class wise semester reports (UG), and Analysis of Graduate Attribute Attainment by students.

Based on the data collected on student performance the following actions are taken to overcome the barriers of learning.

- Remedial programmes are initiated to support students weak in specific subjects.
- Continuing exam series for weak students based on previous year question papers.
- Peer teaching is encouraged among students.
- Focused mentoring and counseling services are offered to students who require special help
- Special Scholarships are provided by the College to financially backward students
- Add-on programmes and Skill enhancement programmes are offered by the College for capacity building among students
- Career and Placement orientation programmes and Finishing School programmes give direction, clarity and training to students to face job interviews with confidence.

2.6.6 Monitoring and Ensuring Achievement of Learning Outcomes

Integrated into the Academic Council of AJCE and the Internal Quality Assurance Cell of the College, the following strategies are deployed for monitoring and ensuring the achievement of learning outcomes.

- Preparation and publishing of Course Plan which has learning outcomes, student centric pedagogy and evaluation procedures embedded in it.
- Semester wise formative and summative result analysis as inputs for focused academic Counseling and Mentoring support
- Course feedback (integrated with the computer aided student feedback on teachers) to assesses the quality of curriculum delivery

- Analyzing the progression of Students to higher education and/or job placements, assessing the performance of students in placement drives, the academic results analysis as yardsticks of the achievement of learning outcomes.

The achievement of learning outcomes is monitored by the Course faculty, class teacher, Heads of Departments, Dean Academic and the Principal with systematic support from the AES.

2.6.7 Evaluation Outcomes, Performance Indicators and Follow up

Semester wise formative and summative assessment outcomes are measured using internal assessment tests, assignments, seminars, quizzes, discussions, case study and project assessments and attendance monitoring. The institution and the individual teachers use these assessment and evaluation outcomes as an indicator for evaluation of a student's performance, achievement of learning objectives and planning.

Analyzing these evaluation outcomes, students with special needs are identified and steps are taken to cater to their needs.

- Peer teaching, leadership in clubs and associations, self-oriented projects etc. are given to students with higher potential.
- For students who need additional support remedial classes, tutorials, remedial tests, special mentoring meetings and interactions are arranged.
- In order to recognize students' performance, awards like Best Outgoing Student, Best Researcher, Best Field Worker, Best Class and Academic Proficiency have been instituted.

Assessment and evaluation outcomes are discussed in the departmental meetings which are held bi-weekly. The inputs and insights obtained at the departmental level are taken up for discussion in the Academic Council and are incorporated in the annual planning for the next academic year.

Teaching Learning and Evaluation: Other Relevant Information

NIL

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

Amal Jyothi College of Engineering (AJCE) has formulated and deployed required policies and practices for inculcating research aptitude among students and faculty members. This has paved the way for a smooth conduct of research, consultancy and extension activities in the college as well as in the region. The college seeks for continuous improvement in the areas of research, consultancy and extension to measure up to internationally acceptable standards.

3.1. Promotion of Research

3.1.1 Doctoral Research

Our Institute caters to doctoral research by guiding students for the doctoral programme of different universities and encouraging faculty members to do research.

- Total number of research guides in the college: 9 [BS-4, ME-2, MET-1, CE-1, ECE-1]
- No of Ph.Ds awarded under guidance of our faculty- one (BS)
- No. of faculty who obtained Ph.D during the period under review: 4 [BS-2, EEE-1, HUM-1]
- No of faculty members pursuing Ph.D.: 32 (ME-3, ECE-7, IT-3, AU-4, CE-1, CSE-6, CHE-1, CA-2, MCA-2, BS-2, HUM-1)
- No of students pursuing Ph.D. 7 (BS)

3.1.2 CREST

- ❖ Centre for Research and Extension in Sustainable Technology (CREST) functions as a coordinating entity that brings all R&D, consultancy and extension activities of Amal Jyothi together. It is directed by Dean (Research) of the College.

- ❖ CREST currently has the following five arms:

- ➢ **Innovation and Entrepreneurship Development Center (IEDC)**

- ❖ IEDC was established with NSTEDB funding of Rs.43.85 lakh in 2010
- ❖ Conducts annual project ideas contest- Innovation Ideas Unleashed (I^2U)
- ❖ Winning project ideas financially supported by the College and NSTEDB
- ❖ Conducts training programmes in entrepreneurship (Entrepreneurship Awareness Camps, Faculty Development Programmes)
- ❖ Technical Partner with Malayala Manorama in the conduct of state-wide innovation contest- Yuva Mastermind

- **Amal Jyothi Consultancy and Technical Services (ACTS)**

  - Provides technical consultancy and design services to industries, institutions and the general public
  - Team led by Mr. Zacharias Mathew, a well known machine design expert and industrialist

- **Amal Jyothi Business Computing Division (ABCD)**

  - Undertakes new ventures related to Business Process Outsourcing (BPO), software development, computer-based training etc.

- **Amal Jyothi Centre for Advanced Research (ACAR)**

  - Promotes inter-disciplinary faculty and student research leading to Ph.D theses, publications and funded R&D projects
  - Publishes bound volumes of AJCE research publications
  - Promotes national/international collaborations. MOUs signed with UOIT Canada, Deakin University, Australia

- **Amal Jyothi Centre for Nanoscience and Technology (ACeNT)**

  - Promotes research in nanomaterials, structures and their applications

The institution has constituted a research committee headed by Dean (Research) in 2010 to facilitate the research activities of students as well as faculty members. By the inception of the research committee, student research activities flourished along with faculty research. The research committee recommendations paved the way for quality student research, and student projects, faculty research and the facilities for research, increased participation in National and International conferences, and publications in international journals (Impact Factor up to 4.198)

3.1.2 Composition of the Research Committee:

The Research Committee has been established with Dean (Research) as the convener and members from all Departments. The Principal, Deans and HODS are ex-officio members of the committee.

Recommendations of Research Committee meetings:

- Faculty members from different Departments may be provided with study leave for pursuing Ph. D programme. All faculty members with M. Tech shall be encouraged to register for Ph.D.

- ❖ Try to establish a research centre at AJCE (exploring the possibilities of collaboration with MG University, BITS Pilani, VIT University etc.) so that Ph. D. guides/co-guides could be from AJCE.
- ❖ Each department can designate one research oriented faculty member as research coordinator. The coordinators will initiate regular meetings within the department and across departments to promote multi-disciplinary R&D. Each department to submit as many proposals as possible to external funding agencies.
- ❖ Encourage publishing research papers, cash incentives may be given for publishing papers in reputed journals. Publication of papers to be given due consideration in faculty appraisal.
- ❖ Travel support to be provided for presenting papers at conferences and for presentation of proposals before funding agencies.
- ❖ Financing students for carrying out minor research project to the tune of up to Rs.20, 000 each.
- ❖ Bringing out bound volumes of papers published by Amal Jyothi faculty and students.

- ❖ Establishment of Research Labs for each department in the new independent block, called Research Square, exclusively for PG programmes and research.

Outcome/Impact
- ❖ 32 faculty members have registered for Ph. D with the support from the institution.
- ❖ Some of the AJCE faculty members have been recognized as research guides of VIT, Vellore, Bharathiar University, Coimbatore and M. G. University, Kottayam with the wholehearted support from the institution.

- ❖ Several faculty members are presenting papers and participating in conferences and seminars with financial support from the institution.

- ❖ 253 Applications were received and funding is given to 57 Projects under I^2U during the period of this report

- ❖ Best faculty awards are given to faculty members for the overall performance of the faculty in which research, extension, and consultancy play a key role in deciding the awardees. Best faculty awards are given each year in the category of Assistant Professor (8), and Professor/Associate Professor (one)

- ❖ Increased commitment among faculty members to
  - ❖ Complete Ph. D
  - ❖ Register for Ph. D
  - ❖ Publish Papers
  - ❖ Undergo M. Tech.
- ❖ The First volume of Research papers (2007-2011) has been published. Publication of further volumes is under way.

❖ A research lab for nanotechnology has been established and currently seven research scholars of the institution are availing this facility along with faculty and PG students of the institution.

3.1.3 Implementation of Research Schemes and Projects

❖ For the smooth progress and effective implementation of research projects, the institution has taken several steps such as:

- Autonomy to investigators
- The Principal Investigator has been given the full freedom to implement the project effectively irrespective of the funding agency like DST, KSCSTE, AICTE, DRDO etc.
- Duty leave /flexibility and concession in work load to attend seminars /workshops /symposia to PIs and Co-PIs and Researchers
- Timely availability or release of funds and resources
- Financial support for attending research related workshops and conferences
- Funding received by the College from funding agencies is deposited in a separate bank account and it is operated jointly by the Principal and the PI of the project

❖ Adequate infrastructure and human resources:

- Wi-Fi connectivity (Internet & Intranet)
- Research Lab for research scholars/ PIs for implementing the projects
- Network Resource Centre in the Library
- Computer Labs with networked systems
- Subscription of Science Direct (nanotechnology) and IEEE, ASME, ASCE and IEL journals for promoting research culture among staff and students
- Appointed two Research Assistants for executing research related activities in DBS/ Center for Nanoscience and Technology
- Time-off, reduced teaching load, special leave etc. to the faculty
- Duty leave/flexibility /concession in workload to do course work/research work
- Support in terms of technology and information needs
- Licensed software like Lab View for research

3.1.4 Research Promotion among Students

❖ The institution has taken keen interest to promote research culture in the campus. The various steps taken at the College level are enumerated below:

- Constitution of Research Committee to mentor and monitor research activities of the College and support the Management to develop a scientific and research oriented environment in the college
- Academic projects for all students are carried out in the campus itself to make them more research oriented
- Training programmes are organized to foster innovation
- Seed money for selected student research projects (57 $I^2 U$ projects were supported)
- Encouraging Research paper presentations in National and International Conferences
- Personal mentoring and guidance by the research supervisor throughout the research process

Department Level efforts to enhance research aptitude among students:

- Encouraging students to publish their B. Tech projects in journals
- Faculty guidance, collaboration and support to students at all stages of research work
- Giving cash award to the best student project based on detailed evaluation by the faculty members
- Promoting students to participate in various intercollegiate design competitions and research related events
- Encouraging the participation of students in the college level national and international seminars and symposia
- Training on the use of research specific software tools for data analysis, accurate referencing, in-text citations etc.
- Interaction with eminent researchers of national and international acclaim by arranging lecture series like Issac Newton lecture series, National Science Day celebrations, National Technology Day, World Mathematics Day celebrations etc.

3.1.5. Faculty Involvement in Research Activities

Guiding Student Research: The faculty is actively involved in guiding student research projects at different levels, viz, Ph.D, M.Tech, M.Sc and B.Tech. During the last five years, the faculty members have guided 928 student projects. Details are given in the following Table 1.

Table 1: Guiding Student Research

Sl. No	Guiding Student Research	No. of Research Projects				
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
1	Guiding Student Research (Ph. D)	2 (ongoing)	3 (ongoing)	4 (ongoing)	6 (ongoing)	7 (ongoing)
2	Guiding Student Research (M.Tech)	40	63	50	63	117 (ongoing)
3	Guiding Student Research (M. Sc)	4	5	10	8	4 (ongoing)
4	Guiding MCA projects				60	60
5	Guiding Student Research (B.Tech)	62	61	67	96	136

Collaborative research:

Faculty members have undertaken collaborative research work by establishing collaboration with two outside bodies- School of Chemical Sciences and International and Inter University Center for Nanoscience and Technology, M.G. University.

Individual Research of the faculty:

Several research projects have been undertaken by the faculty including Major and Minor researches funded by DST and other agencies during the last 4 years. The details are given in Table 2.

Table 2: Research Projects:

Sl. No.	Nature of Projects	Funded/sponsored by	No. of Research projects
1	Major projects	DST/KSCSTE/**BRNS/RRII/ABS**	6
2	Minor Projects	IE	1

3	Minor Projects	IEDC	25
4	Minor Projects	KSCSTE	4
5	Minor Projects	Kerala state Commissionerate for persons with disabilities	5
6	Minor projects (College funding)	I^{2}U	57
7	Minor Projects	Centre for Disability Studies, Trivandrum	3

3.1.6. Capacity building for Research

A host of workshops/ training programs/seminars were conducted at the college and department level with a focus on capacity building and imbibing research culture on the campus. One hundred and twelve such workshops/training programs were conducted in the College during the last four years. The details are furnished in Table 3.

Table 3: List of training programmes

Sl. No	Programmes conducted	Numbers
1	Seminars	15
2	Workshops	20
3	Training programmes	5
4	Invited talks/ motivational classes	39
5	Entrepreneurship Awareness camps/ programmes/FDP (IEDC)	25
6	All Kerala project contests	4
7	Annual Project contests (I2U)	4
8	Total	112

Steps 2 Research: e - Seminar on Research Methodology

The departments of Computer Science & Engineering and Computer Applications of Amal Jyothi College of Engineering, in technical partnership with the ISTE Kerala section and the CSI Cochin Chapter, conducted a two-day national level e-seminar on Steps 2 Research, which focused on understanding research in multiple perspectives and helped researchers acquaint themselves with recent developments. The Seminar offered a unique opportunity to learn from eminent academicians and research scientists by sharing their experiences and best practices

blended with theoretical and experimental research. It also provided an excellent opportunity in equipping and enhancing capabilities in the pursuit of research programme, spanning from identification of the topic to documentation of the thesis and related scholarly publications.

The seminar was conducted on 19th and 20th September 2014, through A-View, a specially developed software tool, simultaneously at selected institutions all over India. The course included delivery of two- way live lectures from Amal Jyothi and class rooms networked via internet. About 50 institutions all over India participated in this e-seminar, reaching to more than 2000 researchers. Resource persons were Professors from Amal Jyothi, IIT Bombay, University of Kerala and M. G. University.

FDP on Nanotechnology

A Faculty Development Programme on Recent Advances in Nanoscience and Nanotechnology was organized at Amal Jyothi College of Engineering during 20 April to 01 May, 2015. It was sponsored by All India Council for Technical Education, New Delhi. This programme was inaugurated by Rev. Dr. Jose Kannampuzha, Principal of the college.

The entire programme benefitted the academic community which attended the event. All the relevant fields of nanoscience and nanotechnology were covered and discussed. Eminent speakers from different organizations delivered lecturers on the basics, current scenario and scope for research in different areas of nanotechnology.

Faculty members who attended the programme were from different disciplines such as mechanical, electrical, civil, chemical, electronics, polymer, IT and basic sciences. Many faculty members were inspired to pursue research in nanotechnology by this programme. Some of them got the opportunity to collaborate with speakers of various institutions for characterization and analysis of samples.

3.1.7. Research Areas and Expertise Available

The College has prepared a list of prioritized research areas considering domain expertise available and the overall Vision and Mission of the College. The expertise (subject expertise, research methodology, resource person, Training and development) available with the institution and is made available to students, research scholars and the local community. The departments and their respective areas of research are given below:

- Civil Engineering: Structural Engineering, Waste water treatment, Environmental Engineering
- Mechanical Engineering: Material Science, Metal Matrix Composites
- Electrical Engineering: Power electronics, Power systems, Energy Systems

- Electronics and Communication Engineering: Biomedical imaging, Digital image processing
- Computer Science and Engineering: Image processing, digital image forensic, cloud Computing
- Information Technology: Big data, Internet of things
- Metallurgy: Material Science, Micro structural analysis of materials
- Automobile Engineering: Heat transfer, diesel engines, composites
- Chemical Engineering: Adsorption, Diffusion and nanocomposites
- Basic Sciences : Physics, Chemistry, Polymers, composites, blends, membranes, nanomaterials and nanocomposites
- Mathematics: Graph theory, Special functions, Applied Analysis, Cryoptography

3.1.8. Scholars on Campus

- The different departments of the College have put in concerted efforts to bring researchers and experts of eminence to the campus. More than 124 researchers and experts visited the College during 2010-2015

Organizational efforts to attract researchers

- Coordinated efforts from Research Committee, Placement Cell and the departments to bring researchers and scholars to campus
- Lecture series have been organized
- Department associations are formed and on behalf of the same, several researchers have been invited to the campus.
- Tie-ups and collaborations with other institutions/ NGOs/ industry etc.

Initiatives/Activities/Programs to bring researchers to the campus

- Organizing National and international seminars/conferences by departments
  - AJCE organizes Annual International Conference on Emerging Research Areas (AICERA); In AICERA 2015 (to be held during 23-24 July) the theme will be Manufacturing and Materials Engineering.
  - AJCE organized an International Conference on Quantum Mechanics and Quantum consciousness in January 2015
  - AJCE organized FDP on Recent Advances in Nanoscience and Nanotechnology in April 2015

- Organizing Workshops on Research Methodology
- Faculty development Programs
- Department Fests during which speakers of eminence are invited

Facilities and Funding to facilitate the visit of researchers
- Well-equipped guest house to provide accommodation to visitors
- Video conferencing facility in the state-of-the-art audio visual room
- Financial assistance to departments to bring researchers of eminence to the campus
- Honorarium and travel expenses to visiting faculty

3.1.9 Leave Provision for Research Activities

- The institution grants study leave to faculty members who are doing full time Ph. D and during the course work period for those doing part-time Ph.D.
- Duty leave is granted to all researchers and guides for doctoral committees and review meetings in universities
- Leave is granted for presenting papers in national and international conferences for researchers
- The research activities have resulted in more national and international publications/paper presentations
- Ph.Ds/ Ph. D scholars/M. Tech students of the institution are taking lead in organizing workshops/seminars and conferences.

3.1.10. Dissemination of Knowledge Generated through Research

The initiatives taken by the institution to share research knowledge are categorized under three heads, viz, Print and Online Media, Institutional Systems and Procedures, and Faculty as resource persons.

❖ Print and Online Media

The PRO section looks after all publications in the college. Interesting and important research contributions from the college are given publicity through news papers and electronic media.

The research work done by students and faculty are collected in PDF format/hard copy and selected ones are made available to students and faculty in the campus and also to outsiders who visit the department library and central library.

❖ Institutional systems and procedures

- Library facilities are open to outsiders including research scholars, students and general public and the research outputs of the college available in the library/network resource centre are made available to such visitors.
- Departments organize various extension activities which lead to more interactions and deliberations by faculty with the cross section of people in the community.

- Every department organizes national and international seminars with participation of students and members of the community. Through the discourses by eminent researchers and paper presentations of participants, the research outputs are communicated to students and community.

    ❖ **Faculty as Resource Persons**

- Faculty members are encouraged to act as resource persons for programs organized outside and are given duty leave without affecting the regular academic work. Faculty members have led more than 60 such sessions during the period of this report.

3.2 Resource Mobilization for Research

3.2.1 Financial Allocation for Research

The college has given due share in its budget for carrying out research activities. The amount is spent for books, journals, research promotion measures, organization of workshops etc. The details are given in Table 4.

Table 4: Expenditure on Research

Sl No	Item	Amount (Rupees)			
		2011-2012	2012-2013	2013-2014	2014-2015
1	Research	548253	847453	831941	731178
2	Project Funding			100000	175600
3	Print Journals	230304	315724	335649	311860
4	e-Journals	1410248	1589707	1700860	3169596

3.2.2 Seed Money for Faculty Research
- Support for researchers to participate in national and international conferences and research methodology workshops outside the college upon individual request, are provided. Decision is taken by the management on a case to case basis.
- Costs involved in submitting project proposals and travel funds to present the project before the expert committee are provided.
- Financial support is provided to students to participate in national level project contests like Innovation Hub, Infocom, Kolkata and Tech Top, Thiruvananthapuram.

3.2.3 Financial Support for Student Research

- Financial provision of upto Rs.20000 each to a maximum of 12 students every year to undertake innovative research projects. During the period 2013-2015 about 30 projects have been supported with a total financial outlay of 275600/-

3.2.4 Initiatives in Inter-Disciplinary Research

- Interdisciplinary research is very much encouraged by the institution as proposed by the research committee of the College.

- Many of the student projects are interdisciplinary in nature; students and faculty are from different departments. Besides this student projects supported by KSCSTE are also interdisciplinary in nature. Major projects supported by DST also come under interdisciplinary area.

A list of student projects and details can be found in Criterion 5- Student support and progression.

3.2.5 Use of Research Facilities

The College is committed to provide good infrastructural facilities for research and development. This facility is made available to students, faculty and people outside (31 M.Sc projects from outside were supervised so far). The optimal usage of facilities is ensured by providing availability, accessibility, flexible timings, motivation and tracking for feedback, among other things.

 Some important steps in this direction are

The student research work is fully carried out in each department. The infrastructure and lab facilities for the same have been added up during the past several years.
The student research work in UG and PG courses require the maximum use of research facilities. It is mandatory for students to use online resources like IEEE explore, ASME, Science direct (nanotechnology), ASCE and research software's such as Lab View etc.
- Extended lab hours (12 x 6) and extended library hours (8.00 am to 8.00 pm) on all working days
- Wi-Fi internet and online resources are made available free of cost
- Reprographic facilities are offered to students and staff at concessional rates
- Research orientation sessions and Methodology workshops are offered to PG students, research scholars and junior teachers

- An exclusive space for researchers and PG students is set apart in the library. The research related facilities in the library are displayed to inform and encourage optimal usage
- Science promotion in the form of Science Excursion with financial support of Kerala State Council for Science, Technology and Environment (KSCSTE)
- As part of popularisation of science, Kerala State Council for Science, Technology and Environment (KSCSTE) has sanctioned a new project to AJCE on "Introduction of Polymer Chemistry to the undergraduate students of Mahatma Gandhi University"

3.2.6 Special grants for developing Research facility

The College has been making efforts to attract infrastructure development funds from Kerala State Council for Science, Technology and Environment (KSCSTE) and DST, New Delhi. Recently proposals have been submitted to the above funding agencies under the SARD and FIST schemes.

3.2.7 Institutional Support for Faculty in Securing External Funds

- The Research committee informs and guides the faculty about the availability of various funding opportunities from DST, AICTE, KSCSTE, Government organizations, Industries and NGOs.
- The Management encourages the staff to go for funded projects and allow the staff to use facilities of the College free of cost/concessional rate.
- Travel expenses for the project proposal presentation are met by the Management.
- Flexible timings and workload sharing (Example, exemption from exam duties/administrative duties) without compromising on regular academic work.
- The College demonstrated a liberal approach in granting leave to faculty for undertaking research.

    Details of ongoing and completed projects and grants received during the last five years are given in Table 5.
- ➢ Number of projects (ongoing) : 5
- ➢ Number of projects (completed): 38

Table 5: List of major and minor projects

Sl No	Major/ Minor	Title of the project	Duration of the project	Funding agency	Amount Sanctioned Rs.	Amount Released Rs.
1	Major	Rubber Tapping Knife	2010-2014	RRII	670000	210000
2	Minor	Cocobot	2010	DST	100000	100000

3	Minor	Intelligent Automated Fan	2010	DST	100000	100,000
4	Minor	Pepper Separator	2010	DST	100000	100000
5	Minor	Low cost air-conditioning system	2010	DST	100000	100000
6	Minor	Mercury pendulum : A wave power plant	2010	DST	100,000	100000
7	Minor	Pedal powered inverter	2010	DST	100,000	100000
8	Minor	Pre-paid Energy Meter	2010	DST	100000	100000
9	Minor	Internet Radio Streaming Server	2010	DST	100000	100000
10	Minor	Bore well rescue robot	2010	DST	100000	100000
11	Minor	Anti-Sleep Driver Alert Sensor (ASDAS)	2011	DST	100000	100000
12	Minor	Hybrid Driver Seat	2011	DST	100000	100000
13	Minor	Web Doctor	2011	DST	100000	100000
14	Minor	E- Diagnoser	2011	DST	100000	100000
15	Minor	Bomb Disarming Robot	2011	DST	100000	100000
16	Minor	Hybrid driver seat for physically challenged	2011	IE	30000	30000
17	Minor	Economic Fuel Consuming Vessel	2011	DST	100000	100000
18	Minor	Guardicon	2012	DST	100000	100000
19	Minor	Soilmithra	2012	DST	100000	100000
20	Minor	Vehicle Data Recorder	2012	DST	100000	100000
21	Minor	Complete LPG Leak Protection System	2012	DST	100000	100000
22	Minor	Enhancement of lifestyle of a physically challenged person - Easy Elevator	2012	State Commissionerate for Persons with Disabilities, GOK	75000	75000
23	Minor	Creep Testing Machine	2012-13	ABS Instruments, Chennai	200000	200000
24	Major	Development of Novel poly(vinyl alcohol) Nanocomposite Membranes for the Pervaporation	2012-2015	KSCSTE	1365000	1265000

		Separation of Aqueous Organic Liquid Mixtures				
25	Minor	Green Hearth	2013-2014	DST	100000	100000
26	Minor	Low cost water treatment using Vetiver System	2013-2014	DST	100000	100000
27	Minor	SBR Graphene Nano-composite	2013-2014	DST	100000	46000
28	Minor	Driver Assistance	2013-2014	DST	100000	100000
29	Minor	Table-top Power Operated Coconut Husking Machine	2013-2014	DST	100000	100000
30	Minor	Virtual-I	2013-14	Centre for Disability Studies, Trivandrum	50000	-
31	Minor	B.A.T (Blind Assistance Technology)	2013-14	Centre for Disability Studies, Trivandrum	50000	-
32	Minor	Smart walking Stick	2013-14	Centre for Disability Studies, Trivandrum	40000	-
33	Minor	Development, characterization and pervaporation performance of chitosan blended PVA/bentonite clay nanocomposite	2013-2014	KSCSTE	15000	-
34	Minor	Effect of nanosilica on the compressive	2013-2014	KSCSTE	15000	-

		properties of the Natural rubber latex modified concrete				
35	Major	Development of high performance Chloroprene Rubber/graphene nanocomposites	2013-2016	DST	1940000	18,28283
36	Minor	Patient Transfer device	2014-15	Kerala state Commissionerate for persons with disabilities	20000	-
37	Major	Development of ECAP/ECAE Process in the Warm Working Temperature Range for the Study of Microstructural Stability and Mechanical Properties of Austenitic Stainless Steel	2014-15	BRNS, DAE	4500000	-
38	Minor	Low cost vehicle for physically challenged	2014	State Commissionerate for Persons with Disabilities, GOK	20000	-
39	Minor	Study On The Compressive Strength Of Natural Rubber Latex And Nano Graphite Modified Concrete	2013-2014	KSCSTE	15000	
40	Minor	Water Quality Studies	2013-2014	KSCSTE	15000	15000

		on Manimala River During Sabarimala Season				
41	Minor	Low cost Vehicle for persons with disabilities	2013-2014	Kerala state Commissionerate for persons with disabilities	20000	20000
42	Minor	Stair Case Climber cum Hand Trolley	2014-15	Kerala state Commissionerate for persons with disabilities	20000	20000
43	Major	Development of a system for Child rescue from bore well	2014-15	DST	1500000	750000
	Total funds	Sanctioned/ received so far			12,960,000	69,39,283

3.3 Research Facilities

3.3.1. Research facilities available to the students and research scholars

Table 6 shows the institutional facilities available for research at AJCE:

3.3.2 Institutional Strategies for Planning, Upgrading and Creating Research Infrastructure

The College recognizes the importance of furthering research in new and emerging areas where timely interventions are possible. Research and Infrastructure Committees of the College have developed policies to take care of planning, up-gradation and creating infrastructure facilities for research.

Individual departments identify emerging areas of research and develop a direction for their research activities in line with current trends. Each department is networked with institutes and, industries that spearhead in qualitative studies, inviting eminent scholars from such centers to AJCE campus for conducting workshops and seminars for scholars and teachers. Such interactions have brought new insights on emerging areas of research and necessary infrastructure required for the same.

Table 6: Research facilities

Infrastructural facility	Library and Software resources	Human resources	Training provided
• Unlimited internet connectivity • Well equipped computer center • Well equipped library • Discussion room • Reprographic Center • Well equipped research labs • Guest house	• E- journals and E- books • Good collection of journals and periodicals • Facility to lend books • Network resource center	• Research Guidance • • Eight Ph.D guides • Two Research Assistants (Nanotechnology) • 17 Ph. Ds and M. Techs to guide student projects	• Training on how to carry out a research work • Training on Research methodology and quality research • Training on LateX • Training on writing proposals

3.3.3 Finances Received for Developing Research Facilities

The institution has received substantial funding for research in the form of project funds, as listed in Table 5. These funds have been utilized, to a great extent, for developing research facilities in the College. The College has submitted a few proposals recently to attract funds from different funding agencies for developing research infrastructure further.

The Management has a very supportive outlook on this matter and supports the faculty in every way to attract funds and develop research infrastructure and output in the College.

3.3.4 Research facilities made use of outside the campus

Many faculty members have made use of research facilities available elsewhere for their research. A few such cases are listed in Table 7.

3.3.5 Library and Lab Facilities Available for Researchers

Over the past decade of its existence, the College has developed many research facilities either through funded projects or investment made by the Management. A list of such facilities is given in Table 8.

Table 7: Research facilities made use of outside the campus

University/ Institution	Students/ Research Scholars	Facility provided
VIT	K G Satheesh Kumar	Part time Ph. D
VIT	Geevarghese Titus	Part time Ph. D
VIT	Darsana P	Part time Ph. D
VIT	Jayakrishna V	Part time Ph. D
VIT	Jerrin Thomas	Part time Ph. D
VIT	Sherin Sam Jose	Part time Ph. D
VIT	J P AjithKumar	Part time Ph. D
VIT	K J Mathew	Part time Ph. D
VIT	Midhuna Jyothi	Part time Ph. D
VIT	Rosamma Sebastian	Part time Ph. D
VIT	K.M. Abubeker	Part time Ph. D
VIT	Shiju George	Part time Ph. D
VIT	Richu Thomas	Part time Ph. D
CUSAT	Krishnalal G	Part time Ph. D
CUSAT	P.K. Jayasree	Part time Ph. D
Satyabhama University	Manoj T Joy	Part time Ph. D
Chennai	Therese Yamuna Mahesh	Part time Ph. D
CSIR NIIST	M. Tech students	Materials Science Lab
ISRO	M. Tech students	Umbilical Systems Lab
M.G. University	Jasmine Mathew	Part time Ph. D
IIUCNN	Thomasukutty Jose Maya Mayaooram	Testing facilities
RRII	Anoop Arun	Testing facilities
CFSC	Nibu	Preparation of nanocomposite samples
STIC, Kochi	Shalini	Characterization
CUSAT	Maya	Raman Spectrum
STIC, Kochi	research scholars	Sample characterization

Table 8: Lab Facilities Available for Researchers

Facilities		
Department	**Lab & Software**	**Library**
AU	1. Automobile heat engines laboratory 2. Automobile computer	Textbooks-210 Periodicals/Magazine : 2

		laboratory	
		3. Auto chassis laboratory	
		4. Fuels and lubricants laboratory	
		5. Auto electrical and electronics laboratory	
		6. Cam laboratory	
		7. Vehicle re-conditioning laboratory	
CE		Survey Laboratory Materials testing lab Geotechnical engineering lab Concrete Laboratory Environmental Engineering lab CAD Lab (AutoCAD, STAAD, Prima Vera P6) Transportation Engineering Lab	No. of Text books: 1100, Monographs: 17
CSE		Advanced Systems Lab, Project Lab Programming Lab Hardware & Networking Lab M Tech Lab	Text books- No of volumes: 1070 No of titles: 447
CHE		Physical and Analytical laboratory,	No of Textbooks- 185, Jouranls-6
ECE		Electronics Circuits lab, IC lab, Advanced Communication lab, Project lab, Systems lab, PG lab	Textbooks-No: of Titles: 1388 No.: of Journals and Magazines:163 No: of Seminar Reports:740

EEE	Electrical Measurement Lab Electronic Circuits Lab Electrical Machines I Lab Electrical Machines II Lab Power System Simulation Lab Power System Simulation Lab Power System Simulation Lab Non conventional Energy Systems Lab	Text books: 1320 Periodicals-4 Seminar Reports-288
MTG	Metallography Lab Optical Microscope with image analyzer Heat Treatment Lab Mechanical Testing Lab Welding Lab Foundry Lab	Text books: 110
IT	Database Lab Project Lab Multimedia Lab, Internet Lab Programming Lab	No. of books: 528 books
ME	Fluid Mechanics Lab Hydraulic Machines Lab Machine Tools Lab Heat Engines Lab Mechanical Engineering Lab Heat Transfer Lab	Total No. of Books=1014 Reference Books=55 Periodicals/Journals=30 Seminar Reports -134
	Mechanical Measurements Lab	
BS/ACeNT	Nanotechnology Research lab	
MCA	Advanced Systems Lab Project Lab Programming Lab Hardware & Networking Lab	No. of volumes:937 No. of titles: 432

3.3.6 Collaborative-Research Facilities

In India, collaborative research work is ongoing with International and Interuniversity Center for Nano Science and Nanotechnology, M.G University, Kottayam.

3.4 Research Publications and Awards

3.4.1 Research Achievements of Staff and Students

The Research achievements of staff and students in terms of publications and patents applied for, are listed in relevant sections of this document.

3.4.2. Publications and Paper Presentations

The College has published 12 text books, 6 chapters in reference books, 8 Monographs, 4 Conference Proceedings, 163 Articles in Peer- Reviewed Journals and 355 articles in Conference proceedings during the period of this report.

Articles Published in Peer reviewed journals (national and international) and those listed in international databases are given in Table 9 below:

Table 9: List of Publications

Sl no	Faculty / Student name	No of papers published National /International journals	No of papers published/ presented in conferences	Total	Citation index	Impact factor	h-index	SNIP/SJR	No of papers listed in international databases
		Peer reviewed	Others						
1	Mr. P C Thomas	1	12	13					
2	Prof. V .I Cherian	0	9	9					
3	Mr. Arun S	3	13	16					
4	Mr. Robins Anto	0	16	16					
5	Mr. Victor Jose	1	7	8					
6	Mrs. Sreekala P	3	10	13					
7	Mrs. Vidya M Nair	1	5	6					
8	Mrs. Sreeja C	1	3	4					
9	Ms. Reshmi V	1	9	10					
10	Mrs. Sarin Baby	0	9	9					
11	Mr. Anish Benny	1	19	20					
12	Mr. Bobin K Mathew	0	6	6					
13	Ms. Neenu Rose Antony	0	2	2					

14	Mr. Shinosh Mathew	1	2	3					
15	Mr. Joffie Jacob	2	2	4					
16	Mrs. Manjusha V A	0	5	5					
17	Anumodu D M	0	3	3					
18	Mrs. Rani Chacko	0	4	4					
19	Ms. Dona Sebastian	1	6	7					
20	Sreekumar T	0	3	3					
21	Midhu Das B	0	1	1					
22	Daru Anna Thomas	0	5	5					
23	Dr. Sivasubramanian	0	7	7					
24	Aju S nair	0	1	1					
25	Elizabeth jose	0	1	1					
26	Elizabeth Rajan	0	3	3					
27	Prof. K.J Thomas	0	1	1					
28	Sreenath	2	2	4					
29	Dinto Mathew	1	4	5					
30	Dr. Mini Mathew	2	1	3					
31	Mrs. Dhanya Krishnan	1	2	3					
32	Mr. Belarmin Xavier C.S.	1	0	1					
33	Ms. Jyothis George	1	3	4					
34	Mrs. Margret Sherin Joseph	0	2	2					
35	Ms. Minu S	0	1	1					
36	Mr. Bevin Varghese Cherian	0	1	1					
37	Ms. Linu Theresa Jose	1	2	3					
38	Mr. Nirmal George	3	1	4					
39	Mr. Naveen Joseph	1	2	3					
40	Ms. Jeena B Edayadiyil	0	1	1					
41	Soumya Anand	0	1	1					
42	George Mohan	0	2	2					
43	Deepak John Peter	2	2	4					

No	Name								
44	Jose Joseph	0	1	1					
45	Minnu M M	1	1	2					
46	Geroge M Varghese	1	0	1					
47	Mrs.P.K Jayashree	0	1	1					
48	K.G. Samuel	1	0	1					
49	Mr.Satheesh Kumar	2	1	3					
50	Ms.Therese Yamuna Mahesh	7	1	8					
51	Mr.Geevarghese Titus	1	6	7					
52	Ms.Darsana P	2	1	3					
53	Mr..Jose J Edathala	1	8	9					
54	Ms.Indu R Varghese	1	2	3					
55	Ms.Divya R S	0	4	4					
56	Mr.Jaison C S	0	1	1					
57	Mr.Binoshi Samuvel	1	2	3					
58	Ms.Rosamma Sebastian	0	1	1					
59	Ms.Muth S	1	0	1					
60	Mr.Abubeker K M	1	3	4					
61	Mr.Shinto Sebastian	1	5	6					
62	Ms.Ranjitha Rajan	0	2	2					
63	Ms.Careena P	1	2	3					
64	Ms.Reeju Elisa Baby	0	1	1					
65	Mr.Binu Mathew	2	5	7					
66	Ms.Ria George	0	3	3					
67	Mr.Sunish Kumar O.S	0	1	1					
68	Mr.Mathew George	0	2	2					
69	Agi Joseph	0	1	1					
70	Ajai Mathew	1	0	1					
71	Anu Abraham	1	0	1					
72	Binu C Pillai	3	1	4					
73	Anish Francis	1	0	1					
74	Prof. Manoj T Joy	6	4	10					1
75	Shiney Thomas	5	8	13	1		1		3
76	Resmipriya M G	2	0	2					
77	Santhoshkumar G S	7	3	10					1
78	Sunil K S(Study Leave)	1	1	2					

79	Syam Gopi	2	3	5					
80	Elisabeth Thomas	1	1	2					
81	Arun K S(Study Leave)	1	0	1					
82	Ashji S Raj	0	1	1					
83	Jerin Thomas	1	1	2					
84	Anishamol Abraham	1	3	4					
85	Tintu Alphonsa Thomas	6	1	7					
86	Sumy Joseph	2	5	7					
87	Jayakrishna V	7	6	13					1
88	Neenu R	1	0	1					
89	Ansamol Varghese	0	1	1					
90	Krishnalal.G	3	1	4					
91	Neethu C Sekhar	2	0	2					
92	Anjana V	0	1	1					
93	Minu George	0	2	2					
94	Sruthi S	0	1	1					
95	Deepu Benson	2	0	2					
96	Teenu Therese Paul	3	1	4					
97	Fabeela Ali Rawther (Leave)	1	0	1					
98	Lisha Varghese	4	0	4					
99	Fr. Rubin Thottupuram	2	0	2					
100	Juby Mathew	6	2	8					
101	Gloriya Mathew	2	1	3					
102	Mr.AKSukumaran	0	2	2					
103	Mr. Arjun KR	1	1	2					
104	Mr.Toms Philip	0	5	5					
105	Mr.Tenny Thomas	0	2	2					
106	Mr.Mathew Joseph	0	1	1					
107	Mr.Roshan Kuruvilla	1	1	2					
108	Mr.Ashok Chitharanjan	0	2	2					
109	Mr.Mathew J Joseph	0	1	1					
110	Mr.Rojas Thomas	0	4	4					
111	Mr.Tony Varghese	0	1	1					
112	Mr. R Rakesh	0	2	2					
113	Mr.Abu Mani	0	1	1					
114	Mr. K. Francis	0	1	1					
115	Mr. Manu Moses Jacob	0	1	1					

116	Meby mathew	0	1	1				
117	Binu Thomas	0	3	3				
118	Ms. Sandhya Ramakrishnan	0	3	3				
119	Mr. Thomas Varughese	0	1	1				
120	Mr. Shiju George	3	4	7				
121	Mr. Jobin T. J	0	1	1				
122	Ms. Midhuna Jyothi R	1	1	2				
123	Ms. Saumya Sadanandan	1	0	1				
124	Ms. Reshma P	2	0	2				
125	Mr. Joms Antony	1	4	5				
126	Ms. Alfin Abraham	2	0	2				
127	Ms. Jincy Lukose	0	1	1				
128	Mr. P. V. Shijin	2	0	2				
129	Dr Soney C George	12	14	26				
131	Mr.Ajithkumar J P	0	1	1				
132	Dr. Jacob Philip	4	0	4				
133	Dr Dilip Kumar	0	2	2				
134	Dr. Jince Kappen	4	0	4				
	Total	163	355	518				

The books/monographs published by the faculty during the period of the report are listed in Table 10.

Table 10: Details of books/ monographs etc

Faculty / Student name	No of Monographs	Chapter in books	Publisher names	ISBN/ ISSN	Books edited	Publisher names	ISBN / ISSN	Year
Anish Benny					Textbook of Analog Communication (Kerala University) Edition 1	Pentex Publishers		2009
					Textbook of Analog Communication (Kerala University)	Pentex Publishers		2012

					Edition 2			
					Textbook of Basic Communication and Information Technology Edition 1	Pentex Publishers		2009
					Textbook of Basic Communication and Information Technology Edition 2	Pentex Publishers		2012
					Textbook of Basic Electronics Engineering	Pentex Publishers		2013
Jose J Edathala	1							
Sunish kumar OS					1			
Divya R S	1							
Abubeker K M	1							
Dr Soney C George	1	(1)Ethylene Propylene Diene Rubber/Carbon Black Composites Chapter 5 (p129-149) in Polyolefin Composites [Eds: Nwabunma and Kyu], ii) Ethylene Propylene Diene Rubber/ Natural Rubber Blends Polyolefin blends, 2007 iii) .Manufacturing techniques of Mutiphase Polymeric Systems	John Wiley & Sons, 2007 John Wiley & Sons (John Wiley & Sons, 2011)		A Text Book of Engineering Chemistry and Environmental Science (2011) (pub) S.Chand & Co Ltd New Delhi	S. Chand, New Delhi		2011

		Chapter 5, (123-157) in Handbook of Multiphase Polymeric systems, Volume 1, John Wiley & Sons, 2011) iv) Micro and Nano TiO2 Reinforced Natural Rubber Composites. Chapter 10 (p290-305) in Natural Rubber Materails Vol 2: Composites and Nanocomposites, Published by Royal Society of Chemsitry, 2014 v) Polymer Nanocomposite Membranes for Waste Water Purification Runcy Wilson ,Saliney Thomas, Soney C George and Sabu Thomas (Concise Encylopaedia of Nanotechnology, CRC Press 2015)	Published by Royal Society of Chemsit ry, 2014 Published by CRC press, 2015				
Dr. Abin Manoj					A textbook of Engineering Physics	S. Chand, New Delhi	
Dr. Lisa Mathew					Adapted the book Introduction to Automata Theory, Languages and Computation,		

Name		Chapter	Publisher		Book	Publisher		Year
					3rd edition (by John E Hopcroft, Rajeev Motwani and Jeffery D Ullman) for use by Indian Universities			
Dr.Ullas Thomas					Basic Engineering Mathematica - Applied Engineering Mathematica - . Advanced Engineering Mathematica -	Amal Jyothi Publishers Kanjirappally, 2008. Amal Jyothi Publishers Kanjirappally, 2008 Amal Jyothi Publishers Kanjirappally, 2008.		
Prof. Tomy Joseph	1							
Dr. Jacob Philip	2	Chapter in Ferroelectrics: Physical effects	M/s Intech Publishers, Croatia		Textbook of Engineering Physics	M/s Educational Publishers, Cochin		2011
K.G. Samuel	1				Fracture Toughness Evaluation Of An Indigenously Developed SS 316(N) Weld	Narosa Publishing House Pvt Ltd Chennai		2009

3.4.4 Research Awards and Recognitions

Research Awards Received by the Faculty

- Prof. Manoj T. Joy, Best Paper Award for "Performance Comparison of Document clustering with ontology knowledge representation" in International Conference on Advances in Science & Technology (ICAST 2014) on 15th & 16th February, Bangkok.
- Dr.Jippu Jacob, Professor, Department of Mechanical Engineering received the Eminent Engineer Award of Institution of Engineers (IE).

- Dr.Soney C George, Professor of Chemistry, Department of Basic Sciences received the title of Fellow of Royal Society of Chemistry by RSC, London.

Best faculty awards

AJCE is giving awards to faculty members based on their overall performance in teaching, research and extension activities. Since 2012-13, every year one faculty in the cadre of Professor/ Associate Professor and eight faculties in the cadre of Assistant Professor are selected for the faculty awards (Table 11). Besides, 4 of the laboratory staff are also given performance awards.

Table 11: List of faculty awards

Year	Category	Name	Department
2008-2009	Professor & HOD	Mr. Soney C. Gerorge	DBS
	Ass. Professor	Mr. Satish John	ECE
	Lecturer	Mr. Akas G. Kamal	ECE
	Lecturer	Mr. Boby P. Mathew	DBS
	Lecturer	Ms. Jiss Abraham	CE
	Lecturer	Mr. Sunil K.S.	CSE
2009-2010			
	Prof. & HOD	Mr. K.G. Satheeshkumar	ECE
	Senior Lecturer	Mr. Thomas Varghese	IT
	Senior Lecturer	Ms. Jiss Abraham	CE
	Lecturer	Ms. R. Midhuna Jyothi	IT
	Senior Lecturer	Mr. R. Sreeraj	EEE
	Lecturer	Mr. K.R. Arjun	ME
2010-2011			
	Prof. & HOD	Ms. Sandhya Ramakrishnan	IT
	Asst. Professor	Mr. Geevarghese Titus	ECE
	Asst. Professor	Ms. Abin Manoj	DBS
	Asst. Professor	Mr. Arun K.S.	CSE
	Asst. Professor	Ms. Kavitha Jacob	DBS
	Asst. Professor	Mr. Arun S.	EEE
2011-2012			
	Professor	Dr. Soney C. George	DBS
	Asst. Professor	Ms. Shiney Thomas	CSE
	Asst. Professor	Mr. Akas G. Kamal	ECE
	Asst. Professor	Mr. Ajai Mathew	ECE
	Asst. Professor	Mr. Robins Anto	EEE
	Asst. Professor	Fr. Rubin Thottupuram	MCA
	Lab Instructor	Mr. Rony Scaria	AUE
	Lab Instructor	Ms. Rajitha Rajan	EEE
	Lab Instructor	Mr. K.V.	IT

		Raveendrakumar	
	Lab Instructor	Ms. Sheena P. Abraham	CE
2012-2013			
	Professor	Prof. K.G. Satheeshkumar	ECE
	Professor	Prof. Manoj T Joy	CSE
	Asst. Professor	Mr. Geevarghese Titus	ECE
	Asst. Professor	Mr. Shiju George	IT
	Asst. Professor	Mr. S. Arun	EEE
	Asst. Professor	Mr. Binu Mathew	ECE
	Asst. Professor	Mr. Richu Thomas	ME
	Asst. Professor	Ms. Reshma P	IT
	Asst. Professor	Mr. Mathew Joseph	ME
	Asst. Professor	Mr. Ajith G.S.	CSE
	Asst. Professor	Ms. Shamini James	Hum
	Asst. Professor	Ms. Margret Sherin James	CE
	Lab Instructor	Mr. Rajesh M.G.	ECE
	Lab Instructor	Mr. K. Balachandran	ME
	Lab Instructor	Mr. K.M. Manoj	EEE
	Lab Instructor	Mr. P.G. Ranjithkumar	IT
2013-2014			
	Professor	Soney C.George	DBS
	Associate Professor	Sherin Sam Jose	AUE
	Asst. Professor	Arjun K.R.	ME
	Asst. Professor	Thomas Varghese	IT
	Asst. Professor	Binu C.Pillai	ECE
	Asst. Professor	Krishnalal G	CSE
	Asst. Professor	Mathew K.J.	AUE

	Asst. Professor	Merene Joseph	ECE
	Asst. Professor	Shinosh Mathew	EEE
	Asst. Professor	Annie Maria Issac	CE
	Lab Instructor	Haris Xavier	IT
	Lab Instructor	Sheena P.Abraham	CE
	Lab Instructor	Sreejith C.S.	ECE
	CAD Trainer	Rony Scaria	AUE

Incentives given to the Faculty for receiving state, national and international recognitions for research contributions

Financial incentives to faculty and students for paper publication in reputed journals and paper presentations in national and international conferences are under consideration of the Management.

The College recognizes the research achievements like receiving Ph.D Degree/publishing papers by felicitating the faculty member during official meetings and in the Academic Council.

Research Awards Received by Students

Students of Amal Jyothi bagged several national awards in technical project context. Seven top spots have been won by our students in six years in the Innovation Hub contests held at Kolkata, organized by the National Council of Science Museums and The Telegraph News-paper. The First prize gets a cash prize of Rs. 20,000 and a citation. Students also bagged prizes in the national level Tech Top competition held each year at Thiruvanthapuram. The details are given in Tables 12 & 13 respectively, where the First prize is Rupees One lakh. It is an evidence for the spirit of innovation among our students and the faculty and the generous support provided by the College Management, as well as the Department of Science and Technology, Gov. of India, through the innovation and entrepreneurship development centre (IEDC)

Table 12: List of awards (Innovation Hub Contest)

YEAR	PROJECT TITLE	TEAM LEADER	PRIZE WON
Dec 2014	Automatic Lemonade Machine	Jes Thomas Mathew	Second
Dec 2014	Virtual-I	Dennis John	First
Jan 2013	Xerobot- A Multi-purpose Automation Robot	Geet Rose Jose	Second
Dec 2012	E- diagnoser	Libin Varghese	First
Jan 2011	Cocobot	Jijo Paul	Second

| Jan 2010 | Robot for Bore well Rescue | John Pattery | Second |
| Jan 2009 | Solar Irrigation | Avinash Prabhakar | First |

Table 13: List of awards (Tech Top Contest)

YEAR	PROJECT TITLE	TEAM LEADER	PRIZE WON
July 2011	Pepper Seperator	M S Steve	First
July 2011	Helioped	Arun Chand	Consolation Prize
Aug 2013	Advanced cardamom drier	Justin Vincent	Second
Sept 2014	Virtual- I	Dennis John	Consolation Prize
June 2014	Latex Carry Backpack	Ajin Omanakuttan	First
June 2014	Advanced Hair Colouring Tech	Justin	Consolation Prize

3.5   Consultancy

3.5.1 Systems and strategies for establishing institute-industry interface

The policy frame work of Research, Consultancy and Extension envisions the development of the College into a Knowledge Centre which shares its knowledge and expertise with various stakeholders like related industries/ organizations/ institutions and communities.

Systems and Strategies
The Research Committee and Placement Cell play an important role in establishing institute-industry interface. Apart from this, some of the departments have constituted consultancy wings of their own. For the general coordination of consultancy a faculty coordinator has been appointed. As part of its overall strategy, the College explores fruitful linkages with industry/organizations by arranging interface meetings, organizing industrial visits, inviting industrialists as resource persons and appointing them in the advisory bodies, organizing placement drives, live student research projects, internships etc. Besides, the faculty is also encouraged to act as resource persons for programs organized by them.

3.5.2 & 3.5.3 Consultancy Policies and Strategies

AJCE recognizes the relevance and importance of consultancy for the development of the society and the nation. So it promotes consultancy in all areas of its expertise.

In order to encourage the faculty to develop expertise in consultancy, the Consultancy Policy (also in HR Policy) of the Institution allows the faculty to retain 30% of the revenue

generated from consultancy services. Institutionalizing a system for Consultancy by developing faculty expertise is part of the institutional strategy.

This is done through steps such as:

- Workload flexibility (duty leave, workload reduction etc.) is provided to the faculty without affecting the regular academic work
- Recognition of consultancy work during general staff meetings, giving weightage for consultancy in faculty promotions, etc.
- Encouragement to the faculty to identify and publicize their own areas of expertise

3.5.4 Consultancy Services Provided

The broad areas of consultancy services offered by the College are listed in Table 14.

Table 14: Consultancy Services Provided (CE Dept)

Discipline	Specific area	Consultation offered to	Amount
Survey/ Total Station Classes	Building Setting Out Generation of Contour Map for an Area Topographical Survey	1. M.N.B NAIR CONSTRUCTION, B P C L COCHIN 2. J.B / K.W.A PROJECT, CHERTHALA 3. K.P.M.C TRUST, NALLATHANNY 4. KERALA ROAD SURVEY, KANAMALA 5. ALL THE SURVEY WORKS OF KANJIRAPALLY DIOCESE	421900
		Department is offering certified courses on total station *(during the months of May to July)* for students in and outside the campus at affordable fees.	
Calibration Repair	We undertake	Mr. V.T. Thomas, of the	477200

	calibration, repair and maintenance of All *Survey Equipments And Civil Engineering Lab Equipments*	Strength of Materials Laboratory, is in charge of these services.	
Building Consultancy and Other Works	Any Civil Engineering works starting from planning to estimation, through design, drafting	For various Government and Non Government bodies on request.	22500
Material Testing	Conduct of *Various Tests On Civil Engineering Materials*	Kerala PWD, Govt.Poly Technic Pala, Court Complex Pala, Uzhavoor Hospital, Anathanam Builders, Eastern Properties and Developers, Maricon Tiles, St. Mary's Rubbers, Travancore Granites, Silpa Constructions, HPC, Build Arch Engineers and Consultants	84800

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 Institution- Community Engagements

AJCE visualizes itself as a transformational leader in higher education. The awareness that the institution exists within the community and that for its existence and growth a reciprocal relationship is essential is the rationale for the keen interest taken by AJCE in community related extension activities. Experience of past interventions has helped in evolving a policy for the extension activities of the College which are periodically revised. Hence the College has taken strategic initiatives to realize the vision and policy namely AJCES (Amal Jyothi Educational and Charitable Society) and also N.S.S to extend the social and ISR activities.

Amal Jyothi Educational & Charitable Society (AJCES)

Amal Jyothi extends its hand to the weaker sections of our own family and surrounding society by supporting them through Amal Jyothi Educational & Charitable Society (AJCES). AJCES has as its vision, the creation of a self-reliant society based on human values and social justice. Its mission is the empowerment and upgradation of the poor and the marginalized through a process of mutual support and encouragement. Our staff and students contribute regularly for generating funds. Our support may be for medical treatments, education or housing.

Objectives
1. To work for increasing the living standards in the socially backward areas.
2. To provide primary education to the children.
3. To provide good and high quality education at low cost
4. Meritorious students, who belong to weaker section of the society, will be provided guidance as how they can achieve their cherished goals step by step.
5. To promote education, training and research among weaker sections.
6. To eradicate child labour and school dropouts.
7. To initiate employment generation programmes.
8. To promote saving and credit programmes.
9. To promote collectivism and voluntarism among target group.
10. To avail appropriate development schemes (housing, sanitation, drinking water programmes etc.) to needy.
11. To facilitate the participation of women and the marginalized in the development process.
12. To promote brotherhood, communal harmony, national integration and peace.
13. To provide relief to the victims of any natural or manmade tragedy.
14. To promote use of green technology, organic farming and herbal plantation.
15. To promote environmental awareness, cleanliness etc.

The details of support provided by AJCES towards social service are displayed in Table 15

Table 15: AJCES Contribution towards SS

Item	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Education	Rs.121065/-	Rs.748,714/-	Rs.10,87801/-	Rs.6,33,200/-	Rs.7,40,189/-
Medical	Rs. 175000	Rs.138,600/-	Rs.3,46,000/-	Rs.2,92,500/-	Rs.202000/-
Marriage Help	Rs.3000	Rs.5000	Rs.10000/-	Rs.90600/-	0
Construction of Houses	0	Rs.25000	Rs.128000/-	Rs.55000/-	Rs.65,000/-

National Service Scheme (NSS)

The College has established two NSS Units which focus on service orientation and discipline. They have taken up many socially useful projects like construction/maintenance of village roads, cleaning initiatives, Blood donation, Eye Testing Camp, Dental Camp donation/health/medical camps, SHG interactions for Health & Hygiene, and Palliative care awareness. The various activities are summarized below

Activities of NSS

- Road reconstruction
- Yoga class
- Class on self confidence
- Cultural fest
- Class on internal marks
- Class on personality development
- Debate ' Love marriage or arranged marriage'
- Blood group identification camp
- Class for school students
- Trekking
- Class on energy conservation
- X' mas carol
- Camp fire
- Training on paper carry bag preparation
- Visit to orphanage 'Baby Sadhan'
- Indoor games

Red Ribbon Club (RRC)

Red Ribbon Club Program (RRCP) is a comprehensive promotional and preventive intervention to enhance voluntary blood donation as well as mainstream HIV & AIDS prevention, care & support and treatment impact, mitigation, stigma reduction, among the youth in educational institutions. It will also prepare and promote youth peer educators within and outside the campuses. An active RED RIBBON CLUB is functioning in Amal Jyothi collage of engineering.

- The activities of Red Ribbon Club include

  - Blood Donation
    Blood Group Identification Camp
    HIV Awareness Programs

Nature Club

Nature Club is active on the campus. The Club is concerned about issues related to environmental protection. The Nature Club ensures that the College campus is plastic and litter-free. The Club works closely with the Management in these issues.

3.6.2 Strategies for Ensuring Student Involvement in ISR Activities

- Each Department has an activity plan for an academic year which is communicated to the class teachers. Each class organizes outreach programmes every year. Every activity is planned, organized, implemented and monitored by the class teacher along with the student program coordinators.
- Class Teachership: The class teacher plays a key role in facilitating, planning, executing and monitoring the various social initiatives of the class/students.
- Student Reports: Student coordinators submit an evaluation report with account details to the class teacher within five days of completion of outreach programme. The report contains the details of activities undertaken, the participants and the beneficiaries.
- The College NSS unit maintains the records (attendance register, Program register, Accounts and annual reports) of students' participation in its social outreach programmes. The certificates are issued only to those volunteers who complete the stipulated hours of workload.
- Clubs and Associations of the college conduct various programs, maintain documents and review the activities.
- Students are encouraged to do community service like visiting and spending time with mentally retarded people, orphans and engaging tuition classes for financially backward children

3.6.3 Stakeholder Perception on Institutional Performance

The College solicits feedback from stakeholders through different means and uses it for quality enhancement. The institution implements it through IQAC.

The institution collects feedback of its stakeholders through an integrated system which includes students' feedback, exit survey, industry feedback, alumni feedback etc.

Informal feedback is also collected through face-to-face interaction with the following:
- Local Self Government bodies
- Industrialists
- PTA meetings
- Social and Political leaders
- Local Community
- Potential employers when they come for campus recruitment

3.6.4 Extension and Outreach: Planning, Implementation and Review

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The major Extension Activities for the last four years are summarized in Table 16 below.

A detailed study on Solid Waste management was carried out by CE, Dept. for Kanjirapally Panchayat.

Table 16: Major extension Activities

Department	Major Extension activities	2010-2011	2011-2012	2012-2013	2013-2014	Total
ECE	Social Service visits to nearby organizations (as a part of 15-day Social Service of B. Tech)			1 (126 students went to different orphanages, hospitals to do the social service activity		
EEE	Industrial Visits to relevant industries/Power Plants by students	4	4	4	8	20
	Training programmes/STTPs/FDPs organized	2	1	0	1	4
	Continuing Lecture Series (Presentations by staff in the dept)	0	3	0		3
	Social Service visits to nearby organizations (as a part of 15-day Social Service of B. Tech)			1 (62 students , Dates 14-20 June 2012)	1 (62 students , Dates 2-6 Dec 2013)	
CSE	Classes for +2 /non-engineering students under Project "STEP(Societal Technology Educational Programme)" of the Community Development Extension Cell functioning in the Dept.			Technical Talk(Computers) for +2 Students in SMV HSS, Poonjar on 24/8/2013	Career Guidance programme for +2 students in 1) St. Antony's HSS,Poonjar on 21/11/2014 2) Govt. HSS, Edakkunam on 25/11/2014	

	Social Service visits to nearby organizations (as a part of 15- day Social Service of B. Tech)			90 Students went to different orphanages, old age homes, schools, Panchayats, hospitals to do social service activity	87 Students went to different orphanages, old age homes, school, Panchayats, hospital to do social service activity	

Influence of the Extension Activities on Student Development

The various extension activities and the outreach programs have helped to influence and sensitize the Amanitas to respond to social realities, develop concern for the poor and the less privileged, develop ability for reflecting and responding to social issues and be committed to the society and to the nation at large.

At present the impact of the extension activities are analyzed using the written unstructured feedback on various programmes collected from students, informal interactions, observations of the coordinators etc. The assessment done by the NSS Coordinators also supplement this.

3.6.5 Student and Faculty Participation in Extension Activities

Facilitation of Student Participation

The College encourages students to opt for joining NSS, clubs and associations of the College. During the induction program staff coordinators/student coordinators introduce clubs and associations which motivate students to join either of these. All First years are members of the general clubs and others are in a technical club. All students are members of their discipline-based associations

- Students are involved in planning and organizing extension activities. Student committees manage the responsibilities of extension activities like fund management, time management, documentation etc.
- The students participating in NSS are given grace marks in the university examinations
- Students who fulfill the minimum requirements of NSS are given Certificates which are considered for admissions to higher education institutions/ employment.
- Special leave is granted to students participating in state and national level camps.

- Outstanding performers are recognized by the College felicitating them in public meetings, by displaying achievements in College website, College Blog, Publications, in print and visual media.
- Awards and incentives (Best Social Worker, Best Field Worker, GEM of AJCE, and Best Camper) are given to students to encourage their participation in extension activities.
- Financial support is provided to students to participate in national and international camps.

Facilitation of Faculty Participation

- The Academic Council entrusts faculty members with various extension activities. The faculty takes up these responsibilities based on their interest and ability. This ensures participation and input of the faculty in the extension initiatives.
- Allowance for NSS Programme Officers.
- Special leave is granted to the faculty to compensate the lost days of eligible leave.
- Participation in extension activities is given due recognition and weightage in career advancements/promotions.

3.6.6 Ensuring Social Justice through Multilevel Social Engagements

AJCE has been active in society centric programs. The institution tries to ensure social justice through multilevel social engagements. An example for such a program is outlined below.

Computer literacy classes for rural women:

Marking the 50th year of Service, the Computer Society of India (CSI) launched the CSI Golden Tech-Bridge Program all over the nation. As part of this, the Student Branch of CSI at AJCE conducted a 1-Day Golden Tech Bridge Programme on "Computer Literacy". The 1-day workshop was intended for destitute women who never have got any awareness and knowledge about computers. The participants to the workshop were members of the "Kudumba Shree Units", "Ayalkkoottam" and other house-wives. The programme was held on 9/8/2014 at the AS lab of CSE department in AJCE. The formal inauguration of the workshop was done by Fr. Dr. Jose Kannampuzha, Principal, AJCE and he delivered a talk on the relevance and necessity of Computer literacy among women to empower them. Sr. Regina SABS, Assistant Professor of Marian College led the first session on computer hardware and familiarization on software. In this session all the participants were asked to do a couple of hands-on work. Ms. Shiney Thomas of CSE, AJCE led sessions on software tools like MS Word, Excel, Popular applications of Internet etc. In the afternoon session Dr. J Prameela Devi, Member, Vanitha Commission, Kerala spoke on how to empower women through computer literacy. She also mentioned about the job opportunities for women through computer learning and how a woman can become independent.

Dr. Prameela Devi mentioned about the hidden consequences of internet applications and how the social network sites affect children's future and character formation.

As part of the industry/factory visit all participants visited the fully automated kitchen of AJCE along with the Computer Labs.

In the closing ceremony all participants were given CSI certificate of 1-day workshop participation. A local TV Channel covered the program in the local channels. All leading newspapers reported about the 1-day CSI campaign workshop conducted at AJCE.

Excursion for Science popularization for School Students (*Science Excursion)*

Recently, Kerala State Council for Science, Technology and Environment (KSCSTE) has sanctioned a project to AJCE as *Science Excursion* to invite high school students from 20 schools to visit the college and spend a day listening lectures and visiting the laboratories of the college. Students from 5 schools will be invited in a day, which will be a non-teaching day. So the College will devote 4 Saturdays for this program. The KSCSTE has sanctioned an amount of Rs. 2 lakhs for 2014-15 for this program. This amount was utilized to provide transport, refreshments and lunch for the students. It is proposed to allow 100 students from one school to participate in the program. So a total of 2000 school students will be benefitted by this program. The list of schools which participated in the programme recently is given below.

- 58 students and 2 teachers from St. Thomas H.S.S. Erumeli on 12/2/15
- 32 students 4 teachers from CCM HSS, Karikkattoor on 07/03/15
- 48 Students and One teacher from AMHSS Kalakatty on 18/5/2015.
- 96 students and 13 teachers from St. Kuriakose Public School Kadathuruthy (S.K.P.S) on 27/05/2015

3.6.7 Extension as a Value Inculcation Process

Students involving in various extension activities come to witness the hard realities of life. This gives them opportunity for experiential learning. AJCE students are not just spectators but are actively involved in the interventions for social change applying their domain knowledge appropriately and making their Amalite experience an education for life.

The extension activities complement and supplement the academic learning experience of students by strengthening the knowledge level, practical exposure, soft skills, aptitude and attitude, social commitment and inculcation of social and moral values that promote good citizenship. They develop empathy, life skills and imbibe social values during the process.

The core values promoted by the institution such as faith in God, integrity, innovation, secularism, commitment to environment, gender equity, national integration and inclusion are acquired by students through various extension activities.

However, integrating extension activities into curriculum delivery is a challenge due to constraints of time and schedule of examinations. Ensuring the participation of students of all disciplines brings up practical difficulties which the college addresses progressively.

3.6.8 AJCE Partnership Model of Community Involvement
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When any community activity is planned by the College, in response to the locally felt needs, the involvement of the community is ensured. The representatives of the community are involved in the advisory board of NSS, and IQAC. The ideas and suggestions of the representatives of the community are given due weightage in the planning process. Establishment of Community-College linkage provides the marginalized and underprivileged sections of the society access to quality education and skill development which makes them readily employable. The institution provides the infrastructure facilities and human resources to the community for organizing meetings, workshops, seminars, training, etc.

3.6.9 Tie ups with local Institutions

The College has been involved in several tie-ups with many local organizations. A few such tie-ups are listed below.

1. Zero waste Kottayam: As per MG University order, in addition to the requirements prescribed for the award of B. Tech. Degree, each student must complete compulsory social service for a total duration of 15 days during 3rd to 7th semesters of the course. Normally students do not undergo any social service of much relevance to the community.
Dept. of Mechanical Engineering of the College, in consultation with local self-governing bodies, decided to send the students for community work useful for the society. The students joined hands with Mundakayam Grama Panchayat for creating awareness on "Reducing, Refusing & Re-cycling" of plastic materials among citizens. As a part of the programme 40 students of second year Mechanical Engineering delivered this message to each and every house of Mundakayam Panchayat from 30 June to 04 July, 2015. In order to clean the environmental conditions and give awareness to the citizens on the necessity of removing plastic materials in a scientific way in Kottayam district, similar programmes will be arranged with the help of various agencies.

2. Kisan Jyothi: Kisan Jyothi 2015 is an Exhibition of agro-related equipment for farmers, developed by students of Mechanical Engineering Department of the College. Most of the projects exhibited are prize winners in national level Tech fests and other competitions. The exhibition provided opportunities for farmers and planters to share their "ideas" which could be developed as student projects at the College. The following items were exhibited at these exhibitions.

1. Mobile Coffee Plucker
2. Small Scale Paper Recycling Unit
3. Pepper Separator
4. Rubber Leaf Compactor
5. Trash Compactor
6. Arecanut De-Husker
7. Lemonade Maker
8. Coconut Splitter
9. Head Load Aider
10. Pulling Gas Trolley

First Venue: Parathode Panchayat on 18 March 2015

The exhibition was inaugurated by the Patron, His Excellency Mar Mathew Arackal, Bishop of Kanjirappally. Different projects listed above were displayed. The idea of commercialization of existing projects was the prime motive along with lending a helping hand to the farming community. The farmers and allied industrialists in the nearby areas showed keen interest, sharing their problems and providing with possible modification of the projects on display. The program was sought after by the mainstream media, popularizing the idea of helping the **farming community**.

Second venue: Kalaketty Panchayat on 07 April 2015. A similar exhibition was organized at Kalaketty Panchayat on this date. The reception was very good there as well.

3.6.10 Awards Received by the Institution for Extension Activities

Nil

3.7 Collaborations

3.7.1. Collaboration for Research Activities

AJCE is keen on initiating collaborative research with institutions inside and outside India. Some of the faculty members have informal tie-up and collaboration with researchers in other universities and institutions in their specific areas of interest.

The College has signed a Memorandum of Understanding with the Deakin University, Australia, and University of Ontario Institute of Technology, Canada, for initiating collaborative research, conferences, seminars, workshops and training, faculty and student exchanges.

3.7.2 & 3.7.3 Linkages and Collaborations

The College has linkages with several industries, institutions and agencies for enhancing the student learning experiences, skill development, curriculum enrichment, understanding professional standards, and for job placements. The TBI, Volvo-Eicher Center etc. are examples for these. The details of these collaborations are described in other sections of this document.

3.7.4. National and International Conferences Organized by the College

The details of the National/International conferences organized by the College during the period of this report are given in Table 17 below

Table 17 National and International Conferences Organized by the College (2010-14)

Sl no	Name of the Conference or seminar	Period	Key resource persons
1	National Conference on Advances In Nanoscience and Technology NANOSAT-10	April 22-23, 2010	Prof Sabu Thomas, Director IICUN, M.G University, Prof. Nandakumar Kalarickal, Joint Director, IICUN, M.G University, Prof. M.R Anatharamman, Dept of Physics, CUSAT, Prof. S. Anandan, NIT Trichy, Dr. Siby Varghese, DD, RRII
2	International conference on Advanced computing and Communication	3-4, May 2010	Dr. Mahew J. Palackal, Dean Purdue Universiy, Prahlada Vadekepatt, National University of Singapore, Fr. Biju John, Kingston University, London
3	Annual International Conference on Emerging Research Areas (AICERA-11),	2011	Dr.M.K Radhakrishnan, Mr.Manmohan Kapoor, Dr.Sudarshan
4	AICERA-12, International Conference on Engineering Education: Innovative Practices and Future Trends	2012	Prof. Kuncheria Issac, Member Secretary, AICTE, Dr. Rob Reilly President IEEE Ed Socisty, MA USA. Prof. Dr S. Hossein Mousavinezhad,Professor and Chair , Department of Electrical Engineering, Idaho State University, Pocatello, Prof. Dr. Swaminathan Balachandran University of Wisconsin-Platteville Platteville, Wisconsin 53818, Prof.Micheal E Auer, Austria, Dr.Achu S Nair, Prof & Head, Dept. of Bio-informatics, Kerala University
5	AICERA-13, International	2013	Shri T. P Sreenivasan, Vice Chairman

	Conference on Engineering Education		and Executive Head, Kerala State Higher Education Council, Dr. Sameer Bataineh, Dean of IT, UAE university, Prof Chris Rodgers, Seneca College, Ontario, Canada, Prof. P. Sabrinatha, Secretary IEEE Kerala, Dr. A.V George, Vice Chancellor M.G University
6	Annual International Conference on Emerging Research Areas (AICERA), International Conference on Magnetics, Machines and Drives (ICMMD), IEEE Conference ID : 33623	24-26 July 2014	Prof. Udaya Kumar, IISc, Bangalore; Dr. K. N. Srinivas, Abdur Rahman Univ. Chennai; Prof. S. R. Kolla, University of Bowling Green, USA; Dr. J. Karthikeyan, SSM Institute of Engg, Dindigul; Dr. Balakrishnan P.A., Bharathiar Institute, Salem; Dr. Renji V. Chacko, CDAC, Trivandrum, Dr. Sanjay Sharma, Nvis, Indore; Venkatesu Samala, Icon, Bangalore etc.
7	International Conference on Quantum Mechanics and Quantum Consciousness, (ICQMQC- 2015)	02-08, Jan, 2015	Prof. Mathew Chandrankunnel, Prof. Agashe, Prof. K.L. Sebastian, IISc etc.

3.7.5 Formal MOUs and agreements

The details of MoUs signed by the College with outside institution/industry are given below.

Sl No	Institution/organization	Name of the organization	Nature of interaction
1	Organization	ABS instruments, Chennai	Design, development and marketing of 1. Creep testing machine, Furnace and controller. 2.Potentail drop system for crack growth measurement
2	Organization	VE Commercial Vehicles Ltd., Pithampur, MP	Establishment and operation of a skill development centre for heavy-duty automobiles- Amal Jyothi - Eicher Automobile Technology Centre.
3	Institution	The Institution of Engineering & Technology (India), Kolkata	Conducting Summer and Winter Exams of the institution
4	Institution	iTEP Education India LLP, Vadodara, Gujarat	International test of English proficiency
5	Institution	DEAKIN University	Academic collaboration

		of Australia	
6	Institution	Indian educational Enterprises (P) Ltd., Cochin	Autodesk software downloading and to conduct Autodesk online exams at AJCE
7	Institution	University of Ontario Institute of Technology (UOIT), Oshawa, Ontario, Canada	Academic collaboration
8	Institution	Dr.M.G.R. Educational and Research Institute, Chennai	Academic collaboration

3.7.6. Institutional Efforts in Planning, Establishing and Implementing the Initiatives of the Linkages/Collaborations

Collaboration is an integral part of the systemic efforts of AJCE for reaching its full potential and for the realization of its vision and mission. The policy encourages both college level and departmental level linkages and tie-ups with corporate bodies, academic institutions, and other organizations at both national and international levels. Identification of corporate bodies and institutions stem from the identified needs and requirements of each department. This is made based on student, staff, alumni and industry feedback on quality, performance, credibility, reputation and national and international standing. Each department is entrusted with the responsibility of assigning responsible faculty members for the implementation and promotion of policies at the departmental level.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 Institutional Policy for Infrastructure Development

The management policy of Amal Jyothi College of Engineering (AJCE) is to provide state-of-the art quality infrastructure, adequate for professional and personal growth of an engineering student as well as to meet the academic and administrative requirements of the College. The master plan of the College gives direction to the spatial/infrastructural planning and development in sync with the academic growth.

The implementation of the policy is primarily through the Infrastructure Committee which is constituted of the Manager, Principal, IQAC Coordinator, Faculty Coordinator as Convener, and Administrative staff Representative. HODs of various Departments, including Physical Education, are consulted as and when required.

4.1.2 Infrastructural Facilities available at AJCE

a) Facilities for Curricular and Co-curricular Activities

Class rooms

Amal Jyothi has over 80 classrooms spread over 6 Blocks: Resource block, Central Complex, Divisional Blocks A, B and C and the Research Square. All classrooms are ergonomically designed to reinforce a student-centered style of instruction. The spacious, airy and well-furnished class rooms provide the right atmosphere for developing proper study habits and extending the attention span to the full session.

All the UG classrooms have a capacity to accommodate 70 students. All class rooms have ceiling mount LCD projectors, Notice Boards, Lecture Stand, Uninterrupted Power Supply from a centralized UPS, wooden tables, Centralized Public Announcement System, black board, PAS system and wooden benches.

Technology enabled learning spaces

Wi-Fi campus

The College campus and hostels have 24x7 Wi-Fi connectivity

Knowledge Center

The Knowledge Centre of Amal Jyothi is meant to equip students and staff to go beyond the limits of classroom learning. This imposing edifice of 50,000 sq. ft comprises five floors, three of which are dedicated for the Central Library. The Knowledge Center affords technology resources and academic support to students and staff for Research activities, training sessions, CAD, Language lab, Internet browsing, Software development etc. The rental section occupies the ground floor of the Central Library. The first and second floors house the reference section and reading rooms for UG and PG students, respectively.

The Central Computing Facility, established on the third floor of the Knowledge Center, is divided into 5 labs and seminar halls. 250 workstations are provided for the net savvy. Internet @100 mbps is provided through dedicated OFC cable.

The top floor of the Knowledge Center accommodates a multi-purpose Auditorium, seating 800, employing cutting edge audio-visual, videoconferencing and distance-learning facilities for various purposes.

Conference Halls

AJCE has state-of-the-art conference halls, set up in the Resource Block, Central Complex, Divisional Blocks, Knowledge Centre and the Guest House, with the following capacities.

1. Resource Block conference hall: 25 seats, air conditioned

2. Central Complex conference hall: 200 seats, air conditioned

3. Guest House conference halls: 15 seats and 50 seats, both air conditioned

4. Knowledge Centre conference hall: 50 seats, air conditioned

5. Divisional Block C conference hall: 120 seats, air conditioned

6. Divisional Block A conference hall: 70 seats, air conditioned

7. Divisional Block B conference hall : 120 seats, air conditioned

8. Research Square conference hall: 120 seats, air conditioned

Laboratories
1) Auto Chassis Lab
2) Reconditioning LAB
3) Heat engines lab
4) Fuels and lubricants lab
5) Auto electrical and electronics lab
6) Survey lab

7) Materials testing lab
8) Geotechnical engineering lab
9) Concrete Laboratory
10) CAD Lab
11) Transportation Engineering Lab
12) Environmental engineering lab
13) Project Lab
14) Advanced Systems Lab
15) Programming Lab
16) Network Lab
17) M. Tech Lab
18) DBMS Lab
19) Internet &Multimedia Lab
20) Programming Lab
21) Fluid Mechanics & Hydraulic Machines Lab
22) Heat Transfer Lab
23) Mechanical Engineering Laboratory
24) Machine tool Laboratory
25) Advanced Machine tool Laboratory
26) Heat Engines Laboratory
27) Metrology & Mechanical Measurements Laboratory
28) Computer Labs MCA
29) Computer Labs IT
30) Electronics Labs ECE
31) Electrical Labs EEE
32) Electronics Labs EEE
33) Metallurgy Labs
34) Chemical Engg Labs

b) Facilities for Extra-Curricular Activities

Athletics
Facilities for outdoor games
Facilities for indoor games
Gymnasium

Auditoria

There are 4 auditoriums on the campus with the following capacities

1. Resource Block auditorium: 750 seats
2. Knowledge Centre auditorium: 800 seats
3. Divisional Block C auditorium: 1200 seats + gallery
4. Open air theatre: 2000 seats + gallery

These are equipped with Dolby woofer sound system, stage curtains, accessories etc.

Health Club

'A Healthy mind in a Healthy body' – so goes the adage. The Health Club houses an ultra modern gymnasium, 2000 square feet in plinth area, catering to the needs of the fitness enthusiasts. Staff and students are free to use the gymnasium, after class hours under the tutelage of professional trainers. The state-of-the-art equipment available includes bench press, peck deck, bicep curl, lateral pulley and body twister machines.

Hostels

One of the star attractions of Amal Jyothi is the excellent hostel facility. The two campus hostels, Santhom for gents and Amala for ladies, are taken care of by dedicated Catholic priests and sisters. There is telephonic access to all rooms but mobile phone is banned as it is in the College. Affectionate discipline, tasty food at moderate rates and neat rooms with modern sanitation and professional laundry services are the hallmarks of Amal Jyothi hostels**.**

Chapels

For a short withdrawal from the busy working life, far from the madding crowd's ignoble strife, for a moment of quiet reflection and prayer, there are chapels with a serene space of elegant design, at the College and at the two campus hostels.

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library student/user friendly?

The Library has an Advisory Committee. The composition of the Committee is given below.

Table 4.1: Composition of the Library Advisory Committee:

S. No.	Designation	Status
1	Principal	Chairperson
2	Dean Admin	Joint Chairperson

3	Chief Librarian	Secretary
4	Heads of all teaching departments including Basic Science and Humanities	Executive Members & Subject Experts

The following items fall under the purview of the committee.

- Purchase of Books/Journals/E-Resources
- Budget planning for the year and Budget utilization of the previous year
- Library development activities
- Student promotional Activities

4.2.2 Provide details of the following:

- **Total number of volumes in the library: 39080** (31232 in Central library and 7848 in Department Libraries)
- **Total number of print journals: 168**
- **Total number of e-journals: 262**
- **Total number of e-books: 370**
- **Total area of the library: 2973 m^2**
- **Total seating capacity : 600**
- **Working hours** (on working days, on holidays, before examination days, during examination days, during vacation) :
  On working days: 8.00 AM to 8.00 PM
  On Holidays: 10.00 AM to 1.00 PM
  On Examination days: 8.00 AM to 8.00 PM
  During Vacation: 8.00 AM to 5.00 PM

Layout of the Central Library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

- **Ground Floor**: Text book section, Circulation section, Server Room, Book Processing section and Reprographic Centre.
- **First Floor:** Reference section, Journals and periodical Section, Bound Volumes, Conference Proceedings and Reports, Rare Book Collection, Ready reference, Reading section and e-Learning centre.

- **Second Floor**: PG Library, group and individual study spaces, reading carrels and discussion rooms.

4.2.3 How does the Library ensure purchase and use of current titles, print and e-journals and other reading material? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

The Library follows the book purchase rules framed by the Library Committee. These are outlined below.

COLLECTION DEVELOPMENT POLICY, VERSION.3/2001
CENTRAL LIBRARY
AMAL JYOTHI COLLEGE OF ENGINEERING
BOOK PURCHASE RULES 2011

1. **Application**
   - These rules shall be applicable for all purchases of Books, Journals, E-Journals, E- Books, E- Resources, Conferences/Seminars/Conventions Proceedings/Reports, Codes, Standards
   - These rules shall be applicable from 2011-2012 onwards.
2. **Selection of Books**
   Books may be selected following any of the following methods:-

   - Catalogues of Publishers, Distributors and Books Suppliers.
   - References in Books, Journals and Conference Proceedings.
   - Publisher's/ Distributor's/ Books Seller's Representatives visit to the College.
   - Books Display /Exhibition organized by library or other Institutes/Organizations.
   - During visit of faculty members to other places/Institutes.
   - Internet sites of Publishers.
   - Demand from students
   - Library catalogues/Internet sites of other Institutes.
   - Information from authors of Books.
   - Constituting committees for on the spot purchase.
   - Visiting local/outside market.
3. **Recommendation of Books**
   - Faculty members may give requirements in the proforma (Annexure.1)
   - Students may suggest to increase the copy of existing books or to give suggestions to purchase new books which are not available in the library.(Register kept in the library)

- HOD of the concerned department will give final recommendation based on faculty/students' requirements.
- Librarian will consolidate the requirements and recommend for purchase.
- Dean Administration may recommend the requirements and forward for approval from the Principal and the Manager

4. **Power of Approval of Books**

All purchase should be done with the approval of the Manager.

   a. Prior approval is not mandatory in the following cases:
   - For petty purchase of library books (not more than one copy of each title) which are urgently required and faculty/ HOD can process the purchase in consultation with the Librarian directly from the market.
   - Rare books: Faculty can purchase rare books/out of prints from local/open market first and get approval from the Manager.

   b. For books costing more Rs.10000/-, prior approval is mandatory

5. **Placing of supply Orders**
   - Supply orders of all approved books will be processed by the Librarian and signed by the Manager with the recommendation of the Dean Administration.
   - The supply order is required in the case of 4b only; supply order is not mandatory in case of 4a. above

6. **Mode of Procurement of books**

Books costing more than Rs.10, 000/-. Librarian may invite quotation with the recommendation of Dean Administration and approval of the Manager and process the quotation; decide rate of discount and name of supplier to whom the supply order is to be placed. Procurement may be done through any of the following methods:

   - Book Exhibition in Campus: Faculty may select the books from the exhibition with recommendation of HOD.
   - By Spot Purchase: A committee organized by the HOD with nominees from concerned Department and the Library will visit the distributors/publishers shop and select the books available with them.
   - Books not readily available with Distributors: List of books is given by the HOD in consultation with the faculty and it will be processed by the Library and Purchase order will be issued by Manager.
   - Petty purchase: If a book is urgently required then purchase the same in consultation with Librarian directly from the distributor/publisher.

7. **Discount**

At the beginning of every academic year quotation is invited from suppliers and discount is decided.

8. **Supply of books**

   The supplier has to follow the terms and conditions prescribed in the purchase order. They have to give assurance of the following matters:

   - Only latest editions have been supplied and these are not remainder titles.
   - The current Publishers price has been charged (The proof to be attached).
   - The Book Supplier has to undertake to take the books back at his own cost, if found damaged, Duplicate in the collection, or if not required.

9. **Payment**

   If the books are supplied in good condition as per the Purchase Order complying with the terms and conditions, the Acquisition section will process the bills and forward the same within 30 days to the Accounts Section for payment.

10. **Advance Payment**

   Advance payment may be made in following cases:

   Subscriptions of Journals, Periodicals, Magazines, E-journals, E-Resources, E-Books, Government Publications, Proceedings/Reports of Conferences, Seminars, Workshops, Conventions etc.

11. **Validity**

   The order is liable to be cancelled if the delivery is not made within one month after the expiry of the stipulated delivery date, i.e.

   - Indian Publications: Forty five days from the date of the purchase order
   - Foreign Publications: Three months from the date of the purchase order

Details of the amount spent during the last four years:

	2010-2011		2011-2012		2012-2013		2013-2014	
Library Holdings	No.	Total Cost Rs.	No.	Total Cost Rs	No.	Total Cost Rs	No.	Total Cost Rs

Text books and Reference books	3736	18,25,333	3714	15,30,688	2006	8,66,257	1754	13,10,226
Journals and Periodicals	103	1,14,392	129	2,37,485	158	3,22,783	144	3,15,223
E-resources	IEL, ASME and ASCE	7,94,640	ASTM – DL, ASCE, ASME, Elsevier, J-Gate, IEL, Mc Graw-Hill, Springer	1,41,0248	ASTM – DL, ASCE, ASME, Elsevier, J-Gate, IEL, Mc Graw-Hill, Springer	1,58,9707	IEL, ASME and ASCE,	1,50,6642

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC : Available
- Electronic Resource Management package for e-journals: D Space Digital Library Software is available in the library

- Federated searching tools to search articles in multiple databases: Nil
- Library Website : http://www.ajce.in/library/
- In-house/remote access to e-publications : Available
- Library automation :Partially completed: Circulation, Serial Control, Acquisition and OPAC
- Total number of computers for public access : 13 systems in Central Library
- Total numbers of printers for public access : 3
- Internet band width/ speed : 100 Mbps
- Institutional Repository : Available
- Content management system for e-learning : IEL, ASCE, Springer (Electrical and Electronics and Computer Science Engineering), Springer (Mechanical Engineering), ASCE, Mc Graw-Hill, J-Gate and Elsevier, IEEE/IEL Electronic Library, NPTEL Video Lectures, ASTM Digital Library
- Participation in Resource sharing networks/consortia (like Inflibnet): (DELNET, NPTEL) NPTEL, DELNET
- Walk-in recording software : To be installed
- Theft detection cameras : Yes
- Book-bank: Nil
- Exhibit zone: available
- Remote access e-resources: available
- Reprography, printing and download: available

4.2.5 Provide details on the following items:

- Average number of daily walk-ins: 200
- Average number of books issued/returned :148
- Ratio of library books to students enrolled: 1:12
- Average number of books added during last three years: 2500
- Average number of login to OPAC: 170
- Average number of login to e-resources : 100
- Average number of e-resources downloaded/printed per month: 1000
- Number of information literacy trainings organized : 12
- Details of weeding out of books and other materials : 97

4.2.6 Give details of the specialized services provided by the Library

- Manuscripts : Not available
- Reference : Yes, 8505 books in reference section
- Current Local, state and national newspapers and periodicals in vernacular and English: 4 Malayalam (state and local) and Two English

- Reprography (computing, printing and photocopying facilities) : 3 Xerox machines available in reprographic section
- ILL (Inter Library Loan Service): Loan service provided to members of Amal Jyothi Civil Service Academy.
- Information deployment and notification : E-mail alert of New arrivals to staff and students
- Download : More than 260 e-Journals, more than 1200 conference proceedings, over 2500 standards and 370 e-books subscribed in the library
- Printing : 3 printers available in reprographic section
- Reading list/ Bibliography compilation : Reading list of books are generated on request using Library software
- In-house/remote access to e-resources : IP authenticated multi user access is provided for accessing e-journals, conference proceedings and e-books
- User Orientation and awareness : Regularly done
- Assistance in searching Databases: Library housekeeping operations (Acquisition, Circulation, Serial Control and OPAC) are automated with local software.

Details of Digital Library service Available: NPTEL support available

- Number of courses & e-books available : 3397 Video Lectures, 2673 previous years' question papers and 370 e-books available
- Availability of an exclusive server : Yes
- Availability over Internet/Intranet : Available
- Availability of exclusive space/rooms : Available
- Average number of users per day : 50

4.2.7 Enumerate the support provided by the Library staff to Students and Teachers of the College

- Research corner with more than 1000 rare books and more than 1000 bound volumes of journals and periodicals, conference proceedings, project reports etc.
- Question paper Archive: Previous years university question papers are uploaded in Digital Repository.
- Newspaper Archive: leading newspapers back issues are specially kept in the library
- Two-to Three days Book exhibition of leading publishers and book distributors are organized by the Library.
- Career/Personality Development Section: Books and journals for competitive exams, Quiz completions and personality developments are kept in separate place in the library

- Conference and seminar alerts received from Principals' office are displayed in library notice board. E-mail alerts on conferences, seminar and workshops received in library are forwarded to staff members.
- Course reference: Details of Course References (Syllabus Books) are created in library software to access its availability

4.2.8 What are the special facilities offered by the Library to the visually/physically challenged persons? Give details

- An area is reserved in the ground floor for physically challenged persons.
- Lending facility is provided on demand.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?

- Feedback form is uploaded in the library website to download and give comments and recommendations
- Annual review is collected from outgoing students/faculty.
- Suggestions Register kept in the Library counter for staff and students to record their comments, which is periodically reviewed by the Librarian.

4.3. I T Infrastructure

4.3.1. Computing Facilities at Amal Jyothi College of Engineering

M. Tech CSE Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	Number
1	INTEL CORE i5 3470	4GB DDR3 ZION	ASUS P8H61-M-Lx	250GB SAMS SATA	SAMSUNG 18'5 LED	OPTICAL SCROLL	LOGITECH BLACK	24
Total								24

CSE Programming Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	Number
1	Intel Core 2 Duo T6600 @ 2.2 GHz	2 GB DDR RAM	ASUS P8H61-M-Lx	320 GB	14.1 WXGA TFT			62
Total								62

CSE Project Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	Number
1	INTEL PENTIUM D 2.66GHz	512 MB	INTEL D102 G	40GB SAMSUNG SATA	SAMSUNG Sync Master 594 mg	LOGITECH	LOGITECH BLACK	33
Total								33

CSE Advanced Systems Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	Number
1	INTEL PENTIUM D 2.66GHz	512 MB	INTEL D102 G	40GB SAMSUNG SATA	SAMSUNG SyncMaster 594 mg	LOGITECH OPTICAL SCROLL	LOGITECH BLACK	36
2	INTEL CORE i5 3470	4GB DDR3 KINGSTON	ASUS P8H61-M-Lx3	500GB SEGATE SATA	SAMSUNG SyncMaster 594 mg	LOGITECH OPTICAL SCROLL	LOGITECH BLACK	30
Total								66

CSE Hardware and Networking Lab - Number of computers and configuration

Sl. N o	Proce ssor	Mem ory	Moth er Board	Hard Disk	Moni tor	Mouse	Keyboard	No
1	INTEL CORE i5 3470	4GB DDR3 ZION	ASUS P8H61-M-Lx	250GB SAMSUN G SATA	AOC 15.6'' LED	LOGITEC H OPTICAL SCROLL	LOGITEC H BLACK	66
Total								66

IT DBMS Lab - Number of computers and configuration

Sl. N o	Proce ssor	Mem ory	Moth er Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel Core 2 Duo	2GB DDR2	ASUS P5KPL	320GB SAMSUN G SATA	Samsun g 8.5" LCD	LOGITEC H OPTICAL SCROLL	LOGITEC H BLACK	40
Total								40

IT Project Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel Core 2 Duo	1GB DDR2	Intel DG 31	80GB SATA	Samsung 17" LCD	LOGITECH OPTICAL SCROLL	LOGITECH BLACK	40
Total								40

IT Internet & Multimedia Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel Core 2 Duo	2GB DDR2	Intel DG 41	160GB SATA	Samsung 15" CRT	LOGITECH SCROLL	LOGITECH BLACK	35
Total								35

IT Programming Lab - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel Core i3	4GB DDR3	Intel DH 61	500 GB SATA	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	60
Total								60

CCF Lab1 - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel Core 2Duo 2.93 GHz	2Gb DDR2	Asus P5KPL AM/PS	320GB	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	75
Total								75

CCF Lab2 - Number of computers and configuration

Sl. No	Processsor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel i3-530 2.93 GHz	2Gb DDR3	Intel Dh55tc	320GB	Samsung 18.5" LCD	Logitech Optical	LOGITECH BLACK	75
2	Intel i5-650	4Gb DDR3	Intel Dh55tc	500GB HDD SATA	Samsung 20" LCD	Logitech Optical	LOGITECH BLACK	4
Total								79

CCF Lab 3 - Number of computers and configuration

Sl. No	Processor	Memory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No

1	Intel core 2Duo2.93 GHz	4Gb DDR2	Asus P5KPL AM/PS	320GB	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	60
Total								60

CCF AES Lab - Number of computers and configuration

Sl. No	Proce ssor	Mem ory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel core 2Duo2.93 GHz	4Gb DDR2	Asus P5KPL AM/PS	320GB	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	10
Total								10

CCF Staff Room - Number of computers and configuration

Sl. No	Proce ssor	Mem ory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel core 2Duo2.93 GHz	2Gb DDR2	Asus P5KPL AM/PS	320GB	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	4
Total								4

Language lab- Number of computers and configuration

Sl. No	Proce ssor	Mem ory	Mother Board	Hard Disk	Monitor	Mouse	Keyboard	No
1	Intel core 2Duo2.93 GHz	2Gb DDR2	Asus P5KPL AM/PS	320GB	Samsung 18.5" LCD	LOGITECH OPTICAL	LOGITECH BLACK	75
Total								

Total No of Computers

1	M. Tech CSE Lab	40
2	CSE Laptop Lab	80

3	CS Project Lab	40
4	CS Advanced Systems Lab	82
5	CS Network Lab	66
6	IT DBMS Lab	40
7	IT Project Lab	40
8	IT Internet & Multimedia Lab	35
9	IT Programming Lab	60
10	CCF Lab1	75
11	CCF Lab2	79
12	CCF Lab3	60
13	CCF AES Lab	10
14	CCF Staff Room	4
15	MCA Labs	162
16	ECE and EEE Labs	150
17	ME Labs including CAD labs	55
18	Other laboratories	110
16	Language lab	75
17	Other locations (Faculty rooms, offices, laboratories etc)	88
Total		1351

4.3.4 Budgetary Allocation for Procurement, Up-gradation, Deployment and Maintenance of ICT Infrastructure

Year	Procurement Rs.	Up-gradation cost in Rs. `	Deployment (Including salary, operational Cost etc.) Rs.	Maintenance cost in Rs. `
2010-11	1,05,11,871	94,89,760	8,19,561	2,02,550
2011-12	42,48,337	37,96,211	4,38,726	13,400
2012-13	78,11,407	72,75,977	3,59,000	1,76,430
2013-14	98,21,428	91,95,858	5,20,420	1,05,150

4.3.5 Ensuring Optimal Use of ICT Resources

- ❖ The College facilitates use of ICT resources mainly by making available a state-of-the-art IT infrastructure. This includes the following services/provisions:
  - Round the clock Wi-Fi internet connectivity in the College and hostels
  - Uninterrupted power supply and generator back-up
  - Extended hours to access computers and net connectivity in the computer labs
  - Encouragement to use the laptops and Wi-Fi internet to students and the faculty
  - Network Resource center in the library with internet access for students
  - Well maintained students and faculty clubs to develop and design brochures, newsletters, magazines, software applications, presentations etc. for various activities.
  - Wall mounted LCD projectors and screens available in all classrooms and common spaces like conference hall, AV room, Alphonsa Hall, discussion rooms etc
  - IT operations and training staff-in-charge for coordinating faculty training to enhance technical skills
  - Several licensed softwares made available in the lab
  - Additional staff in the computer lab to assist teachers and students

- Net server for collaborative working and information sharing

4.3.6 Technology-aided Pedagogy for student-centric education

Teaching- learning process at Amal Jyothi is student-centric and use of ICT significantly enhances this aspect. The table below delineates how technology-aided pedagogy supports the learning process

ICT Facility	Learning Process
IEDC Lab	Supporting students for doing innovative projects
AJCE Incubation center	Developing tools for Technology Transfer.
AJCE E-learning center	Students can view multimedia presentations from different resource persons all over India
ekalavya – eOUTREACH e-seminar	Students and faculties can attend the different classes conducted by IIT, Mumbai
Quality Enhancement in Engineering Education	Students can get benefit from the sessions of the syllabus oriented classes conducted by IIT, Chennai
ICT Enabled class room	Students seminars, quizzes ,seminars, role play etc
Internet Access and Wi-Fi	Self-learning using the wealth of information in www
Language Lab	Interactive programs for communication skill development
AV room and ICT enabled discussion room	Project reviews, multimedia presentations debates, seminars
Central computing Facility	Internet surfing, scanning, printing
Reprographic Centre	Photostat

Intranet	Sharing information, NPTEL contents and other resources within the campus
Auditoria and seminar halls	International and national conferences, technical meetings and discussions

4.4.1 Maintenance and Upkeep of Infrastructure

The maintenance of buildings, furniture and facilities on the campus is at a prompt and impeccable pace. The records of the requests for repair and maintenance are maintained systematically in chronological order, in registers in College and Hostel offices. The maintenance works are completed within 24 hours of registration of the complaint. The College maintains a group of staff with technical expertise to take care of infrastructural, electrical, finishing and maintenance works.

Apart from maintenance of existing buildings, the college authorities are keen on improving the infrastructural facilities every year as per the requirement as well to improve the academic and research facilities on the campus. The amounts allocated for the maintenance and upkeep of the infrastructure are given in the Table below:

Head	Year	Amount allocated in Rupees	Amount utilized in Rupees
Building	2009-10	1,000,000.00	3065953
	2010-11	2,300,000.00	4826336
	2011-12	4,210,000.00	3457126
	2012-13	4,000,000.00	8861236
	2013-14	5,000,000.00	8841707
Furniture	2009-10		nil
	2010-11	5,000.00	nil
	2011-12	3,000.00	6450
	2012-13	25,000.00	33145
	2013-14	5,000.00	nil

Equipment	2009-10		47437
	2010-11	5,000.00	7103
	2011-12	17,000.00	53676
	2012-13	25,000.00	33204
	2013-14	10,000.00	21150
Computers	2009-10		27721
	2010-11	15,000.00	23988
	2011-12	80,000.00	197915
	2012-13	63,000.00	104631
	2013-14	85,000.00	383208
Vehicles	2009-10		147811
	2010-11	250,000.00	418196
	2011-12	150,000.00	556969
	2012-13	500,000.00	922577
	2013-14	450,000.00	1254642
Landscaping/ Gardener	2009-10		398078
	2010-11	425,000.00	541554
	2011-12	250,000.00	764060
	2012-13	400,000.00	809049
	2013-14	450,000.00	1135714

4.4.2 & 4.4.3 Mechanisms for Maintenance and Up-keep

The College is developing an in-house *Online Tracking System* for maintenance and monitoring of the infrastructure. Requirements can be posted by the staff concerned in this system and the

action taken can be tracked online. The Infrastructure Committee examines the postings and monitors the maintenance done.

The Infrastructure Committee also conducts infrastructure performance audit and IT performance audit periodically.

A Regular staff team for maintenance who attends to various areas has been appointed by the Management. The team includes the following staff:

Area of Responsibility	Number of Staff
Construction & Maintenance	Major construction and maintenance works are getting done through professional contractors under the supervision of 2 supervisors, 3 electricians and 2 plumbers
IT infrastructure Maintenance	4
Land & Garden Maintenance	12
Classroom & Office Cleaning	15
Driver	4

4.4   Maintenance of Campus Facilities

4.4.4   Arrangements for Maintenance of Sensitive Devices at AJCE

1. Generator with sensor system to ensure uninterrupted power supply

2. Centralized UPS for power supply and prevention of risk of damage to systems

3. Highly professional maintenance of computer labs and central computing facilities by efficient lab staff.

4. Separate server room in computing facilities.

5. All buildings provided with lightening arresters

6. All buildings provided with Fire-fighting equipment and First aid boxes.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 College Prospectus and the Information Provided to Students

The institution publishes its updated Prospectus and calendar annually. Some of the departments also bring out their handbooks and brochures. These publications reflect the transparency and commitment of the College to the academic and allied activities and their schedule. This helps to disseminate important information, to encourage applications from deserving students for various courses, scholarships etc. available to students and to acquaint all stakeholders with provisions of the institution and to instill the spirit of accountability and academic democracy among the management, faculty and students of the College.

The following information is provided to students through the above documents and through the College website:

About the College	Major Milestones
	Vision & Mission
	Members of Advisory Board
	College anthem
	Faculties and intake
	Highlights of the College
	Contact Numbers + Photo
	Unique features of the department
Academic information	Programmes offered
	Academic Calendar
	Course description
Faculty information	Class Teachers and Mentors
	College Staff

Rules& Regulations	General Discipline Class Timings Tests and progress reports Attendance and Leave Issue of Certificates Library Rules Hostel Rules & Regulations		
General information	Parent- Teacher Association Alumni Association Students' Council Academic Council Technical Clubs Scholarships and Endowments Research & Development, Consultancy, Extension and Student Projects Major Recruiters		

5.1.2 Scholarships and frees-hips provided by the institution [2010-14]

The type, number and amount of institutional scholarships/free-ships given to the students during the last four years are as below.

(All amounts in Lakhs of Rs.)

Name /Nature of scholarship		2010-2011		2011-2012		2012-2013		2013-2014		2014-15	
		Nos	Amt	Nos.	Amt	No. s	Amt	No. s	Amt	Nos	Amt
TFW	GOVT.	51	39.66	81	54.51	98	67.26	113	84.75	123	92.25
TFW	MGMT	7	2.75	2	0.75	4	2.00	7	4.625		
AJECS	AJECS			39	6.15	43	11.30	14	4.26	11	0.38

MOMA-MCM	GOVT.	21	6.05	19	5.65	125	34.60	136	39.925		
CSS	GOVT.	19	0.80					8	2.90		
PG-GATE	GOVT.-AICTE	1	0.96	11	10.56	30	28.8	45	43.2		
FISHER MEN SCHOL ARSHIP	GOVT									1	1.16
AJCE MERIT	MGMT	25	0.48	32	0.48	49	0.49	22	0.22	38	0.45
AJCE MERIT CUM MEANS	MGMT		0.54								
CEE-LOW INCOME	MGMT					43	7.97	57	7.56		
VATTA KKUNN EL	EF			4	0.075	4	0.075	4	0.075	4	0.08
LINSA ANNIE	EF	2	0.1	2	0.1	2	0.1	2	0.1	2	0.10
LUKES JOY	EF	2	0.1	2	0.1	2	0.1	2	0.1	2	0.10
BALU S PILLAI	EF					1	0.05	1	0.05	1	0.05
LIZ SIMON	EF	1	0.3								
SILVER ORDINA TION	EF									1	0.04

SARAM MA IPE MEMOR IAL	EF										1	0.02
RODRIG UES MEMOR IAL	EF										1	0.01
VENGAL IPE MEMORI AL	EF										1	0.02
PROF. VIJAYA N'S	EF										1	0.02

TFW: (Tuition fee waiver); MOMA: (Ministry of Minority Affairs); CSS: (Central Sector Scholarships)

MGMT: Management; MCM: Merit-cum-Means; EF: Endowment Fund

AJECS: Amal Jyothi Educational and Charitable Society

5.1.3 Percentage of students in receipt of Financial Assistance (includes Tuition fee waiver, Management concession and BPL concession)

Year	Percentage of Students
2014 - 2015	9.5
2013 - 2014	5.3
2012 - 2013	4.2
2011 - 2012	4.6
2010 - 2011	3.4

5.1.4 Specific Support Services /Facilities Available to Students

Students from SC/ST, OBC and economically weaker sections

Students from SC/ST, OBC and economically weaker sections are provided with Scholarships. Reservation in admission is provided as per Government norms.

Students with physical disabilities

Classes of students with physical disabilities are confined to the ground floor. The hostel has specially built ramps for the students with physical disabilities. An elevator is also in the pipeline to meet the needs of the students with physical disabilities

Overseas students

Medium of instruction is English.
At present we have no overseas students, other than NRIs.

Support for Students to partake in various competitions

Students are supported to participate in various competitions with duty leave. Also grace marks are awarded for those who win the competitions.

Medical assistance to students: **Health centre, health insurance etc**

A 30 bedded hospital (Holy Cross Hospital, Koovappally) is available very adjacent to the campus. Full time doctor (2), nursing staff (4), pharmacist, X-ray technician, lab technician and clerical staff man the facility. An ultra modern hospital (Mary Queens Mission Hospital, 26th mile, Kanjirapally) with all modern facilities is just 4 km away. It has most of the specialized departments manned with about 20 doctors and supporting staff. Vehicle service is available 24 hours at this hospital.

Organizing coaching classes for competitive exams

The departments organize coaching classes for GATE examination. The Placement Cell organizes seminars on Higher Studies and conduct aptitude training. A Foundation Course for Civil Services is offered for interested students by Amal Jyothi Institute for Civil Services

Skill Developments (Spoken English, Computer literacy etc)

Communicative English has been incorporated into the curriculum. The Language Lab with a capacity of 67 consoles has been set up to complement classroom teaching.

In addition to this, different departments conduct the following add-on courses

Department	Add-on Courses
AUE	AutoCAD, Pro-E
CE	Revit architecture, Auto Cad, Primavera P3, STAAD Pro
CSE & CA	JAVA, PHP, Android, NS2, LATEX
ECE	Matlab, Embedded Lab (PIC and 89C51), Lab View, Department placement cell, Aptitude training
EEE	CAD Training, MATLAB training
IT	Android , PHP, Java
ME	AUTOCAD, CATIA, ANSYS, PRO-E, ABAQUS TRAINING

Support for "slow learners"

Remedial Classes are arranged for slow learners. To help weak students to score better marks, improvement tests are conducted. In addition to this there is a strong mentoring system to boost the confidence of the slow learners

Exposure of students to other institutions of higher learning, corporate/business houses etc.

The students are exposed to other institution/industries through industrial visits/trainings. Students participate in various inter-collegiate competitions and attend trainings organized by other institutions

Publication of student magazines

Student magazines are published with participation of students. The Student Council annually publishes the College magazine. In addition to this each department has its own magazine / newsletter, as listed below.

Department	Magazine
CE	Contour
CSE & MCA	Department Magazine
ECE	Zealous

EEE	Sparks
IT	CLICK
ME	Yantrik

Also the students publish their articles on Blogs.

5.1.5 Instilling of Entrepreneurial Skills among the Students and its Impact

Details of Entrepreneurs from AJCE

The College has identified entrepreneurship development as the need of the hour in the context of growing opportunities for enterprise in India. Developing entrepreneurial traits in students is one of the graduate attributes. The following are some of the initiatives taken by AJCE in this direction.

We have one unit of Innovation Entrepreneurship Development Centre (IEDC) under NSTEDB (DST) New Delhi. This is the first IEDC unit which is sanctioned by NSTEDB to an Engineering College in Kerala.

The College conducts annual student project competition 'Innovation Ideas Unleashed contest, funded by the College.

It organizes special trainings like Business Skill Development Program (BSDP), Intellectual Property Right Awareness and Entrepreneurship Awareness Camps in association with Techno Park, Trivandrum, Kerala State Council for Science, Technology and Environment (KSCSTE) and the Ministry of Micro, Small and Medium Enterprises (MSME), Govt. of Kerala. An IPR facilitation centre supported by KSCSTE also functions in the College.

Two projects were shortlisted among the eight from Kerala and got funding of one lakh each from the State Govt. for developing a coconut tree climbing machine.

Three student projects are approved for TePP funding for product development. A few applications have been submitted for patent through the Patent Information Centre, KSCSTE, Govt. of Kerala.

Space is provided to start new companies by students, as a part of incubation. A Technology Business Incubator (TBI) has been sanctioned by the DST in 2014.

Projects that won top place in the all-India Innovation Hub project contest, organized jointly by National Council of Science Museums and 'The Telegraph' at Kolkata

Project	Year	Prize
Password Security System	2007	First Prize
Electronic Wheel Chair	2008	First Prize
Solar Power-based Computerized Irrigation System	2009	First Prize
Robot for Bore-well Rescue	2010	Second Prize
Cocobot – Coconut Plucking Robot	2011	Second Prize
E- diagnoser	2012	First Prize
Xerobot - A Multi-purpose Automation Robot	2013	Second Prize
Virtual-I	2014	First Prize
Automatic Lemonade Machine	2014	Second Prize

Projects that won positions in the all-India Tech Top project contest, Trivandrum

Project	Year	Prize
Intelligent Light Dimmer	2008	Third Prize
Pepper Separator	2011	First Prize
Helioped	2011	Special Prize

Details of Amalite-Entrepreneurs

Some of the alumni of AJCE who have initiated their own companies are listed below.

Entrepreneurship Initiatives	Batch	Dept	Name
Wedding Platter	2006	ECE	Sofia Anup

Emvigo Technologies	2007	ECE	Nitin Prabhakar
Emvigo Technologies	2008	ECE	Avinash Prabhakar
Zorus Technologies	2008	ECE	Syril Joseph
Dhuniya Al Jamali Group	2009	ECE	Hashim Jamal
Engineers World	2009	ECE	Rogen Joseph
Zhooyi Communications	2010	ECE	Mittu Andrews Tigi
Synergen Consultants	2010	ECE	Bansan Thomas George
Marigold Group	2011	ECE	Thomas Kiran
Developer of Fullforms.com	2006- 2010	EEE	Mithun Mathew
Electrical CAD	2006-2010	EEE	Sajin Babu
Kanchi Signature Collections-online store	2006 - 2010	IT	Sruthi Merin
Mayoora Jewels- Handmade Terracotta Jewellery	2007 - 2011	IT	Archana R Nair
Xinprodes Innovations	**2010 - 2014**	IT	Alok Thomas , Jijo Mathew, Jinu James, Jackson Thomas Anto P Joseph, Shibin Mathew
Train Labs	**2010 - 2014**	IT	Abraham K Joseph
Delight Orchids and Universal Greens	**2009 - 2013**	IT	Thomas V Abraham
Braincube Solution	**2008 - 2012**	IT	Bridgit Sruthi Jacob K
Marian Event Miracles	**2008 - 2012**	IT	Bency Babu Philip
Livemob Technologies	**2006 - 2010**	IT	Aby Thomas

Rain Drops	**2004 - 2008**	IT	Anju E Mathew
Construction Company	2008-2012	CE	Arun George, Roshan E.E, Tigil Thomas
Filanza	2011	CSE	Sarath S
Construction Company	2006-2010	CE	Jobit Joseph
Construction materials business	2010-2014	CE	Shon Jacob

5.1.6 Promotion of Extracurricular and Co-curricular Activities

❖ The College views extracurricular and co-curricular activities as integral to the holistic development of the students. Opportunities, therefore, are identified, created and given to promote student participation. Financial support, training and development support are provided by the institution appropriately. The College helps students in these activities in the following ways:

• Additional academic support and flexibility in examination times.

• Students are informed of Special dietary requirements, provided with sports uniform, necessary materials and other relevant information

❖ Students organize 3-day National level Techno Cultural Fest "Azure", Arts Day, College Day, Onam and Christmas celebrations.

❖ Annual Sports Meet and Inter-Departmental Games competitions.

❖ A program called Talent'EVE is conducted on year wise basis every two weeks to promote talents of students.

❖ All core departments have their own branch association. They organize seminars / workshops / invited talks from industry/inter-College and intra College technical and cultural fest

❖ With a view to honing the technical and cultural skills and talents of students, and to promote their aptitude for research and extension, the College offers both technical as well as non-technical clubs.

❖ Students are given duty leave to participate in technical and cultural activities organized by the university or any other College.

❖ Those who win the competition are awarded grace marks along with the internal

marks

❖ Annual Sports Meet and Inter-Departmental Games competitions are also conducted.

5.1.7 Assistance Provided Preparatory to Competitive Exams

The departments organize coaching classes for various competitive examinations like GATE. The Placement Cell organizes seminars on Higher Studies and conduct aptitude training. Foundation Course for Civil Services is offered interested students by Amal Jyothi Institute for Civil Services. Many books and periodicals are available in the library.

Action has been initiated to form a Question Bank for the benefit of the students

Programme	No of Students Qualified for Competitive Examinations			
	2013-2014	2012-2013	2011-2012	2010-2011
GATE	23	27	32	6
MAT	0	2	0	4
Central Services	0	0	0	1
State Services	0	1	0	1

5.1.8 Counseling Service Provided to Students

Academic Counseling
Each faculty member is entrusted with 20 students to keep track of their progress and performance. Class committee meetings are conducted frequently to know the problems of the students

Personal Counseling
There are two professional Counsellors in the College. Also students may contact their

respective faculty mentor for guidance on issues affecting them.

Career Counseling
Career Guidance and motivational programmes by Alumni, External guest and faculty are organized frequently

Career and Placement Cell of the College under the guidance of a Placement Officer offers career counseling.

Psycho-social Counseling
Psycho- social counseling is provided through various programmes like retreat, social service etc.

In order to equip the mentors for effective mentoring, AJCE has organized a Mentorship Training Programme. Training was imparted to mentors by experts from outside.

5.1.9 Career Guidance and Placement of the Students of the College

The College has a Placement Cell with 3 full time staff members to provide career guidance and placement training to the students. The Placement Cell organizes on-campus and off-campus recruitments and pre-placement training programmes in Aptitude test, Group Discussions, Interviews and presentation skills, in collaboration with the Department of Humanities and the core departments. Mock interviews and GDs are conducted on a regular basis so as to equip final and pre-final students to face the challenges of the recruitment scenario. Close on the heels of placement drives, the Placement Cell makes an evaluation of the performance of the students. This objective appraisal enables the College to identify strengths and weakness of the candidates and select the strategies for improvement. Besides, there are intensive supportive measures for low performing candidates.

Placement performance of AJCE during the period of this report is tabulated below.

Year	Name of the Company/Industry	Number of Students placed	Total Number of Students Placed	Percentage of Placement based on Eligible students
2009	NsST	1	84	60.43%

	TCS	32		
	Hexaware	1		
	Syntel	3		
	IBS	5		
	Infosys	11		
	Keane	11		
	L&T	2		
	L&T Info	1		
	Satyam	7		
	HCL	1		
2010	TCS	25		
	HCL	22		
	GULFAR	2		
	SPECTRUM	18	93	53.29%
	UST Global	22		
	CYBER SLASH SUPPORT	41		
2011	TCS	60		
	ACCENTURE	52		
	IBS	16		
	PATNI COMPUTERS	49		
	SYNTEL	25	155	91.71%
	HCL TECHNOL OGIES	21		
	SPECTRUM	22		
	SUBEX	1		

	OSMS	10		
2012	TCS	100	119	55.60%
	UST Global	32		
	IBS	4		
	South Indian Bank	5		
	HCL Infosystems	2		
	SYNTEL	2		
	Indian Navy	1		
	Saskan	2		
	Oracle FS	2		
	Telios Technologies	4		
2013	TCS	22	73	29.91%
	IBS	14		
	HCL INFOSYSTEMS LTD	10		
	MRF	1		
	UST Global	6		
	INDIAN NAVY	2		
	SUBEX	0		
	OMNEX	4		
	GULFAR	3		
	DALMIA CEMENT	2		
	ARICENT	4		
	SATVEN (M.Tech.)	2		
	ZYXWARE	3		
2014	OMNEX	38		63.05%

	TCS	30		132	
	MPHASIS	2			
	INDIAN NAVY	11 (Shortlisted)			
	UST Global	14			
	EVEREST	4(Shortlisted)			
	IBS	4			
	MRF	2			
	CTS	2			
	Verizon	1			
	RM	2			
	BizTime IT Solutions	9			
	Srishti Innovative	20			
	Infocom Softwares	1			

	Branch-wise Placements					
Year	Branch	No of Students placed through Placement Cell	No of Eligible students	Percentage of Placement based on Eligible students	Strength	Percentage of Placement
2009	CSE	23	37	62.2	59	39.0
	ECE	30	50	60.0	90	33.3
	EEE	18	25	72.0	45	40.0
	IT	13	27	48.1	48	27.1
	Total	84	139	60.4	242	34.7
2010	CSE	22	36	61.1	63	34.9
	IT	22	33	66.7	62	35.5
	ECE	33	68	48.5	131	25.2

Year	Dept					
	EEE	6	22	27.3	43	14.0
	ME	6	8	75.0	66	9.1
	Total	89	167	53.3	365	24.4
2011	CSE	38	38	100.0	62	61.3
	I T	26	26	100.0	61	42.6
	ECE	65	69	94.2	104	62.5
	EEE	14	18	77.8	43	32.6
	ME	12	18	66.7	41	29.3
2012	CSE	26	42	61.9	63	41.3
	IT	21	35	60.0	51	41.2
	ECE	50	83	60.2	117	42.7
	EEE	13	32	40.6	52	25.0
	ME	5	22	22.7	61	8.2
	MCA	4			11	36.4
	Total	119	214	55.6	355	33.5
2013	CSE	14	62	22.6	79	17.7
	IT	5	22	22.7	31	16.1
	ECE	27	83	32.5	112	24.1
	EEE	7	43	16.3	56	12.5
	ME	7	34	20.6	51	13.7
	Civil	5				
	MCA	8			57	14.0
	Total	73	244	29.9	386	18.9
2014	CSE	27	38	71.1	90	30.0
	IT	3	5	60.0	53	5.7
	ECE	39	60	65.0	120	32.5
	EEE	6	18	33.3	53	11.3
	ME	33	43	76.7	90	36.7
	MCA	8	30	26.7	56	14.3
	Auto	9	9	100.0	59	15.3
	Total	129	203	63.5	521	24.8

5.1.10 Student Grievances Redressal Cell and its Functioning 2010-2014

The institution has a Grievance Redressal Cell functioning to rectify the grievances faced by the students. It has been established to find the solutions for the problem faced by the

students during their course of study

Sl No	Grievances Reported	Redress Offered
1.	Extension of Library Hour	Library is open till 8 pm
2.	Support for GATE Examination	GATE coaching is provided
3.	Reduction of Fine in Library	Reduced to Rs5/-
4.	Extension of Loan Period	Under consideration

5.1.11 Resolving Issues Pertaining to Sexual Harassment

There is a separate cell for Women and the members deal with any such type of problems if arise. Such problems don't arise in the College as the institution keeps high level of discipline.

5.1.12 AJCE's Anti-Ragging Committee and its Functioning

There is an Anti-ragging Committee to prevent ragging inside the College. After initiating the committee, the implications of ragging are made known to all students through yearly meetings when new students join. Senior students do not indulge themselves in such practices as the punishment is severe. Classes are organized on legal awareness on anti ragging every year. Anti ragging affidavits by both student and parent are collected at the time of admission. Because of the effective steps taken by the Management the College never had any incidence of ragging.

5.1.13 Student Welfare Schemes

The welfare schemes made available for students by the institution are as follows:
- Scholarships, endowments and free-ships.
- Counselling Centre
- Multi-gym & recreational facilities
- Fully Wi-Fi campus
- Food Court
- First aid and medical assistance
- Driving Academy
- Reprographic Facilities on campus
- Stores
- Coaching Programme for Civil Services Examination
- Finishing School
- Technology Business Incubation
- Industry Partnerships

- Walk & Talk
- Talent Eve.
- Azure
- Arena
- AJECS Scheme
- 'Over a cup of Tea' – meeting with a successful individual

5.1.14 Alumni Association Activities and Major Contributions

Association of Amal Jyothi Alumni (AAJA) is a vibrant organization which caters for the inculcation of intimate fellowship and frequent interaction among the former students of the College.

Activities

Regular yearly meetings

Some of the activities under the banner of AAJA during the period of this report are listed below.

- Bansan Thomas George, CEO, Synergen Consultants, handled personality development and excellence sessions for students. He also gave a talk for the Alumni Induction Programme
- Donna Sebastian (HR IBS, Cochin) and Nithin Raju Chandy (Freelance Software Designer) gave a talk to the First Year students.
- Avinash Prabhakar (CTO Emvigo Technologies, TVM)andNithin Raju Chandy (Freelance Software Designer) were invited to address the school students during the Yuva Mastermind 2012
- Robin Tommy (Mc Faydays Solutions) addressed the final and pre-final year students in 2013 on better placement prospects
- Arun Gopalakrishan (CDAC, TVM) handled a session for the faculty during an FDP

5.2   Student Progression
5.2.1 Student Progression Trend Analysis (2010-2014)

Table blow provides the percentage of students progressing to higher education or employment (for the last four batches).

	Programme	2013-14	2012-13	2011-12	2010-11
UG to PG	AUE		7.14	NA	NA

	CE	27.7	30	42	56
	CSE		23	24	18
	ECE	5.6	11.81	35.77	25.4
	IT		10.8	16.94	12.89
	EEE	3.17	10	25	10
	ME	6.60	23	25	20
PG to M.Phil.	AUE	0	NA	NA	NA
	CE	0	0	0	0
	CSE	0	0	0	0
	ECE	0	0	0	0
	IT	0	0	0	0
	EEE	0	0	0	0
	MET	NA	NA	NA	0
PG to Ph.D.	AUE	NA	NA	NA	NA
	CE	0	0	0	0
	CSE	0	0	0	2
	ECE	0	0	0	0
	IT	0	0	0	0
	EEE	0	0	0	0
	ME		0	0	0
Employed : Campus selection	AUE	14.51	0	NA	NA
	CE			2	
	CSE	12	5	17	29
	ECE	22.4	11	14.3	29.2
	IT	1.89	8.70	35.59	38.09
	EEE	10	14	19	20
	ME	NA	NA	NA	NA
Employed : Other than campus recruitment	AUE		29.41	NA	NA
	CE	15	19.35	40	39.6
	CSE	7	5	25	20
	ECE	4.8	33.1	24.3	32.4
	IT	3.77	45.65	27.12	33.34
	EEE	0	9	12	0
	ME				

5.2.2   Programme-wise Pass Percentage Rate (2010-2014)

Details of the programme-wise pass percentage and completion rate for the last four years is as shown below:

Completion rate 2011	Pass % 2011	Completion rate 2012	Pass % 2012	Completion rate 2013	Pass % 2013	Completion rate 2014	Pass % 2014	Branch	Programme
NA	NA	NA	NA	NA	NA	23.529	11.76	AUE	B. Tech
100	74.6	100	75.8	1000	82.5	100	82.2	CE	B. Tech
						100	91.3	SECM	M. Tech
		98.32	96.87	100.00	88.75	100	65.55	CSE	B. Tech
NA	NA	NA	NA	100	69.98	100	54.56		MCA
NA	NA	NA	NA	NA	NA	100	100	CSE	M. Tech
		74.42		84.55		84.25		ECE	B. Tech
		100		94				Comm. Engg.	M. Tech
98.41	44.26	100	58	98.41	66.13	98.38	91.8	EEE	B. Tech
98.41	44.26	100	58	98.41	66.13	98.38	91.8	PEPS	M. Tech
98.41	77	98.44	84.13	98.33	71.19	97.87	47.83	IT	B. Tech
96.5	32	96.7	42	97.45	50	97.77	57.29	ME	B. Tech
NA	NA	60	40	81.81	72.20	70	70	Machine Design	M. Tech

Comparison of B. Tech. Results with a few neighboring Colleges in the same University

CE B. Tech. RESULT COMPARISON						
Sl. No	Name of Colleges	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
1	Amal Jyothi College of Engineering	82.5	75.8	74.6	50	82.22
2	Carmel College of Engineering	37.3	21.2	12.91	17	40
3	M A College Kothamagalam	77.5	70.1	53.85	71	66
4	Saintgits College of Engineering, Pathamuttom, Kottayam	73	69.2	48.34	37	71.21
5	SNGC Kadayiruppu, Kolencherry	68.1	57.4	-	23	63.38
6	SCMS School of Engineering & Technology	80.6	83	47.46	69	76.56

7	Rajiv Gandhi Institute of Technology, Kottayam	74.6	65.7	46.97	55	63.9
8	Ilahia College of Engineering & Technology	54.9	60.9	40.91	36	57.1
9	Musaliar College of Engineering & Technology	43.7	25.4	37.71	11	23.81
10	Mar Basalious College of Engineering &Technology, Peermade	40.6	-	-	--	60.47
11	St. Josephs College of Engineering & Technology, Pala	50.8	-	-	--	57.63

CSE B. Tech. RESULTS COMPARISON						
Sl. No	NAME OF THE COLLEGE	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
1	Amal Jyothi College of Engineering	65.52	87.25	96.87	95.06	58.89
2	Carmel Engineering College	25		30	18	42.80
3	M A College Kothamagalam					70.30
4	Saintgits College of Engineering, Pathamuttom	66.97	87.5	88		66.67
5	SNGC Kadayipruppu					64.13
6	Mangalam College of Engineering, Ettumanoor					41.79
7	St. Josephs College of Engineering & Technology, Pala	62	89.56	87.7	77	32.20
8	SCMS School of Engineering & Technology	55.4	58	57	34	77.42
9	Rajiv Gandhi Institute of Technology, Kottayam	55.7	48	39	32	66.2
10	Mar Basalious College of Engineering & Technology, Peermade					60.47
11	Viswajyothi College of Engineering & Technology, Muvattupuzha	57.1	55	57	41	58.26

EEE B. Tech. RESULTS COMPARISON						
Sl. No	Name of Colleges	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
1	Adi Shankara Institute of Engineering and Technology	66.12	80	50	74.14	72.58
2	Amal Jyothi College of Engineering	91.8	66.13	58	44.26	36.67
3	Carmel Engineering College	44.64	21.54	16	16.12	46.80
4	Govt College, Painav	64.17	53.73	32.35	52.3	57.50
5	Saintgits College of Engineering, Pathamuttom	78.78	67.19	46.66	60.34	78.33
6	FISAT College of Engineering, Angamaly	83.33	68.18	52.3	61.01	57.58
7	Mangalam College of Engineering	63.63	33.82	21.21	30.9	47.83
8	St. Josephs College of Engineering &	79.6	67.19	50	69.49	51.61

	Technology ,Pala					
9	SCMS School of Engineering & Technology	77.6	65.63	47.45	86.44	63.49
10	Rajiv Gandhi Institute of Govt Engineering College, Kottayam	73.6	77.14	42.25	59.09	66.2
11	Mar Basalious College of Engineering &Technology, Peermade	75.47	52.38	18.03	34.62	041.07
12	Viswajyothi College of Engineering & Technology	87.7	77.42	40.9	79.66	65

IT B. Tech. RESULTS COMPARISON						
Sl No	Name of Colleges	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
1	Adi Shankara Institute of Engineering and Technology	48.6	63.5	49	80	67.05
2	Amal Jyothi College of Engineering	47.8	71.2	84.13	77	32
3	Carmel Engineering College	24.1	27.9	32	44	45
4	Govt College , Painav, Idukki	40.0	32.1	35	68	27.60
5	Ilahia College of Engineering and Technology	48.3	47.1	63	23	37.7
6	KMEA College of Engineering	40.4	43.1	24	67	36.05
7	Mangalam College of Engineering	23.7	26.7	11	37	21.28
8	Matha College of Technology	21.2	40.4	33	28	41.02
9	Mount Zion College of Enginering	8.8	14.5	44	66	26.66
10	Rajagiri School of Engg and Technology	52.5	67.2	24	25	65.52
11	University College of Engineering	36.4	51.5	69	84	
12	Viswajyothi College of Engineering & Technology	56.9	73.8	83	84	67.57

ME B. Tech. RESULTS COMPARISON						
Sl. No	NAME OF THE COLLEGE	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
1	Amal Jyothi College of Engineering	57.3	47.6	42	32	44.94
2	Carmel Engineering College	25	5.085	30	18	20
3	M A College Kothamagalam	55.1	50.8	64	41	59.8
4	Saintgits College of Engineering, Pathamuttom	51.9	50.8	22	36	52.71
5	SNGC Kadayipruppu	48.4	34.7	30	32	39.25
6	Mangalam College of Engineering	17.1	32.14	23	21	23.88
7	St. Josephs College of Engineering & Tech., Pala	60.9	45.8	43	50	38.46
8	SCMS School of Engineering & Technology	55.4	52.5	57	34	48.03
9	Rajiv Gandhi Institute of Technology, Kottayam	55.7	53.6	39	32	35.6
10	Mar Basalious College of Engineering & Technology, Peermade	47.5	37.74	30	18	31.30
11	Viswajyothi College of Engineering & Technology	57.1	59.3	57	41	48.44

Sl No	Name of Colleges	2009-2013	2008-2012	2007-2011	2006-2010	2010-2014
ECE B. Tech. RESULTS COMPARISON					
1	Adi Shankara Institute of Engineering and Technology	76.85		81.81		48.06
2	Amal Jyothi College of Engineering	73.01		86.92		68
3	Carmel Engineering College					28.30
4	Govt College , Painav					25.80
5	Saintgits College of Engineering, Pathamuttom	68.18		93.33		65.63
6	FISAT College of Engineering, Angamaly	66.66		88.65		76.19
7	Mangalam College of Engineering					37.21
8	St. Josephs College of Engineering & Technology ,Pala	64.88		80.99		44.35
9	SCMS School of Engineering & Technology	76.56		85		66.10
10	Rajiv Gandhi Institute of Technology, Kottayam	74.64		79.92		47.2
11	Mar Basalious College of Engineering &Technology, Peermade					30.80
12	Viswajyothi College of Engineering & Technology	79.48		93.18		74.14

5.2.3   Student Progression towards higher Education/ Employment

The Placement Cell, with the support of core departments, conducts seminars on career guidance and higher studies. It also organizes coaching classes for GATE.   The Placement Cell organizes on-campus and off-campus recruitments and pre-placement training programmes in Aptitude test, Group Discussions, Interviews and presentation skills in collaboration with the Department of Humanities and core departments. Mock interviews and GDs are conducted on a regular basis so as to equip final and pre-final students to face the challenges of the recruitment scenario.

Sustained practices in the College for student progression to higher level of education include:

- GATE coaching
- Guidance for higher studies like PhD
- Academic counseling
- Scholarships and free-ships

Practices for student progression towards employment include:

- Coaching for competitive exams like Civil services Exam

- Add-on programmes, Industrial tie-ups and visits
- Finishing School programme, Placement-oriented Personality and skill development programmes.
- Placement drives, Career seminars, Sessions on Aptitude & Reasoning skills, etc.

5.2.4 Special Support Provided to Students at Risk of Failure/ Drop Out

Students who are at risk of failure and drop out are identified through attendance monitoring, results analysis in every semester, and also through teachers' observations and informal interactions within and outside the classroom. (c.f. 2.2.6) Special attention and support are given to such students and they are motivated for improved performance:

- ❖ **Academic support**
- Remedial Classes
- Peer teaching
- Tutorial sessions
- ❖ **Financial support**
- A Coordinator at the College level facilitates the availability of various scholarships offered by the Govt.
- The College has instituted various scholarships through alumni, parents and well-wishers.
- ❖ **Psycho –Social support**
- Active Individual and Group Mentoring is provided
- Constant Parent-Teacher interaction and House visits
- Emotional support through Phoenix club activities

Drop-out rate for various courses has been negligible over the last several years. The institution has designed and implemented an array of programmes to minimize the drop-out rate of students.

5.3   Student Participation and Activities

5.3.1   Sports, Games, Cultural and Other Activities available to Students

AJCE ensures participation of students in a wide range of co-curricular and extra-curricular activities to facilitate their holistic development. Under the Physical Education Department, facilities for Basketball, Cricket, Volleyball, Football, Table Tennis, Ball Badminton etc are provided to students. The Department has made provisions for

Athletics, Judo, Power Lifting and Weight Lifting. Training is also given in Yoga periodically. An inter-College basketball tournament, ARENA is held annually.

AJCE has given due importance to cultural activities along with academic subjects for the all-round development of students. The Arts Festival is conducted by the Students' Council once in a year. It is a one day year wise competition. The students who are attaining first and second places in the arts festival will be sent to University level competitions. The color of arts includes 33 events, some of them are Musical events, Dance events, Fine Arts, Stage events, Quiz Competition, Recitation, Elocution, Mock press, Adzap, Debate, JAM, Kathaprasangam etc.

Under the auspices of different Departments, fests and competitions such as Azure are organized every year. Students are also encouraged to participate in on campus and off campus Youth Festivals. Several cultural events such as Onam, Christmas and Arts Day and important days like Tourism Day, Women's Day, etc. are celebrated. Opportunities for Short Film Making, Drama, Script Writing, Web Designing, Photography, Literary activities (Malayalam, English), Quiz and Debate programmes, folk dance, classical and western dance, etc. are also provided to students. Besides this, there are several clubs, Department Associations and activities such as NCC, NSS, CSM and Jesus Youth which are active and make the campus vibrant.

A brief outline of the **program calendar** is given below:

Events	Items	2013-14	2012-13	2011-12	2010-11
Sports	Discus Throw, Javelin, Shot put, Athletics	March 2014		March 2012	January 2011
Games	Arena	March 2014	February –March 2013	January 2012	January 2011
	Inter departmental/Year Games – Chess, Basketball, Cricket, Football, Volleyball	Along the year			
	Intercollegiate Volleyball Tournament Pace	April 2014			
	Inter Branch Football	Even			

	Tournament	Semester			
Cultural	Azure – National Techno Cultural Fest	August 2013		January 2012	January 11
	Arts Day	March 2014	Oct 12 (Inau) & March 13	January 2012	January 11
	Onam Celebration	September 2014	August 2012	September 2011	August 2010
	Christmas Celebrations	December 2013	December 2012	December 2011	December 2010
	Freshers' Day		October 2012	October 2011	
	Talent Eve	Bi weekly	-	-	-
	Luke's Memorial Photography Competition				
Technical	Azure	August 2013			January 2011
	Departmental Association Events	Depending on dept plans	April 2013	Depending on dept plans	Depending on dept plans

5.3.2 Student Achievements in Co-curricular, Extracurricular and cultural Activities (2010-2014)

The details of major student achievements in co- curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years are as below:

<u>2013-2014</u>

Achievements at National/Inter University Level
- Dennis John received Young Innovators Award in Infocom NCSM (ECE)
- Abhilash Anandan and team reached final round of TechTop 2013 (ECE)
- Sarath V Joy (S5 ME), selected to the MG University Table Tennis team.
- Aswin Tom (S3 CSE), selected to the MG University Table Tennis team.

- Rahul Binu Mathew (S1 S2 ME) selected to the MG University Table Tennis team.
- Vishnu Surendran (S1S2 ME), represented MG University in the south Zone inter University Chess Championship held at SRM University Chennai.

Achievements at State Level

- Abel Aby Kuriakose (ECE) and team won First place for Best Choreography at St. GITs

- Mathew M John has won first prize in Circuit Debugging at SaintGits (ECE)

- Arun Thomas (ECE) and team won first prize for Project Competitions at Caarmel Engg. College

- Ajay P Joji and Bony M Jose (ECE) won second prize for Concept PPT at Saintgits

- Denson K Shaji and team (ECE) has won first prize at Robowar in Saintgits

- Deepak Thomas (EEE) won second prize in Asthra 2014 Arts fest at St. Joseph's Engineering College, Pala

- Nithin Biju (EEE) won second prize in Asthra 2014 Arts fest at St. Joseph's Engineering College, Pala.

- Harikrishna S. P (EEE) won first prize in Cricket at St. Joseph's Engineering College, Pala (PACE 14)

- Asha Mary Raju won first prize in the Technical Quiz Contest at Musaliar College of Engineering.

- Jerin Babu (EEE) won first prize in the Technical Quiz at Musaliar College of Engineering.

- Amal Jyothi bagged the Overall Championship in the 'PACE 14' all-Kerala intercollegiate Sports fest organized by St. Josephs College of Engineering, Pala.

- Amal Jyothi Volleyball team secured the First position in the 'PACE 14' all-Kerala intercollegiate Sports fest organized by St. Josephs College of Engineering, Pala.

- Amal Jyothi Cricket team secured the First position in the 'PACE 14' all-Kerala intercollegiate Sports fest organized by St. Josephs College of Engineering, Pala.

- Amal Jyothi Volleyball team secured the First position in the "MBC Trophy 14", all-Kerala intercollegiate Volleyball tournament organized by Mar Baselious College of Engineering, Peerumedu.

- Amal Jyothi Volleyball team secured the First position in the "SMASH 14", all- Kerala Intercollegiate Volleyball tournament organized by IHRD College of Engineering, Kalluppara.

- Amal Jyothi Volleyball team secured the First position in the 'ASPIRE 2014' all-Kerala intercollegiate Volleyball tournament organized by Amal Jyothi College of Engineering.

- Amal Jyothi Basketball team secured the Second position in the 'ARENA 2014' all-Kerala intercollegiate Basketball tournament organized by AmalJyothi College of Engineering.

- AmalJyothi Table Tennis team secured the Second position in the all-Kerala intercollegiate Invitational Table Tennis Championship organized by St. Alberts College, Ernakulan.

Achievements at University Level

- Winners of MG University Table Tennis Tournament
- Runners Up of MG University Chess Tournament

Achievements at Zonal Level

- Fourth position in MGU South Zone Cricket
- Winner of MGU South Zone Chess
- Winner of MGU South Zone Table Tennis
- Third position in MGU South Zone Basketball

2012-2013

Achievements at National/Inter University Level

- Sarath V Joy (S3 ME) selected to MG University Table Tennis team and participated in the All India Inter University Championship held at Kannur University.

Achievements at State Level

- Amal Jyothi Basketball team secured the Second position in the 'ARENA 2013' all-Kerala intercollegiate Basketball tournament organized by Amal

Jyothi College of Engineering.

- Amal Jyothi Chess team secured the First position in the All-Kerala intercollegiate Chess tournament organized by Saint Gits College of Engineering.

- Amal Jyothi Basketball team secured the second position in the 'Rajagiri Trophy2012' all-Kerala intercollegiate Basketball tournament organized by Rajagiri College of Engineering, Kakanadu, Ernakulam

- Overall Champions in 'PACE 2013' Organized by SJCET, Pala

- Football Champions in 'PACE 2013'

- Cricket Champions in 'PACE 2013'

- Basketball Champions in 'PACE 2013'

- Volleyball Runner Up in 'PACE 2013'

- Badminton Champions in 'PACE 2013'

Achievements at University Level

- Neenu Jose (IT) secured "A Grade" in MG University Youth Festival.

- Joel P Jacob (ME) has participated in Mechanical Quiz Competition and won first place held at Musaliar College of Engineering

- Joel P Jacob (ME) participated in ROBOWARS and got first place in Muzaliar College of Engineering

- Tojo K Jose (ME) participated in MG University Youth Festival in Daffmutt Competition and won second place

- Ajith A (ME) participated in Duet singing at M A College of Engineering conducted in connection with Sanskriti-2013, and was awarded the Second prize.

- Divine George Ninan (ME) has Participated in MACHINE MAYAA- Robot war competition at Govt Engineering College Painavu, and got First prize

- Second position in M.G University Chess Tournament

- Second position in M.G. University Table Tennis Tournament

- Fourth position in M.G. University Inter Zone Basketball Tournament

Achievements at Zonal Level

- Winner of MGU South Zone Chess tournament

- Winner of MGU South Zone Table Tennis Tournament
- Third position in South Zone Basketball tournament
- Fourth position in South Zone Cricket tournament

2011-2012

Achievements at National/Inter University Level

- Nithin Raju Chandy (ME) participated in the International Designers Competitions called Top Coder in USA
- Sarath V Joy (S1S2 ME) represented MG University in the All-India Inter University Table Tennis Championship and won Silver medal in the south Zone.
- Bineesh Mathew (S8 ECE) represented MG University in the South Zone Inter University Chess Championship held at VIT University, Vellore.

Achievements at State Level

- Justin Mathew Thomas (EEE) won first prize in Hitch Hiker - Robotic Event (VIDYUT2012) at Amrutha Engineering College, Kollam.
- Eldhose John (EEE) won First prize in League of Machwes (ECHO 2012) at RIT Pambady
- Rony Jacob (EEE) won second prize in Ethinicity (Nakshatra2012) at Saint Gits College of Engineering, Pathamuttom
- M.C Jackson (EEE) won second prize in street play (AZURE12) at Amal Jyothi College of Engineering
- Martin Sebastian Joseph (EEE) won second prize in street play (AZURE12) at Amal Jyothi College of Engineering.
- Krishna Chandran R (EEE) won second prize in street play (AZURE12) at Amal Jyothi College of Engineering.
- Rony Jacob (EEE) won first prize in Corporate Walk (ADVAY12) at TOCH Institute of Science & Technology.
- Amal Jyothi Basketball team secured the Second position in the 'ARENA 2012' all-Kerala intercollegiate Basketball tournament organized by Amal Jyothi College of Engineering
- Amal Jyothi Volleyball team secured the second position in the 'Azure 2012'

all-Kerala intercollegiate Volleyball tournament organized by Amal Jyothi College of Engineering, Kanjirapally.

- Overall Champions in 'PACE 2012' organized by SJCET, Pala
- Volleyball Champions in 'PACE 2012'
- Cricket Champions in 'PACE 2012'
- Basketball Champions in 'PACE 2012'
- Table tennis Champions in 'PACE 2012'
- Badminton Champions in 'PACE 2012'

Achievements at University Level

- Second position in M.G University Badminton Tournament
- Second position in M.G University Chess Tournament
- Second position in M.G University Table Tennis Tournament

Achievements at Zonal Level

- Cricket Team - M.G. University South zone Runner up 2011-12
- Chess Team - M.G. University South zone Winner 2011-12
- Table Tennis Team - M.G. University South zone Runner up 2011-12

2010-2011

Achievements at National/Inter University Level

- Jijo Paul and team (EEE) participated and won second prize in project presentation INFOCOM 2011, held at Kolkata
- George Emmanual (EEE) won first prize in Robo Tryst at IIT Kharagpur
- Nilda Mary Thekkedathu (EEE) won third prize in Robo Tryst at IIT Kharagpur.
- Athul Cyriac (EEE) won first prize in Robo Tryst at IIT Kharagpur
- Vivek Varghese Thomas (EEE) won first prize in Robo Tryst at IIT Kharagpu
- Akhil, N (EEE) won first prize in Robo Tryst at IIT Kharagpur.
- Justin Mathew Thomas (EEE) won first prize in Call of Duty in Shaastra 2011 at IIT Madras
- Donny Baby (EEE) won first prize in Call of Duty in Shaastra 2011 at IIT Madras.
- Donny Baby won first prize in Robowars in Shaastra 2011 at IIT Madras(EEE)

- Justin Mathew Thomas (EEE) won first prize in Robowars in Shaastra 2011 at IIT Madras.
- Jiju B James (EEE) participated in National innovation contest (Tech Top 2011) at Technopark, Trivandram
- Jijo Paul (EEE) participated in National innovation contest (Tech Top 2011) at Technopark, Trivandram
- Arun Chand and team (ECE) participated in Techtop 2011 held at Trivandrum
- Githin James (IT) participated in project Exhibition in INFOCOM 2011 Kolkatta
- Steve M S (ME) and team participated in project presentation INFOCOM 2011, held at Kolkata
- Bronin Criac (ME) and team participated in project presentation INFOCOM 2011, held at Kolkata
- Shan P Ismail (ME) has participated in project presentation Tech Top 2011, held at Techno Park Trivandrum
- Sam Varghese and team (EEE) participated in project presentation INFOCOM 2011, held at Kolkata

Achievements at State Level
- Jees James (ECE) won first prize for Project Presentation in COE, Kidangoor Amal Zachariah (ECE) won first prize for Paper Presentation in Conjura, TKM Kollam
- Paul J Arickaat (ECE) won first prize for Circuit Debugging in Advaitha, Sahrdaya College
- Bineesh Mathew (ECE) won third prize for Volleyball in Smash 2011 at, Kaloopara.
- Jacob Abraham (ECE) won second Prize for Project Exhibition in College of Engineering, Kidangoor
- Jilson Thomas, Nikhil Cherian (IT) won first prize in Web Designing in INCEPTRA 11
- Donny Baby, Jince A Manual, Vivek Varghese Thomas and Athul Cyriac (EEE) won first prize in Robotic INCEPTRA 11 at Mangalam College of Engg,

Ettumanoor

- Amal Jyothi Basketball team secured the Second position in the 'ARENA 2010' all-Kerala intercollegiate Basketball tournament organized by Amal Jyothi College of Engineering.

- Amal Jyothi Volleyball team secured the second position in the 'TOUCH 2010' All-Kerala intercollegiate Volleyball tournament organized by College of Engineering, Kalloopara, Pathanathitta

Achievements at University Level

- Sebin Mathew Jacob (IT) won third in Western Group Song M.G. University Youth Festival

- Ajeesh S (ECE) won first prize for Fancy Dress at MGU Fest

- Abhishek K Mathew (ME) and team participated in Western Group Song and won Third place, held at MG University.

- Joel P Jacob (ME) participated in Mega Quiz competition and got first position, at Muzaliar College of Engineering

- Second position in M.G University Badminton Tournament 2010- 11

- Third position in M.G University Chess Tournament 2010- 11

5.3.3 Improvement of AJCE's Quality and Performance Using Feedback from Graduates and Employers

The College takes feedback from graduates every year in order to improve the Quality Education. Suggestions for improvements are carried out to improve the performance and quality of the institution.

The feedback is collected formally through exit feedback of the final year students. Besides this, the following Informal mechanisms are also used to get the feedback:

- ❖ Open house, feedback from IQAC student team, Student Associations, Graduate assistants, Oral feedback from parents during PTA on which improvements are made, feedback collected through meetings, social networks.

- ❖ Feedback from employers are gathered through emails, industry interface, visits to the industry, Experts visiting the campus, interaction with alumni working with different organizations etc.

❖ Visitors' diary in the College and Departments are also used to collect feedback.

❖ The feedback received has instilled improvements in fields like support services, activity streamlining, facilities, etc. In response to student feedback, special language and personality skills training are offered to students to enhance their employability.

5.3.4   Student Publication initiatives and institutional support mechanisms

The College encourages students to participate and publish research Papers in both the National and International Conferences. Students are encouraged to contribute material for the College magazine.

A faculty member is given charge of guiding and supporting students for publishing the College magazine. College magazine, published annually, gives opportunities to students to express their literary skills. In addition to this, each department association brings out its own department magazine which comprises topics relevant to the latest developments in those subjects

List of Publications by students during the period of the report

Year 2013-2014

1. Albert Mathew , Done Boben, Jibin Jose, Josvin Thomas John, "Single Sign On (SSO) using User Specific Security features", International Journal of Engineering Research & Technology (IJERT), ISSN:2278-0181, vol.3 Issue 3, March-2014
2. Alfina Jamal, Fathima Latheef, Fathima Nizar ," RSA Based Encrypted Data Embedding using ADPM", International   Jounal of Engineering Trends and Technology, 9th Vol, 15th issue,2014, ISSN: 2231-5381
3. Alok Thomas," Indoor Navigation System using Wi-Fi Access Points", International Journal of Recent Development in Engineering & Technology (IJRDET), ISSN:2347, vol.3 Issue 3, March-2014
4. Jijo Mathew , Jose Thomas , Praison Dani George ," Indoor Navigation System using Wi-Fi Access Points", International Journal of Recent Development in Engineering & Technology (IJRDET), ISSN:2347, vol.3 Issue 3, March-2014
5. Saira Rachel Varghese , Saranya S Nair, Smera P G, Vishnuja A Nair," Change Detection in SAR images to study the effect of Natural calamities", International Journal of Scientific Engineering and Technology Research (IJSETR)
6. Saira Rachel Varghese , Saranya S Nair "Change Detection in SAR images to study the effect of Natural calamities", International Journal of Scientific Engineering and Technology Research (IJSETR)
7. Jeena B Edayadiyil, Divya K; "Finite element analysis of separation system of payload

fairing under structural loads", National Conf on Recent Advances in Structural Engineering RASE-2013, organized by CUSAT ,Cochin.

8. Nirmal George " Effect Of Fines In Concrete Using Quarry Dust ", 2 Day National Conf "ENTROIDS-2013", Kamaraj College Of Engineering & Technology,Viruthanagar, Tamilnadu

9. Tina Abey Joseph, S.Bhaskar, P. Eapen Sakaria; "GPR Technique for Thickness Estimation and Identification of Characteristic Features of Brick Masonry"; Proceedings of 2nd National Conf, RACE-2013, September 6 & 7, Kottayam, Kerala

10. B. Narasimhan, J. Naveen, P. Pooja, J.G. Arnold and R. Srinivasan (2013), Integration of a pseudo 3D ground water model with SWAT, International SWAT Conference, Toulouse, pp.84

11. J. Naveen, P. Pooja and B. Narasimhan (2013), Estimation of instream flow requirements of Son river in Ganga basin, International Hydros Conference, IIT Madras, pp.1190-1197.

12. J. Naveen, P. Pooja and B. Narasimhan (2014), Estimation of instream flow requirements of Son basin in Ganga river using a surface water ground water coupled model, IWRM International Symposium, CWRDM Calicut, pp.159 – 167

13. J. Naveen, G. Satish and C. Vinod (2013), Comparative study of sediment transport equations using HEC RAS for a run-of-river hydroelectric project, International Hydros Conference, IIT Madras, pp. 729–736.

14. Linu Theresa Jose, K N Lakshmikandhan, P Sivakumar, R Ravichandran and J Selwyn Babu; "Finite Element Parametric Study on Funicular Shells", Proceedings of the International Conf on Futuristic Innovations & Developments in Civil Engineering (ICFiDCe '13) – April 18 – 20, 2013

15. Paper on "Automatic License Plate Recognition System" at National Conf on New Trends in Electronics, Computing & Communication, ICET Mulavoor by Silviya Benny, Soumya Kurien, Sreelakshmi Soman, Veena Babu

16. Paper on "Novel Approach for Error Detection and Correction Capability in Viterbi Algorithm using Graphical Programming" at National Conf on New Trends in Electronics, Computing & Communication, ICET Mulavoor by Kingini Mary, Lia Loy, Neethu Chacko and Paven Susan

17. Paper on "Grading of Indian Basmati Rice" at National Conf on New Trends in Electronics, Computing & Communication, ICET Mulavoor by Maria Sonny, MInu James, Mythreyi Mohan and PoornimaVaidnath

18. Paper on "Detection of Epilepsy from EEG Signals using DWT with ANN" at National Conf on Communication and Signal Processing (CaSP'14).March 26-28.Dept of ECE, Govt.Engineering College, Idukki by Glaxeena Joseph, Jasmin K S, Jithin J, Jibin P John, Jibin Abraham

19. Paper on "Automatic Speaker Recognition in a text dependent closed system" at National Conf on VLSI and Communication (NCVC'14), MET'S School of Engineering, Mala, Trissur by Chrisline A Zachariah, Architha A, Juby P Jacob, Alakananda Nair, Divya A N – Received Best Paper Award

20. JinsLal, Therese Yamuna Mahesh, Dr. K.L. Shunmuganathan Paper on "Segmentation and feature extraction of the vessel pattern on the sclera region of the eye using radial partitioning for human identification" International Conf on trends in Science, Engineering, Business and Disaster Management, ICBDM 2014, held at Noorul Islam

University, Kanyakumari on Feb 28th 2014.

21. Jenny Elizabeth John (PG Scholar), has published a paper title "*A Novel Approach for improving the performance of Geographic Routing in MANET using OGRP*" International Journal of Engineering Research and Technology. It was co-authored by Manoj T Joy

22. Josekutty Abraham (PG Scholar), published a paper entitled *"Intelligent HTML Code Analyzer and Builder from PSD Layers*" International Journal of Scientific and Research Publications. . It was co-authored by Manoj T Joy.

23. Neethu K George (PG Scholar), has published a paper title "*Data Hiding for High Image Quality Based on Local Complexity and Interpolation* "was published in International Journal of Advance Research in Computer Science and Management Studies. It was co-authored by Shiney Thomas.

24. Tina Maria Thomas (PG Scholar), has published a paper *entitled "Fibonacci Based Permutation Tree for 3D Steganography*" was published in International Journal of Research in Computer Application and Information Technology. It was co-authored by Shiney Thomas

25. Veena Rani (PG Scholar), has published a paper *title" A Novel Approach for improving the Network Performance in MANET using ANT Intelligence"* was published in International Journal of International Journal of Engineering Research and Technology ISSN :2278-0181 Volume 3,Issue 8 August 2014. It was co-authored by Santhoshkumar G S

26. Varsha Sabu (PG Scholar), has published a paper *title" Ensuring Fairness in the Distributed Peer to Peer File Sharing System*". It was published in International Journal of Scientific Research and Education was co-authored by Santhoshkumar G S

27. Safna Sulaiman (PG Scholar) published a paper *entitled "A Neighbor Coverage-Based Rebroadcast in MANETs Based on Energy Efficient Rebroadcast Probability"* was published in IJERT. Volume. 3, Issue. 09, September – 2014. It was co-authored by Tintu Alphonsa Thomas.

28. Bittu Ann Mathew (PG Scholar) published a paper *entitled" A novel approach for load balancing in heterogeneous Cellular network* "was published in ICIASET 2014. It was co-authored by Sumy Joseph

29. Veena U K (PG Scholar) published a paper *entitled "CAD Based System for Automatic Detection and Classification of Suspicious Lesions in Mammograms"* was published in the International Journal of Emerging Trends & Technology in Computer Science. It was co-authored by Jayakrishna V

30. Sneha Sebastian (PG Scholar) published a paper *entitled "A Method Based on Data Fragmentation to increase the performance of ICTCP during in cast Congestion in networks*" International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC). It was co-authored by Neethu C Sekhar

31. Bini M Issac (PG Scholar) published a paper entitled "*ID Based Addressing Scheme for Node Autoconfiguration in Ad Hoc Networks*" was published in the International Journal of Computer Science & Communication Networks. It was co-authored by Deepu Benson

32. Sonu Jacob (PG Scholar), Neethu Thomas (PG Scholar), Aby Jacob participated and presented a paper entitled *"A Path Tracker Mobile Application Using GPS*" in the

International Conf on Recent Trends in Engineering and Technology. It was co-authored by Shiney Thomas.

33. Veena U K (PG Scholar), Catherine (PG Scholar), has participated and presented a paper entitled *"A Novel Approach for Mass Classification of Digital Mammogram Using Multiresolution Analysis and Adaptive Dimension Reduction"* in the International Conf on innovations, Advances in Science, Engineering and Technology (ICIASET-2014)-TOCH Institute of Technology. It was co-authored by Krishnalal G (CSE).

34. Antony Thomas (PG Scholar) has participated and presented a paper entitled *"A Novel Approach of Load Balancing Strategy in Cloud Computing"* in the International Conf on Innovations & Advances in Science, Engineering and Technology. It was co-authored by Krishnalal G (CSE).

35. Antony Thomas (PG Scholar) has participated and presented a paper entitled *"Credit Based Scheduling Algorithm in Cloud Computing Environment"* in the International Conf on Information and Communication Technologies (ICICT 2014), CUSAT. It was co-authored by Krishnalal G (CSE).

Year 2012-2013

1. Abin Mathew, "Rotary Engine Technology- an overview", International Journal of Engineering Research and Technology, Volume 6, Number 2(2013)(ISSN 09743154).

2. "EFFECTS ON PROJECT BY UNCERTAIN RESOURCE CONSTRAINTS" (presented in International Conf on Intelligent Science & Technology held at Sun College of Engineering and Technology, Nagercoil on 19th to 23rd march 2012).

3. Paper published on 'BER Comparison of DCT and FFT Based OFDM Systems in AWGN and RAYLEIGH Fading Channels With Different Modulation Schemes' at International Conf on Microelectronics, Communication AND Renewable Energy – AICERA – MiCR13 - at AmalJyothi College of Engineering

4. Paper presented on "Genetic Algorithm for Image Retrieval System" at NCIET – 2013, Musaliar College of Engineering and Technology by Aleena Charles, Alphons Joseph, Amala Sebastian, Johncy Anna John

5. Paper presented on "Accident Response System" at NCIET – 2013, Musaliar College of Engineering and Technology by Susan Joseph, Swathy Joseph, Tara T Alexander, Tesna

6. JinsLal, Therese Yamuna Mahesh Paper on "Human Identification Based on Sclera Vein Pattern" , National Conf on Innovations in Engineering and Technology, Organised by Musaliar College of Engineering and Technology, Pathanamthitta, Kerala, 4th May, 2013

7. Eugene Cherry, Geethu Madhuraj, Sreekala.P, Geethu Mathew, Resmi Rajan, Sreelakshmi. S. Kumar"AUTO PROTECTION OF INDUCTION MOTOR USING PIC MICROCONTROLLER" National Conf on Innovations In Engineering & Technology [NCIET-2013] MAY 4, 2013

8. Anit Zacharia, Denny Mathew, James Joseph, Krishnachandran, Shibin Joseph,

Sreekala.P "INTELLIGENT ACCIDENT RESPONSE SYSTEM" National Conf on Innovations in Engineering & Technology [NCIET-2013] MAY 4, 2013.

9. Saresh Pillai, Melvin Paul, Karthik. D. Kammath, Jerin Biju, Reshma Mathew, Meenu Krishnan, Sreekala .P "Smart Cabin :RFID based Energy Efficient cabin " National Conf on Innovations In Engineering & Technology [NCIET-2013] MAY 4, 2013.

10. Alan C Varghese, Sreekala P "Series Compensator DSTATCOM topology for size reduction and load compensation" National Conf, RIPOC"13 Mohandas College, Trivandrum.

11. Alan C Varghese, Johnson Abraham, Sreekala P "Online Grid Interconnection of Hybrid Renewable Energy Sources with Smart Meter" NCRIST National Conferene 2013 College of Engineering Kidangoor.

12. Ananthu Vijayakumar, Vidya M Nair "Modelling of Fuel Cell for Distribution Generation System" National Conf, RIPOC"13 Mohandas College,Trivandrum

13. Ashna Mohan, Dinto Mathew "Comparative Performance Analysis of Control Algorithms for Three Phase Shunt Active Power Filter" National Conf, RIPOC'13 Mohandas College,Trivandrum.

14. Ashna Mohan, Dinto Mathew "Design of Stand-alone Inverter using Adaptive Total Sliding Mode Control" National Conf (NCSEE2013) on Systems, Energy and Environment Government Engineering College Kannur.

15. Athira Raju, Arun S "Three Phase Boost Front-End Hybrid Multilevel Inverter For Photo-Voltaic System" National Conf, RIPOC'13(Mohandas College).

16. Deepa James, Rani Chacko "Mitigation of Power System Oscillation in Grid Connected Wind farm Smart park Shock absorber " National Conf on Recent Innovations in Power System Operation & Control (RIPOC'13) Mohandas College of Engineering annd Technology, Trivandrum.

17. Deepa James, Rani Chacko, Modelling and control of DFIG in wind farms" National Conf on power systems and energy management VISAT Institute of Science and Technology, Ernakulam.

18. Gayathri Devi K S, Arun S, Sreeja C "Triple Conversion UPS" National Conf, RIPOC" 13, (Mohan Das College).

19. Greety Jose, Victor Jose "Fuzzy Logic based Fault Diagnosis in Induction Motor" 14th National Conf on Technological Trends (NCTT), 2013.

20. Jibin George, Anish Benny "Selective harmonic Minimization for Multilevel Inverters Used in PV Systems" National Conf on Recent Innovations in Power System Operation & Control (RIPOC'13) Mohandas College of Engineering annd Technology, Trivandrum.

21. Johnson Abraham Mundackal, Robins Anto "Advantage of Neuro fuzzy Technique in Detection of Transformer Inrush" NCACA NATIONAL CONF 2012 Bharathiar University Coimbathore.

22. Johnson Abraham Mundackal, Alan C Varghese, Sreekala P Online Grid Interconnection of Hybrid Renewable Energy Sources with Smart Meter" NCRIST NATIONAL CONF 2013 College of Engineering Kidangoor.

23. Johnson Abraham Mundackal, Sreekala P "Grid Interconnection of Hybrid Renewable Energy Sources with Smart Meter Having Power Quality Improvement" NCIET NATIONAL CONF 2013 Musaliar College of Engineering and Technology, Pathanamthitta.

24. Johnson Abraham Mundackal, Robins Anto "Detection and Prevention of Transformer Inrush Current" NCRTE National Conf. 2012 MBC College of Engineering Peermedu.
25. Neenu Rose Antony, Sarin Baby "Optimal Placement of Fuel Cell DG Considering Voltage Stability Enhancement" National Conf, RIPOC '13 (Mohandas College of Engineering anndTechnology Mohandas College of Engineering annd Technology.
26. Resmi.S, Reshmi.V, Joffie Jacob "Comparison of AC-DC-AC Topology and AC-AC Topology of a Dynamic Voltage Restorer" 14th National Conf on Technological Trends (NCTT), 2013 CET Trivandrum.
27. Vinod P. Kurian, Reshmi V. "Design of Direct Power Control Method for UPFC Series Converter" National Conf, RIPOC"13(Mohandas College Mohandas College of Engineering a nd Technology.
28. Rangy Sunny , Robins Anto "Control of harmonics generated by a grid connected PV system" National Conf, RIPOC"13(Mohandas College)
29. Shilpa Sreekumar, Anish Benny Maximum Power Point Tracking of Photovoltaic System Using Intelligent Controller" National Conf on Recent Innovations in Power System Operation & Control (RIPOC'13).
30. Shilpa Sreekumar, Anish Benny "Intelligent Controller Based Maximum Power Point Tracking of a Photovoltaic System" National Conf On Systems, Energy & Environment (NCSEE 13')Govt. College of Engineering, Kannur.
31. Viji Joseph, P.C Thomas "ADAPTIVE CONTROL STRATEGIES FOR MICROGRID" National Conf, RIPOC"13(Mohandas College).
32. Syamala S (PG Scholar), has published a paper *title "Face Detection-A Comparison of HSV With LAB Color Space Model "* was published in International Journal of Engineering Research and Technology, IJERT, Volume 2,Issue 9(September 2013). It was co-authored by Manoj T Joy.
33. Gloriya Mathew, Rintumol Joseph & Joms Antony of first M. Tech CSE PG Scholars published a paper on *"A secure multifactor authentication using graphical password"* in NCET, Archana College of Engineering.
34. Gloriya Mathew, Shafeena Basheer &Teenu Teresa Paul of first M.Tech CSE PG Scholars published a paper on *"Multifactor Authentication for network security use image based password"* in ICETT at Mar Baselios College of Engineering, Kollam.
35. Rintumol Joseph, Asha Yeldose, Josmy T. Jose & Sayana Catherine Paul had presented a paper on *"An Architectural based hybrid approach for network management through mobile agents"* in ICETT at Mar Baselios College of Engineering, Kollam.
36. Syam Gopi (CSE), Bini M Issac (PG Scholar), Neethu K George (PG scholar) published a paper entitled *"A novel approach for sampling mobile phone accelerometer sensor data for daily mood assessment"* was presented in the International Conf on Global Innovations in Technology and Science (ICGITS 2013) organized by SAINTGITS College of Engineering, Kottayam from 4/4/2013 to 6/4/2013.
37. Sumy Joseph (CSE), Catherine, Rintu Tom & Veena U.K (PG Scholars) published a paper entitled " *Hybrid Approach of Face Recognition for Biometric Security by Using Tone Mappig CBIR and SRC*" was presented in an International Conf on Global

Innovations in Technology and Sciences, ICGITS 2013, organized by SAINTGITS College of Engineering, Pathamuttom, Kottayam.

38. Neenu R (AP, CSE), Bittu Ann Mathew (PG Scholars),Ms.Sneha Sebastian (PG Scholar) published a paper entitled, " *A survey of two probabilistic and deterministic packet making mechanisms for IP traceback*" was presented in an International Conf on Global Innovations in Technology and Sciences, ICGITS 2013, organized by SAINTGITS College of Engineering, Pathamuttom, Kottayam.

39. Joms Antony, Anju K S, Anumol Mathew (PG Scholars), has participated and presented a paper entitled *"A Tablet PC based System for Ubiquitous Patient Monioring and Smart Generation in an Intensive Care Unit"* published in the International Journal of Computer Applications volume 67-No.6,April 2013.

40. Tina Maria Thomas, Jiss Varghese (PG Scholars), has participated and presented a paper entitled *"An Improvement to Vertex Decimation: Finding referencing neighbors for low distortion in 3D steganography"* in the 2013 International Conf on Control Communication and Computing (ICCC). It was co-authored by Shiney Thomas (CSE).

41. Mr. Joms Antony (PG Scholar), has participated and presented a paper entitled *"Ubiquitous Patient Monitoring and Smart Alert Generation in an Intensive Care Unit Supported by Low-cost Tablet PC based Automation System Powered Through Open Source Software and Hardware Platforms"* in the Global Humanitarian Technology Conference: South Asia Satellite (GHTC-SAS), 2013 IEEE http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=. It was co-authored by Mr. Santhoshkumar G.S (CSE).

42. Anju K S (PG Scholar), published a paper "A *Cryptographic Approach to Defend Against Distributed DOS Attacks In Multiparty Applications*". It was published in International Journal of Engineering Research and Technology In IJERT,Volume 2 Issue 8 (9-August-2013).). It was co-authored by Ms. Tintu Alphonsa Thomas (CSE), G S Santhoshkumar (CSE).

43. Mr. Joms Antony ,Anju K.S, Anumol Mathew, Sudhin Joy, Bichu Vijayan (PG Scholars), participated and presented a paper entitled *"Business Process Reengineering of the Workflows in Intensive Care Unit Supported with aTablet PC Based Automation System"* in the Third International Conf on Advances in Computing and Communications http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber held during August 29-31 2013. It was co-authored by Mr.Santhoshkumar G.S (AP, CSE).

44. Mr. Joms Antony (PG Scholar), participated and presented a paper entitled *"A context aware System for generation and propagation of Automated alerts from an Intensive care unit"* in the 2013 IEEE conference on Information and Communication technologies held during 11/4/2013 & 12/4/2013. It was co-authored by Bichu Vijayan, Sudhin Joy (PG scholar) & Santhoshkumar G.S (AP, CSE).

45. Asha Yeldose, Dhanyaja N, Josmy T Jose (PG Scholars), has participated and presented a paper entitled *" Integration of ICU data into Electronic Medical Records-Issues and Solutions"* in the IEEE Conference on information and Communication Technologies during 11-12 April 2013 at Noorul Islam Cenre for Higher Education Thuckalay, Tamil nadu.

46. Veena Rani, Varsha Sabu (PG Scholars), has participated and presented a paper entitled *"A Novel Approach for Enhancing Trustworthiness using ReTT and Mobile Agent Technology for Securing Ad Hoc Wireless networks"* in the National Conf on

Recent Advances In Communication Systems and Technology at Francis Xavier Engineering College, Thirunelveli on March 08 2013. It was co-authored by Santhoshkumar G.S (CSE).

47. Dhanyaja N (PG Scholars), has participated and presented a paper entitled "*Integration of ICU data into electronic medical records-Issues and Solutions*" in the 2013 IEEE conference on Information and Communication technologies held during 11/4/2013 & 12/4/2013. It was co-authored by Asha Yeldose , Josmy T Jose (PG Scholar) & Anju S.S (CSE)

48. Neema Babu (PG Scholars), has participated and presented a paper entitled "*Ubiquitous creation of electronic medical records and clinical data management using Tablet PC*" was presented in an International Conf on Global Innovations in Technology and Sciences, ICGITS 2013, organized by SAINTGITS College of Engineering, Pathamuttom, Kottayam. The conference was held from 4/4/2013 to 6/4/2013. It was co-authored by Gloriya Mathew, Rintumol Joseph, Shafeena Basheer (PG Scholars), Jayakrishna V (CSE), Shiju George (IT) & Dina Nair.

49. Jisha Babu (PG Scholars), has participated and presented a paper entitled " *Business process re-engineering of bacteriology laboratory using Tablet PC*" an International Conf on Global Innovations in Technology and Sciences, ICGITS 2013, organized by SAINTGITS College of Engineering, Pathamuttom, Kottayam. The conference was held from 4/4/2013 to 6/4/2013. It was co-authored by Neema Babu, Teenu Therese Paul (PG Scholars), Jayakrishna V (CSE), Shiju George (IT) & Gomathi Sekhar.

50. Sayana Catharin Paul, Soumya Thomas, Sreedevi R & Syamala (PG scholars) has presented a paper entitled "*An architectural approach for distributed network management using mobile agents*" in an International Conf on Global Innovations in Technology and Sciences, ICGITS 2013, organized by SAINTGITS College of Engineering, Pathamuttom, Kottayam. The conference was held from 4/4/2013 to 6/4/2013. Syam Gopi (CSE) & Soumya Thomas (PG Scholar, CSE) published the paper entitled "*A secure data transmission in magnets using hybrid technique*" in International Journal of Engineering Research & Technology 2013.

51. Jayakrishna (CSE) & Shafeena Basheer (PG Scholar, CSE) a paper entitled "*Advanced Hybrid Color Space Normalization for Human Face Extraction and Detection*" (IJSRD July 2013 ISSN 2321-0613) – in International Journal for Scientific Research and Development.

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2. Teena Ranjan, Therese Yamuna Mahesh Paper on "C-Band Chirp Spread Spectrum

(CSS) signal generation using DDS-PLL Technique" International Conf on Electronics, Communication and Signal Processing (ICECS 2012) held at Coimbatore.

3. Mithun Joy, Therese Yamuna Mahesh Paper on "A high Bandwidth Rectangular Microstrip Antenna for Aircraft Applications" International Conf on Electrical Engineering and Computer Science (ICEES), IRnet, May 2012.

4. Jisha Anu Jose, Geevarghese Titus, "Data Hiding Using Motion Histogram", IEEEXplore 978-1-4673-2907-1/13/$31.00 ©2013 IEEE.

5. Joms Antony(PG Scholar) has published a paper" *SMS based E-Assessments enabling better student engagement, evaluation and recommendation services in E-Learning making use of Fuzzy rules and course ontology*" published in International Journal in IEEE conference at IIT-Hyderabad (T4E 2012) co-authored by Manoj T Joy, Fr. Rubin Thottupuram, Sandhya Ramakrishnan

6. The paper entitled "*Semantic Web based Adaptive E-learning triggered through Short Message Services*" has been published in the Proceedings of ICCSE 2012 (Full Text Available) in IEEE Xplore Digital Library — Digital Object Identifier: 10.1109/ICCSE.2012.6295434 Publication Year: 2012 , Page(s): 1860 – 1863. The authors are Antony (PG Scholar), Rubin Thottupuram, (CSE), & Shiney Thomas (CSE).

7. A paper entitled "*An Architecture Based Methodology for Parallel Independent Computation in Enterprise Edition*", has been accepted for the International Conf on Semantic E-business and Enterprise Computing (SEEC). The conference would be from 13/12/2012 to 15/12/2012 at Cyber City of Mauritius. Fr.Biju John Professor & Dir CIS, AJCE, Sumy Joseph (CSE), Josekutty Abraham (PG Scholar) are the authors for the same.

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9. Shiney Thomas (CSE) & Gloriya Mathew (PG Scholar, CSE) had published a paper entitled *" A novel multifactor authentication system ensuring usability and security*" as e-print under subject Computer Science(Cryptography & Security) at Cornell University Library at http://arxiv.org/abs/1311.4037.

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3. Anish Francis, Geevarghese Titus, "Investigation of Channel Capacity of Railway PowerLines for Track and Level Cross Monitoring Application", SpringerLink – Communications in Computer and Information Science, Volume 142, Part 1, 2011.
4. Anish Francis, Geevarghese Titus, "Channel Capacity Analysis of Railway Power Lines", IEEEXplore 978-1-4244-7925-2/11/$26.00 ©2011 IEEE.
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6. Shobitha Ann Jose, Binitta Mary Chandy, Sherin George Vathalloor, Smitha S George, Mila Gerome "*Securing Data In Distributed Environment*" presented in National Conf On Soft Computing 2010- Marian College, Kuttikanam.
7. Heny Abraham Thomas,Ashna C Karim,Gerin George Vathalloor,Akhil Sudhakaran,Ajo Thomas "*proxy server cache replacement according to server charactersticks*" presented in National Conf on next generation computing paradigms 2010 Toc-H Institute of Science & Technology, Arakkunnam.
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10. Parvathy R, Kitty Thomas, Christy Elsa Roy, Antreesa T Kakkanattu "*a novel approach for efficient data access in an email based search engine*"   " presented in the National Conf on human computer interaction and Image Proceesing 2010- Vidya Academy, Thrissur.

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12. Nimmy Nemlin, Revathy Mohandas, Rosemary Sebastian, Shan Sunny Philip, Unni S.Rajan," *A Novel J2ee Architecture With Feasible Support For Service Discovery On Semantic Web*" presented in the National Conf On Advanced Trends In Computing,Jyothi Engineering College,Thrissur
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5.3.5 College Students' Council: Selection, Activities and Funding

- The College has a Students' Council formed through election of office-bearers from among the students.

- The Students Council comprises the Principal as the Chairperson and Dean Academic as the Vice-Chairperson, General Secretary, University Union Councilors (2), Magazine Editor, Arts Club Secretary, Sports Secretary, Lady Representatives, Year-wise class representatives (3) and Staff Advisor, forming a total of 17 members.

- Its main objective is to train students in the duties and rights of citizenship. It also promotes opportunities for the development of their character, leadership abilities, camaraderie and spirit of service through various educational and cultural activities.

Selection: Via an election process recommended by the Mahatma Gandhi University

Activities: The Students' Council consisting of Students and Faculty Advisory Team carries out student centric activities on campus.

Funding: The activities of the Students' Council are funded by the Management

5.3.6 Student Representation in Academic and Administrative Bodies

There are student representatives in the following academic bodies of the institution.

- Student Council
- Class Committee
- Department Associations
- Alumni Association
- IQAC

5.3.7 Institutional Networking and Collaboration with the Alumni and Ex-Staff members

Alumni visits to the campus and interactions with them are encouraged and facilitated by the College.

- ❖ Continued relationship with the alumni is maintained through the College Blog, Website with option for alumni registration, social media groups, and e groups. Industry interfaces and fests by various departments are occasions when the Alumni in the vicinity are invited to interact with the students. This has proved very fruitful and motivating to students. Feedback on various aspects of the College's functioning is taken during these interactions.
- ❖ The alumni contributions are primarily in supporting the College in finding project/job placement for the students, instituting scholarships/endowments, Training support etc.
- ❖ The College invites faculty who have moved to other institutions and positions as Resource Persons for conferences and seminars.
- ❖ Department fest/ National/International Seminars and Conferences/ College Day, AJCE Foundation Day, etc. are occasions when the presence of alumni and former faculty are solicited.

Networking

There is AAJA website for Alumni to provide updates

There is a Facebook page over which updates are posted

Regular Communications are sent over e-mail

Regular yearly meeting since induction

Activities

A few activities of the Alumni during the period of this report are listed below.

- ∗ Bensan Thomas George, CEO, Synergen Consultants, handled personality development and excellence sessions for the Students. He also gave a talk for the Alumni Induction Programme
- ∗ Donna Sebastian (HR IBS, Cochin) and Nithin Raju Chandy (Freelance Software Designer) were invited to give a talk to the First Year students.
- ∗ Avinash Prabhakar (CTO Emvigo Technologies, TVM) and Nithin Raju Chandy (Freelance Software Designer) were invited to address the school students during the Yuva Mastermind 2012
- ∗ Robin Tommy (Mc Faydays Solutions) addressed the final and pre-final year students in 2013 to better placement prospects
- ∗ Arun Gopalakrishan (CDAC, TVM) was invited to handle a session for the faculty during an FDP

Student Support and Progression: Other relevant Information

AJCE supports the students in every way it can for their overall growth and academic development.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 The vision and mission of the Institution and the institution's distinctive characteristics in terms of addressing the needs of the society, students, traditions and value orientations, vision for the future, etc

The College has well-articulated vision and mission statements. These are:

Vision

To be a centre of excellence in technical higher education, research and support services, capable of making significant contribution to individual and societal empowerment.

Mission

To create technically qualified world-class professionals with social commitment through career-oriented courses conducted by high-profile faculties, complemented with globally interactive learning processes and leading-edge technology.

Objectives of the institution are
- To provide world class facilities and infrastructure in education and learning.
- To set new trends, introduce innovative training methodologies and guide our students towards the road to success.
- To give chances for the downtrodden and rural masses to attain new heights.

Though the College is located in the outskirts of a town, the first generation students form the majority in this College. The education which is offered here boosts their self-confidence and moulds them to be great entrepreneurs and eligible employees in the world.

Learning is a phenomenal growth which goes on forever and so does our relationship with our students. The College does not only believe in educating the students but also groom character with moral and ethical values, thus building the nation. Ever since the inception, the aim has been to provide world class facilities and infrastructure in education and learning. The institution attempts to set new trends and introduce innovative training methodologies incorporated with different add-on courses and guide the students along the road to success.

In order to express its tradition and value orientations, the College aims at an integrated and unified education to make the students morally upright, socially committed, spiritually

inspired and nationally dedicated citizens. The institution is committed to excellence of the first order in providing quality and holistic education.

6.1.2 Role of top Management, Principal and Faculty in the design and implementation of its quality policy and plans

As this is a self-financing Management College, the Manager and the Board of Directors play a vital role in its administration successfully with the help of the Principal. The aim of the Management is to provide value based education and to exalt hidden potentials in students that equip them to approach life with optimism. The Management gives full freedom to the Principal to execute and implement the programmes smoothly and successfully.

The Principal, along with the Academic Council, is responsible to convene all sorts of meetings and functions in the College and frame suitable rules and regulations for the students. Apart from College Administration the Principal will attend University meetings like Senate Meetings to take decisions on the implementation of the design of the curriculum. The Principal is responsible for conducting weekly HODs meetings and taking decisions related to College affairs.

The Heads of the Departments are responsible in conducting department meetings, department functions and department activities. They have to keep everything intact in the form of files in the department. As and when necessary the Head of Department represents the needs and strategies of the department in the Academic Council.

The Management, the Principal and the staff/faculty are always stepping in together for designing and proper applications of the quality policy and plans.

6.1.3 Involvement of institutional leadership in strategic planning, stakeholder interactions and ensuring the policy statements and action plans for fulfilment of the stated mission

Teaching plans including course plan are prepared by academic departments before the beginning of each session. The College conducts the assessments of the students at regular intervals through Internal Series and Class tests, model examinations, seminars and assignments. A systematic feedback from the students is received every semester and the data feedback is analyzed and used for the reddressal of the grievances of students. The implementation of action plans is monitored through Academic Council Meetings. Student's Council representatives also offer their suggestions for the development of the College.

While formulating the action plans, the institution takes care of all its thrust areas. Meeting the academic demands, the College plans its academic terms, phases out teaching and examination programmes. Similarly sports and cultural programmes are planned and executed as per the rules and regulations of the university.

The teaching staff organize and unitize the schedule to complete the syllabi. These are regularly reviewed and restructured. The lecture methods of teaching are supplemented by the use of audio visual projects, seminars, field trips and other practical supplementary aids. Many departments are conducting field visits, industrial visits and internship training.

AJCE has various platforms for interacting with its stakeholders.

- At the time of admission the parents are instructed to meet the Heads of Departments and have all the information about the courses, programmes, rules and regulations of the College.
- Every semester there will be a Parents' Meet to keep them posted with the information regarding their wards. In turn, their feedbacks are also taken for taking necessary corrective action, if required.
- Student counselling/mentoring is conducted twice every month to identify their problems and they are resolved appropriately.
- Another category of stakeholders are recruiters, wherein all the communications in all aspects are taken care by the Placement Cell.
- The institution has a strong alumni association and meetings are held on the last Saturday before Christmas every year on the College campus. The Institute maintains links with the Alumni for getting necessary information on current issues and challenges in the industry.

Proper support for policy and planning are provided through need analysis, research inputs and consultations with the stakeholders.

Various Heads of Departments and Deans review the progress for continuous improvement. Based on the recruiters' feedback about the students placed in the preceding years, students are given additional training in the areas for improvement. For acquiring research projects and consultancy work, facilities are enhanced as required. The Principal and the Management encourage the faculty members to further their research and give all support to continue their work. Nearly half of the teachers are actively engaged in research. Add-on courses and different technical Cells undertaken by the College cover a wide range of activities. In order to improve the performance of the students, internal assessment methodology is frequently reviewed and modifications are implemented.

The institution reinforces the culture of excellence through workshops, awareness programmes, special lectures on quality innovations, curriculum, Teaching-learning & Evaluation, research-oriented seminars, applying for research grants and project development, implementation of advanced Learning Resources, ICT Management and the empowerment of staff. It also plans and supports effective implementation of Research, Consultancy and Extension activities for all stakeholders.

The institution champions organizational change in the following way:

The Principal, in consultation with the HODs, plans the activities to bridge the knowledge gap through industry-oriented add- on courses, guest lectures by leading academicians and industrialists, and frequent visits of students to industries. The Principal, HODs and faculty members encourage the students to represent the institution at various conferences, technical paper presentations organized at various prestigious institutions and Industry-Institution Interaction meetings.

The Management convenes staff meetings whenever necessary. Major issues taken up for discussion during Staff –Management interaction like fulfilling Staff requirement as per the growing needs of various departments, upgrading infrastructure facilities and resources needed for improving teaching and learning process.

The interaction with parents once in a semester plays an essential role in the development.

6.1.4 Institutional procedures to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time

Frequent staff meets at department level, Academic Council meets on alternate Wednesdays and Heads meets at institution level, along with representatives of various Committees, are conducted for effective and timely feedback. For effective implementation of policies and plans, the College emphasizes on the reviews made by various Committees constituted for different activities, involving Faculty, as given below:

- Academic Advisory Committee
- Industry- Institute Partnership Cell
- Placement Cell & Career Guidance
- Internal Quality Assurance Cell (IQAC)
- Entrepreneurship Development Cell (IEDC)
- Class Review Committee
- Discipline Committee
- Grievance Redressal Forum
- Alumni Association
- Parents Association
- Student Counselling & Mentoring
- Student Welfare Committee
- Anti- Ragging Committee
- Women's Cell
- Auditing

Frequent monitoring is done through data collection through survey, feedback, and stakeholder meetings.

Various procedures are adopted for evaluating:

- Teaching-learning process is being monitored by a number of theory classes and practical sessions conducted by the faculty.

- Students' attendance and internal marks are recorded. Corrective actions are taken whenever required by informing the parents, conducting retest, remedial classes etc
- Research contributions of students and the faculty are recorded and monitored. Faculty and students are sponsored and sent for presentations in national and international conferences, FDPs, workshops, seminars etc. Incentives are under consideration to the faculty publishing in national and international research journals.
- Faculty and students are sponsored and sent for training programmes in industries. Students are sent for internships, implant training and industrial visits to other organizations. These are also recorded and improvised year after year
- Students are encouraged to take up projects in industry during their last semester both at UG and as well PG level. This is done so that they get the feel of the industry and also to become aware of the industry scenario and its requirement so that they can upgrade themselves.
- Mechanism for promotion of participation in community services through Extension Programmes to develop innovative, creative, value-based education for inculcating social responsibilities and good citizenry amongst the student community.

6.1.5 Academic leadership provided to the faculty by the top Management

The top level Management always encourages and supports the faculty cluster and inspires them to be a part of their academic decision making process. The Principal entrusts the HODs with various responsibilities and suggests new methodologies to improve overall. At the department level, the HODs communicate the same with the staff in faculty meeting held in the department every week. A faculty induction programme is being conducted for the newly joined staff to help them realize their potential and strive together to achieve the vision and mission of the institution. Every year a leadership training programme is delivered to the faculty to concatenate their leadership skills and emerge as an academic leader in all respects. Aiming at shaping transformational leadership, in addition to the class-teacher for each class, here we follow a 20:1 system i.e. for 20 students, a class counsellor is there. They are invoked to give their own academic reports and be a part of the vibrant academic discipline. Moreover, faculties are inspired to indulge in association, student Council, Club activities and to organize seminars, industrial visits/tour etc. aiming at scaling greater academic heights.

As the Principal is the academic head, he provides valuable guidance in planning and organizing all academic activities in the institution. He has given full powers to each faculty member to act as the leader of his own subject and classroom. The duty of the faculty is not only to maintain discipline but also to redress the grievances of the students through proper mentoring system. The Management and the Principal encourage the faculty members to do research and to organize and participate in seminars, national and international conferences, STTP, FDP and workshop training, and other faculty orientation programmes.

6.1.6 Grooming leadership at various levels at AJCE

Faculty Level: As the head of the institution, the Manager along with the Principal, plays a main role in the administration and the Management of the institution. He is the sole controller of academic and non academic activities. In the same way the Principal gives full freedom to the HODs to act as the leaders in their departments. The members of staff are given full freedom to convene and conduct department association activities at various levels inviting experts from the University and State levels. Faculty members work as conveners of various clubs and Associations, NSS Programme Officers, ISTE, IE Program Officers taking individual decisions for the conduct of programmes. These members produce leaders among students by training them to imbibe the spirit of leadership at various levels.

Student Level: A Students' Council is formed and the Chairman, Vice Chairman and Secretary are nominated by the Management. All classes are having representatives who are helpful in organizing and conducting functions and activities in the College. Student leadership is groomed through clubs, associations, NSS, technical and cultural fest, and sports activities. Students are encouraged to participate in seminars, conferences, technical fests, inter collegiate tournaments and programmes. Every year the institution trains students in leadership qualities through career counselling, orientation programs, seminars, Add-on courses, Driving School and Placement Cell. As a result of Entrepreneurship motivations and initiatives former students have started their own companies like Filanza, Zooyi, Art-in-dynamics, Emvigo etc.

Non-teaching Level: The College office is controlled by the Manager who is responsible for maintaining the certificates of the faculty and the students, collecting fees from the students and disbursement of financial assistance. The Manager is assisted by different section heads, accountant, clerks and peons. They are molded by sufficient training, leadership and personality building classes.

6.1.7 Delegation of authority and providing operational autonomy to departments/units of the institution and work towards decentralized governance system

In the beginning of the new academic year the College Council meeting is convened by the Management. Various Committees are formed and their responsibilities and functions are earmarked and the chosen convenors are responsible for its successful functioning. Members from all departments are included in these Committees. The quantum of work and the nature of Committees' jobs assigned to the staff concerned, are communicated to them. Thus the College has decentralized the authority and provides operational autonomy to the Committees.

The Heads of Departments regularly conduct department meetings in which important aspects of the requirements of the departments such as books, journals, equipment, laboratory materials and others are discussed. This should be brought to the notice of the Head of the Institution who, in turn, takes it up to the Management for further action. Normally the Management immediately approves the provision for providing such facilities to the departments.

In the Academic Council meetings the Principal discusses the requirements for the departments and the nature of urgency. The number of books required in the library, number of computers, machines and equipment are also discussed in detail. The Principal receives the plan of expenditure on contingencies to execute academic programs and activities through the Head of the Department.

6.1.8 Promotion of a culture of participative Management and its level at AJCE

Yes, The College has 100% participative Management in all its activities.

All decisions taken by the Management are through detailed discussions and deliberations. There is a network system of coordinative mechanism for the successful conduct of the College. Every decision will be conveyed to the staff through their institution e-mail id. Staff Committee headed by a staff secretary can cast their opinion for academic and non academic improvements including staff welfare. Not only the department meetings are conducted but also intra departmental meetings are arranged for common issues. The Principal with the Heads of the Departments discusses the needs, problems and suggestions to improve the educational quality and infrastructure and forward it to the Management for further action. The teaching and non-teaching staff are represented in the College Committees on account of this participatory Management. The College involves and allows the faculty members to participate voluntarily with involvement in every work including the preparation of NAAC self-study report. The constructive suggestions of the students represented through College Union are also given due importance.

There are various Committees constituted to manage different institutional activities. The list of available Committees is as follows:
1. Examination Cell
2. Discipline Committee
3. Sports Advisory Committee
4. NSS Advisory Committee
5. Library Committee
6. Placement Cell
7. Research Co-Ordination Committee
8. College Magazine Committee

9. College Calendar Committee
10. Cultural Committee
11. Students' Council
12. Anti-Ragging Committee
13. Students' Grievance Redressal Committee
14. Faculty Grievance Redressal Committee
15. IEDC and IPR
16. Department Associations
17. Management Development Centre
18. Vigilance Committee
19. Women's Cell

6.2 Strategy Development and Deployment

6.2.1 Quality Policy of the Institution – Its development, driving, deployment and review

The College has a formally stated quality policy involving various stakeholders viz, students, staff, and others

AJCE Quality Policy: AJCE is committed to tireless striving towards perfection in all aspects of engineering education. The quality policy document not only contains details about implementation, monitoring and review strategies but also spells out its linkages to the vision, mission and motto of the College.

The IQAC developed the draft quality policy which was finalized through a participatory process of gathering feedback from the various stakeholders of the institution. The final draft was discussed in the Governing Board and formal approval was granted. It was communicated to the stakeholders through different media as the underlying spirit which animates every aspect of the College.

6.2.2 Perspective plan for development at the Institution

The Master Plan or a Vision Document is developed by IQAC and approved by the Management. This plan has to be evolved through a process of consultation with the various stakeholders at different levels.

Aspects considered while developing the master plan are as follows:

❖ Possibility of becoming an Autonomous College by the Year 2020
❖ Need for quality in the context of liberalization of education and XII plan
❖ The needs of the community of the east-central region of Kerala, especially opportunities for employment, are taken into account when academic programmes are visualized in different departments.

- ❖ The trend in Higher Education in favour of Engineering.
- ❖ Economic viability and sustainability of individual departments.

6.2.3 Internal organizational structure and decision making processes

The College is run by the Catholic Diocese of Kanjirappally and the Bishop of the Diocese of Kanjirappally is the Patron of the College. The Patron is the Chairman of the Governing Board. Statutory bodies such as Staff Council, Anti Ragging Cell, etc., as per University/Government guidelines are also included in the organizational structure of the institution. The decision-making procedures are made at appropriate levels in the organizational hierarchy. There are different bodies/offices that give academic and administrative leadership to the Institution. An optimum level of decentralization through the autonomous department system and a participative decision making process are in practice.

Various bodies listed below constitute the decision-making bodies:

- Governing body
- Advisory Committee
- Academic Council
- Students' Council
- Faculty Cell
- Women's' Cell
- Counselling Cell
- Steering Committee
- IEDC
- Research
- NSS
- Grievance Redressal Cell
- Anti-ragging Cell
- Placement and Career Guidance Cell

6.2.4 Quality Improvement Strategies of the institution

IQAC has developed systems for ensuring quality and these systems function smoothly with the help of people at different levels.

• Teaching & Learning

The College perceives teaching and learning in engineering education as a process which should foster higher levels of thinking and learning viz., applying, analyzing, evaluating designing and developing. This philosophy is encapsulated in the Teaching- Learning Policy of the institute. This process by nature is student-centric, participative and transparent. The College has developed several systems and tools in teaching, learning and evaluation, for achieving this end. Faculty development initiatives, GA linked course plan, creative assignments, industrial visits, industry interaction, teacher evaluation, internals, academic result analysis, and teachers' feedback, etc.

• Research & Development

The institution recognizes the linkage between teaching and research. The Management has a research policy which outlines different strategies for promoting research aptitude and skills among the faculty and students. AJCE is a 5-star rated remote centre of Ekalavya Program, an open source knowledge initiative organized by IITB. Faculty is actively encouraged to participate in National and International conferences of repute. Also faculty is encouraged to attend FDPs which reinforce the knowledge of their respective domains. Faculty members are encouraged to pursue research by providing them facilities like individual system, Wi-Fi connection, library e-resources, equipments and laboratory. Steps are being made to ensure that even UG students with flare for research are properly motivated to come up with innovative ideas during their B. Tech. The iinstitution encourages innovations among students by providing them incubation facilities. Faculty and students are encouraged to participate in the activities of professional bodies like IEEE, CSI, ISTE etc.

• Community engagement

Various community activities like NSS, Social Service, AJECS, Scholarships, Blood donation Camps, Career guidance for +2 students, Computer Literacy for the Destitute are encouraged in AJCE.

• Human resource management

The College has an HR policy which streamlines the human resource development and Management activities. The policy guides the recruitment, training and development of the faculty and administrative staff, and appraisal, welfare and compensation aspects of the employees. For instance, all faculty appointments are based on merit and the Management follows a liberal approach in sending teachers for faculty improvement programs. There is also a separate policy regarding faculty development.

• Industry interaction

There is an active and continuous interaction with industry. Students are trained to meet the requirements as demanded by the industry. Various interactions are encouraged like Industrial visit, Campus placement, Pre-industry awareness programme, arranging talks by

eminent speakers from different industries, activities of Students, ambassadors to industries like Mozilla Firefox. The College has an Incubation Centre for students to create an environment of how to work in an industry.

6.2.5 Ensuring availability of adequate information for the top Management and stakeholders to review the activities of the institution

The Principal, as the Head of the institution, ensures that adequate information (from feedback and personal contacts etc.) to review the activities of the institution, is obtained through the following ways.

- The College has a bi-weekly Academic Council which is headed by the Principal and attended by all the deans, HOD's, staff representatives etc. This is a venue for taking decisions for the smooth functioning of the day to day academic activities. Various issues of relevance are discussed threadbare.
- Collecting Feedback from students periodically.
- Taking feedback and suggestions from Parents on periodical basis (through Parents' Meet).
- Continuous process of counselling and mentoring mechanism by faculty coordinators.
- Periodical meetings with class review Committee members.
- Alumni Association recommendations to enhance the academic excellence.
- Assessment through well-designed evaluation on the effectiveness of teaching and measuring the learning outcomes of the students.

After thorough discussion and deliberation the existing systems and activities of the College are reviewed and decisions regarding the implementation of new policies are taken.

6.2.6 Encouragement and support of Staff involvement in improving effectiveness and efficiency of institutional processes

The Management is always encouraging and supporting the involvement of the staff in improving the institutional process. The Management, through the Principal, involves the staff members in various activities and decision-making processes related to the curricular, extra-curricular and administrative development of the College. The Staff members involve themselves through various Committees such as Admission Committee, Women Cell, Counselling and Placement Committee, Discipline Committee, Anti-ragging Committee, Sports Committee, etc. The representatives of each Committee are free to give suggestions and opinions during the meetings with the Management. These suggestions are taken in to consideration before making any decisions.

The Faculty are provided with funding and acknowledgement for doing good research oriented projects, presenting paper in National/International conferences. Faculty is paid incentives for producing significant results in the semester examinations and also after

completion of their higher degrees, like PG incentive and PhD incentives. Every year after appraisal, with respect to the review of the faculty performance, increments are awarded.

6.2.7 Resolutions made by the Governing Body in 2013-14 and the status of implementation of such resolutions

The Governing Body has its periodic meetings. It has passed made the following resolutions in one of its earlier meetings:

- Complete a PG Block for the College

- Establish an independent Research centre

- Introduce new UG, PG courses

These resolutions have been implemented in the College.

6.2.8 Provision for according the status of autonomy to an affiliated institution by the University

As of now the statutes of the affiliating University do not have any provision for according the status of autonomy to any affiliated College.

However, recently the government has changed the policy and have started giving autonomous status to affiliated Colleges. AJCE is considering applying for autonomous status, but a formal decision on this is yet to be taken by the Management of the College.

6.2.9 Effective and prompt resolution of grievances/ complaints. Mechanism to analyse the nature of grievances to promote better stakeholder relationship

For promoting better stakeholder relationship the institution has set up a Grievance Redressal Cell to attend each and every complaint. The Institution immediately addresses the problems and solves them effectively. The Cell is constituted by involving the following members.
1. Principal
2. Dean Administration
3. All Heads of Departments
4. Faculty Coordinator from the concerned Department
5. Class representative
6. Ladies' Representative

Adequate publicity of the existence of the Cell is given through the College Website, calendar, etc. The stakeholders – staff/students - can approach any of the grievance redressal Cell members to air their grievances/complaints orally or in writing which will be placed before the Cell, examined thoroughly and verified. The students approach the Cell for their

grievances regarding academic matters, financial matters (AJECS), health services, library and other central services. The complaint, assessments of the Grievance Redressal Cell and possible solutions & suggestions are forwarded to the appropriate decision making authority for necessary action.

Students/faculty can also bring their grievances to the notice of the Grievance Redressal Cell by writing it and putting it in the Complaints & Suggestion Box.

6.2.10 Court cases filed by and against the College during the last four years. Details on the issues and decisions of the courts on these

There have not been any Court cases by the College or against the College during the last four years.

6.2.11 Mechanism to analyze student feedback on institutional performance: Outcome and response of the institution to such an effort

Student feedback on teacher performance is collected and analysed using an internally developed software. At the end of every semester, feedback is taken from the students regarding academic courses and course delivery. Interim feedbacks are also taken in a semester quarter. HODs ensure the performance of the each faculty; if it's not satisfactory the appropriate measures will be taken on the faculty through counselling and training.

Exit-feedback from the graduates of each programme regarding teaching-learning processes, infrastructure and student-support system are also taken. The Programme Outcomes (PO) are assessed and reviewed based on this.

The outcomes and response of the institution included add-on-courses and infrastructural facilities for research, sports etc. This process has resulted in changes and betterment in curricular aspects, infrastructural facilities and student support services.

6.3 Faculty Empowerment Strategies

6.3.1 Efforts to enhance Professional development of Teaching and Non teaching staff

Many efforts are made to enhance the professional development of teaching and non-teaching staff.

- The College has a fund which is utilized for professional development, enabling the teaching departments to organize seminars, conferences and workshops.
- Faculty members of the institution actively participate in national and international seminars and conferences.

- Faculty members are motivated to do research activities and encouraged to publish papers.
- The institution encourages faculty members to enrol for or provide resources for training programmes and workshops offered by other affiliated Colleges.
- Most of the members of the teaching faculty are members of national and international professional bodies like IEEE, ISTE, CSI etc.
- For non teaching staff training is arranged for strengthening the knowledge of using latest facilities and equipment.
- Training and access to Internet, audio-visual aids, software packages etc., as required, are provided.
- Facilitating institutional infrastructure, learning resources for effective curriculum transaction.
- Teaching and non-teaching staff are encouraged to work on innovative research oriented projects.
- Induction training for new Teachers
- Mentorship training for all faculty.
- Opportunity to expose the faculty to developments in different disciplines and international community through international conferences

6.3.2 Institutional strategies for faculty empowerment through training, retraining and motivation for the roles and responsibility they perform

- ➤ The Faculty are entitled to be sponsored for Training Programmes, Paper Presentations in conferences, Attend seminars, workshops, Quality Improvement Programmes etc. The College also organizes motivational and teamwork training programmes. Skill-sharing across departments is also encouraged.
- ➤ The Management protects the freedom of individuals, appreciates their innovations and ideas, and thereby motivates them.

6.3.3 Performance appraisal system of Staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal

Every faculty and non-teaching staff submits their Individual Development Plan (IDP) during the start of an Academic year. In every semester a half-yearly report called the "Semester work report" is submitted by the staff. Towards the end of the academic year, the Faculty Appraisal Report (FAR) based on IDP submitted in the previous year, is recorded. Performance appraisal reports give quantitative assessment of a faculty on four major categories:

- Evaluation by the Head of the Department,   20
  based on self appraisal (FAR) of Individual Development Plan
- Evaluation by the Head of the Department,   30

based on overall performance
- Evaluation by the students based on course offering   25
- Evaluation by the Faculty Appraisal Committee (FAC)   25

Targets are set for each of the categories.

Many faculty improvement training programmes/seminars/workshops etc. are conducted to empower the faculty. Those who achieve higher academic performance in terms of additional qualifications, research outputs and publications are given additional credits and increments. The College has a practice of announcing the major decisions and recognitions in staff meetings.

6.3.4 Review of Performance appraisal reports by the Management, major decisions taken and communicating the same to stakeholders

The outcome of the above review (as in 6.3.3) is:
- If the final grading falls below the minimum target level, teachers are advised accordingly by the Principal.
- Best performing faculty are given awards on Semester Inaugural meetings.
- The faculty members are awarded for 100% results by cash prizes in meetings.
- The Management appreciates the innovations and efforts of each staff based on the categories given below and thereby motivates them.

  - Research & Development
  - Academics
  - Extra-curricular & Co-Curricular activities
  - Services to College and the Society.
  - Administrative support given to College.

6.3.5 Welfare schemes available for teaching and non-teaching staff. Percentage of staff that availed benefit of such schemes in last four years

- Staff Welfare Fund in place
- Contributory Provident Fund Scheme for non teaching staff.
- Gratuity benefit provided to resigned faculty.
- Funds are also collected to facilitate any individual member of the staff in his/her emergency/crisis.
- Family get-together and picnic for teaching and non-teaching staffs and their family
- A Group Accident/Health insurance Scheme is being implemented in the College

  Majority of staff avail the above benefits.

6.3.6 Measures to attract and retain eminent faculty

- Peaceful working atmosphere, adequate facilities, effective teaching-learning practices, quality culture, infrastructure facilities and smooth employer-employee relationship make the eminent, talented faculty to continue their services in this institution.
- Attractive salary package is offered to all, especially to eminent faculty based on their experience, performance and qualification.
- Feedback is taken from the students and appraisal is made in order to give incentives and increments to the faculty.
- Eminent faculties are given allowances for facilities like travel and accommodation.
- Staff members who complete 10 years of service are honoured in the Alumni Meet.

6.4 Financial Management and Resource Mobilization

6.4.1 Institutional mechanism to monitor effective and efficient use of available financial resources

Financial monitoring mechanism involves the following:
- External audit done annually by a registered Chartered Accountant and the internal audit done by a team set up within the College.
- Transparency in transactions through bills and vouchers.
- Single point transaction of money, only through the Cashier
- All major payments done through Bank.
- All major expenditures incurred are on the basis of inviting tenders and quotations.
- Department level budgeting and periodic reviews

6.4.2 Institutional mechanisms for internal and external audit. Date of last audit and the major audit objections. Compliance details

Internal Audit has the following aspects:

- For internal accounts keeping and auditing, there is a full time General Accountant appointed by the Management and a permanent cashier.

External Audit has the following aspect:

- Management level Audit is done annually by a registered Chartered Accountant.

Previous Audit:

- Management Audit is done every financial year, the last being done in May 2014.

Major Audit Objections and compliance details:

- No major objections were raised.

6.4.3 Major sources of institutional receipts/funding and Details of Deficit Management. Audited income and expenditure statement of academic and administrative activities of previous four years and reserve fund/corpus available with Institutions, if any

Major sources of institutional receipts / funds include fees collected from students towards tuition and hostel and special fees collected form students under NRI quota.

Fund deficit is managed through bank loan and diocesan contributions.

No reserve / corpus fund is available.

Audited Statements for all years are available in the institution.

6.4.4 Institutional Efforts to secure additional funding and its utilization

Miscellaneous income includes PTA contribution, income from College store and Food Court, infrastructure charges received by conducting offline/online external examinations and add-on courses.

The institution makes earnest efforts to attract funds by way of external projects.

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Internal Quality Assurance Cell (IQAC) and its Functioning. Institutional policy with regard to Quality assurance and its contribution in institutionalizing quality assurance processes

An IQAC is functioning effectively in AJCE

Strategies of the IQAC:

IQAC has evolved mechanisms and procedures for

    a) Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.

    b) The relevance and quality of academic and research programmes

    c) Equitable access to and affordability of academic programmes for various sections of society

    d) Optimization and integration of modern methods of teaching and learning

    e) The credibility of evaluation procedures

    f) Ensuring the adequacy, maintenance and proper allocation of support structure and services

g) Sharing of research findings and networking with other institutions in India and abroad

Composition of the IQAC:

A. The structure of IQAC of AJCE with 16 members is as follows. The term of the present IQAC Committee is for two years from 01.07.2014.

Sl No	Role	Designation
1	Chairperson:	1. Head of the Institution (Principal, Rev. Dr Jose Kannampuzha)
2.	Four senior administrative officers	2. Dean, Administration (Prof. Tomy Joseph) 3. Director, Civil Service Academy (Mr. Abraham Kurien IPS) 4. Distinguished Professor (Dr. Job Kurian) 5. Director, ACAR (Dr. M. K. Radhakrishnan)
3.	Three to eight teachers	6. One faculty from CSE/IT/DCA (Rev. Fr. Rubin Thottupuram) 7. One faculty from ME/AUE (Prof. K. Sreekumar) 8. One faculty from CE/CH/MET (Dr. Mini Mathew) 9. One faculty from ECE/EEE (Prof. K.G Satheeshkumar) 10. One faculty from DBS/HUM (Dr Jacob Philip)
4	One member from the Management	11. Rev.Fr. Varghese Parinthiricakal, Manager
5.	One nominee from local society	12. President, Kanjirapally Gramapanchayat
6	One nominee from Students	13. Chairman, Students Council
7	One nominee from Alumni	14. Faculty working in AJCE & Alumni Secretary
8.	One nominee from Employers /Industrialists	15. Mr. Isaac Joseph, Managing Director and Chairman, Lunar Kerala limited
9.	One nominee from stakeholders	16. PTA President
10	One of the senior teachers as the coordinator / Director of the IQAC	Prof. K.G. Satheeshkumar HOD, ECE

The membership of such nominated members shall be for a period of two years. The IQAC should meet at least once in every quarter. It is proposed to have two meetings in a semester one before commencement of the semester and one at the end of the semester. The quorum for the meeting shall be two-third of the total number of members. The agenda, minutes and Reports on actions taken are to be documented with official signatures and maintained electronically in a retrievable format.

It is necessary for the members of the IQAC to shoulder the responsibilities of generating and promoting awareness in the institution and to devote time for working out the procedural details.

There is a Department level IQAC, designated as Department Quality Assurance Cell (DQAC), which shall forward the suggestions and positive improvements made in the respective department to College IQAC so that the same can be shared with all departments. The minutes of the meetings of the DQAC are forwarded to the College IQAC as and when they have meetings.

B. The structure of the DQAC, with 16 members, is as given below.

Sl. No	Designation	Role
1	Head of the Department	Chairperson
2.	Three Faculty members nominated by the HOD	Members
3.	One lab staff nominated by the HOD	Member
5.	One student nominee from each class of the department, from the students who secured maximum marks in the previous semester.	Member
6	One nominee from Alumni of the department, nominated by the HOD	Member
7	One nominee from stakeholders, PTA member from the department, nominated by the HOD	Member
8.	One senior teacher as the coordinator of DQAC	Coordinator
9.	One representative from Students' Welfare	Member
10	One representative from Examination/Evaluation process of the department, nominated by the HOD	Member
11	Class teachers of each of the semesters (S3 to S8)	Members

The DQAC shall meet once in every semester to give its inputs to the College IQAC

Quality assurance procedure adopted in AJCE

The following are the few quality assurance procedures adopted in the College

A. Faculty

➢ Induction training to newly inducted faculty.
➢ They are encouraged to attend the Faculty development program organized inside and outside the campus.
➢ They have been financially supported for presenting papers in conferences and journal publications.
➢ Organizes motivational classes and annual retreat program for the faculty.
➢ Semester wise feedback system and the positive and negative comments about the faculty are communicated to them individually by the Principal.
➢ Encourage to apply for the funded training program.
➢ Additional increments for the people who achieve higher qualifications

B. Teaching- learning

➢ Since Amal Jyothi is affiliated to Mahatma Gandhi University, Kerala, the curriculum prescribed by the university is meticulously followed.
➢ The College has been governed by the Governing Body, Advisory Body and Academic Council. The major plans in all aspects are discussed in the higher level Committees and are dispersed and discussed even up to the bottom-most stakeholders through various level meetings and the opinions are considered before implementing the same. The College holds bi-weekly (alternate Wednesday afternoons) Academic Council Meetings chaired by the Principal, to discuss the various academic and administrative matters of the College and discusses about the actions implemented and pending for two weeks and also suggest methods to improve things. In this meeting, Deans, Heads of core departments and allied departments are actively involved. In general following action plans are implemented.
➢ From the scheme, subjects are allotted to the faculty, based on their specialization by the Heads of the departments well in advance and are asked to submit the detailed course plan comprising the course outcome, its mapping with the program outcome, assessment schedule, assignment schedule and examination questions.
➢ Predefined College calendar and academic calendar are given to the faculty and students.
➢ Timetable is prepared and published. It includes additional courses.
➢ Principal's meeting with the HOD and the Faculty at the beginning of the semester
➢ Regular Meetings of the HOD with the faculty to develop academic plans based on the number of available days
➢ Each member of the Faculty maintains lesson plans and course file, reviewed by the HOD and the Principal
➢ Dean-Academic reviews the weekly academic progress report by each faculty and monitors the progress of the syllabus

- Timetable, course plan and daily covered portions are entered in the Academic Enterprise Solution (AES) software which is developed in-house. AES monitors the student attendance and progress in teaching and is accessible to the stakeholders.
- Unexpected loss in working days is compensated by working on available Saturdays.
- Mentors and student counselors ensure good attendance and class performance.
- After announcing internal examination results, student performances are discussed in class Committees, Department meetings and the Academic Council to evaluate and remedial measures are initiated.
- Parents are informed about the performance of students by phone, email and parent-teacher meetings are convened in each semester.
- LCD projectors are provided in each class room.
- Evenly distributed regular assignments, class tests, Internal Examinations and quizzes.
- Central/Departmental Library and e-resources.
- Industrial visits/educational tours
- Arranging remedial classes for academically weak students to raise their academic performance.
- Cash awards to semester the topper of each class.
- Toppers in university examinations are awarded merit certificates under Director's/Principal's Honors list.
- Students' Academic journal system.

For effective teaching AJCE provides the following:
- Academic calendar, timetable, schedule of activity including internal exams and, evaluation pattern is given well in advance.
- Good ambience and well ventilated class rooms equipped with LCD Projectors
- Uninterrupted power supply and solar power
- Seminar rooms in each department for the conduct of guest lectures, seminars etc
- Induction programs for the newly joined faculties
- Compulsory English speaking on the campus by staff and students
- Wi-Fi on the entire campus and hostels
- Personal computers/printers to staff and also in the departmental staff rooms with internet facilities
- Course plan, course traceability matrix, weekly syllabus completion, timely declaration of examination dates and results, evenly distributed assignment schedule and returning the assignment after evaluation, all monitored by the HOD, Dean (Academic) and the Principal.
- Result performance analysis of the students is done after every examination and the same is communicated to the parents.
- Weak students are identified and additional training is given.
- Implemented various scholarship schemes for 100% attendance, toppers in the semester and subject toppers. They are acknowledged through cash awards/certificates/Director's Honors list / Principal's Honors list.

- Micro project/mini projects/mega projects and presentation of papers in conferences are encouraged.
- Add-on courses conducted periodically
- Maintenance of lab equipment
- Add-on in E- resources, digital library and volume of books in the central library.
- Seminars or invited talks from the industry/academia
- Maintenance of the campus/ infrastructure/ computer facility properly monitored.

C. Motivational support
- Awards to teachers for securing 100% pass in their subject
- Freedom to close monitoring of the students and interaction with parents.
- Regular monitoring of class attendance and teacher-parent-student interaction
- Counseling and remedial classes for weak students
- Scholarships to meritorious and needy students
- Scholarships worth Rs.1.8 Crore for top- ranking students by the AJCE Management
- Best Faculty Awards
- Semester topper/subject topper/ university topper/ rank holders/ crown and Gem of AJCE are rewarded with cash prize

b. Decisions of IQAC approved by the Management/ authorities for implementation and the number actually implemented

The IQAC of the College had two meetings on 04/09/2014 and 16/09/2014. The decisions taken by the IQAC in these meetings were the following.

1. In every Department there shall be a Department level Quality Cell (DQC), which shall meet once in a semester and make recommendations to the College IQAC. The constitution of the DQC was framed by College IQAC. As per this, The HOD of the Department concerned will be the Chairman of the DQC and a faculty member chosen by the Department will act as the coordinator. The DQC of every Department will communicate its recommendations to the IQAC.

    This decision of the IQAC has been implemented and a DQC is in place in every Department.

2. The minutes of the meetings of the IQAC will be communicated to the Governing Committee members after the meetings.

3. The IQAC constituted sub Committees to frame the following documents

    (i)   A Quality policy for the College
    (ii)   An HR Policy document

<blockquote>
(iii)   An R&D Policy Document

(iv)   A Master plan 2025 for the College
</blockquote>

The IQAC set deadlines to frame these documents so that the next meeting of the IQAC can deliberate on these and communicate its recommendations to the Management.

4. The IQAC made recommendations to improve entrepreneurial skills of the students and the ways to make them suited to work in industries. The Principal agreed to take necessary steps to implement these recommendations.

c. External Members in IQAC and their contributions

There are five external members in the IQAC. They are

1. Dr. M.K Radhakrishnan (Senior Scientist and Administrator)
2. President, Kanjirapally Gramapanchayat
3. Mr. Isaac Joseph, Managing Director and Chairman, Lunar's Kerala limited
4. PTA President

They have contributed to the IQAC with their presence in the meetings and with their suggestions and advices.

d. Student and alumni contributions to effective functioning of IQAC

The Alumni Association helps in making decisions. Moreover their collective effort in placement activities along with providing motivation to the students helps the academics go hand in hand with the industry.

e. **Communication and Engagement of Staff from different constituents of the institution by the IQAC**

Meetings and Seminars at regular intervals helps effective communication among the different sections in the institute and with members of the IQAC.

The next meeting of the IQAC will be held shortly.

6.5.2 Integrated Institutional Framework for Quality assurance of Academic and Administrative activities, and its operation

The feedback collected from students on teachers along with the self-appraisal reports (SAR) prepared by teachers themselves prove to be very useful measures for the Management to analyze teaching effectiveness and faculty excellence. Different faculty development programmes, add-on courses arranged for students, regular tracking of lab facilities and up-gradation, enhancement of student support services like Placement, Counseling, Mentorship, Project guidance etc help in boosting the internal quality of the institute.

6.5.3 Staff Training for effective implementation of Quality assurance procedures, and its details

Yes. The institution provides Induction programmes for the newly joining faculty members every year to invoke in them their teaching as well as personal skills. The faculty development programmes, STTPs and workshops being conducted regularly on a time bound manner helps to promote and raise the quality of the teachers.

IQAC is planning to organize training programmes and seminars on quality related themes as part of its quality assurance initiatives. This will enable the staff to prepare Graduate Attribute linked Course Plan, to use course Management software, to gain awareness about key concepts of quality in Higher education, to become abreast of current directions like RUSA and to gain greater clarity about systems perspective in higher education, etc. Training will be given in student centric, interactive teaching- learning methodologies, varied learning structures (self-directed, one-to-one, small groups, lecture, field study, mentoring) and ICT. IQAC plans to take up this activity shortly.

6.5.4 Academic Audit or other External Reviews to improve Institutional Activities

The goal of the Academic Audit is to have Continuous Quality Improvement. To accomplish this, faculty, administrators and staff engage in on-going self-assessment, group assessment and peer review (including self study and site visit) to achieve Education Quality Process Maturity. As a Faculty Driven Management Model, AA promotes Teamwork; the process encourages full participation by engaging all members as stakeholders. Also AA focuses on making improvements in institutions without budget increases or outside resources. Continuous quality assessment through feedback and other means is a part of the AA of the College. The College plans to invite external experts to carry out AA periodically in the College.

6.5.5 Compliance of the Internal Quality Assurance mechanisms with Requirements of relevant External Quality Assurance Agencies/Regulatory Authorities

Amal Jyothi Quality Assurance System (AQAS) is responsible for managing and conducting academic, administrative and financial audits/inspections and it provides technical expertise to define and resolve Quality Assurance issues. This assures that the institution is in compliance with the rules and regulations of the Government, University, UGC, NAAC, AICTE etc.

- **Curricular Aspects:**
  - ➢ Number of specializations in UG & PG programmes got enhanced

- ➢ Strength of students in each department got increased

- ➢ Add-on courses offered

- ➢ Semester wise curricular plan: maintained by all subject teachers

- ➢ Attendance: Above 75%

- ➢ Syllabus Completion: 100%

- **Teaching and Learning Aspects:**

  - ➢ **Lecture templates**: All subject teachers are maintaining the records up to date

  - ➢ **Conduct of classes**: Classes have been conducted regularly according to the time table

  - ➢ **Student Centric Activities**: Quiz programmes & Seminars related to the subject and its recent developments have been arranged by all the faculty members

  - ➢ **Student Assignment**: Assignments are given to the students regularly and records are maintained by all the subject teachers.

  - ➢ **Student Feedback**: Internal feedback will be taken by the HOD in the middle of every semester and external feedback will be collected through online by Dean, Academic at the semester end from students so as to improve the quality of teaching of all the Professors.

  - ➢ **Remedial Coaching**: All the faculty members conducting remedial classes for slow learners and its records have been maintained systematically.

- **Evaluation & Results:**

  - ➢ Conduct of internal examination**:-** Class tests, Series Exams, Model Exam

  - ➢ Maintenance of marks register

  - ➢ University Result Analysis

- **Learning Resources:**

  - ➢ Library

  - ➢ Power Point Presentations

  - ➢ NPTEL Videos

  - ➢ Website (Wi-Fi is available)

6.5.6 Institutional Mechanisms in place to continuously review Teaching-Learning process: Structure, Methodologies of Operations and Outcome

The Review Mechanisms of Teaching-Learning Processes are:

- **Semester wise Work Report**: Evaluated periodically by the Principal (Semester End)

- **Students Feedback**: Evaluated periodically by the team led by the Principal (Semester End &Interim feedback)

- **University question paper solution**: Up to date records on answer key of every subjects

- **Result Analysis of University Examination**: Maintained records on successive index report of university results for every batch semester wise results.

- **Counseling**: Learning outcomes can be improved through continuous monitoring and analyzing the progression of students by class teachers, class mentors etc

- **Placement Drives**: Assess the progression of students to their performance in job placements

- The **Amal Jyothi Quality Assurance System (AQAS)** frame work for quality assurance, review and continuous improvement has evolved to its present level over a period of time. The review mechanisms of teaching learning process are embedded in the AQAS

- Formative and Summative Result Analysis and Review by the Department concerned and the AJCE Academic Council, Course Plan preparation, Software supported course Management, etc., are mechanisms in place to continuously review the teaching learning process. Linking the Graduate Attributes with the Course Plan and analyzing the attainment of the GA using the software developed indigenously are being progressively implemented.

- Furthermore, compliance with Academic and Exam Calendars and Course Plan is ensured by the Course Teacher, Class Teacher and HOD.

- Another mechanism to review the teaching-learning process is the periodic Academic Audit by the Academic Council led by the Principal.

- The learning outcomes achievement is assessed through monitoring of class participation of students by Course Teachers and Class Teachers, analyzing the progression of Students to higher education or job placements, and assessing the performance of students in placement drives, besides internal evaluation and results analysis in the departments.

➢ The process of review has enabled the College to analyse and understand the trends and gaps in student performance and to plan improvements in different aspects of teaching-learning and evaluation, viz., introduction of new enrichment/remedial programmes, special attention to slow as well as gifted learners, introduction of appropriate foundation courses, training of faculty in pedagogical methods like interactive self-learning techniques and developing rubrics for the evaluation of graduate attributes, etc.

6.5.7 Communication of the Institution on its Quality Assurance Policies, Mechanisms and Outcomes to various Internal and External Stakeholders

The major methods for communicating the quality assurance policies, mechanisms and outcomes to the internal and external stakeholders are the following:

➢ Staff meetings (College/ Departmental)

➢ Periodic Academic Audit

➢ PTA meetings

➢ Alumni meetings

➢ Industry interactions

➢ Feedback from staff/ evaluators

➢ Face to face meeting with IQAC members, staff, Management

➢ Institute Vision and Mission

➢ College Website, e-publications

➢ College Calendar

➢ Publications like handbooks, policy documents, display boards

➢ Academic Journal

Any other relevant information regarding Governance Leadership and Management which the College would like to include.

NIL

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

Preamble

Amal Jyothi: The word *Amal* means immaculate and inviolate, and *Jyothi* means light. Thus *Amal Jyothi* stands for pure light, a universal symbol signifying the search for unblemished truth. By allusion, it stands for enlightenment through Mary Immaculate to whom the College is dedicated.

Amal Jyothi College of Engineering, Kanjirapally, is the first new generation engineering College in Kerala to secure the prestigious NBA accreditation for prime departments. The main features of the College comprise world-class infrastructure, top-flight faculty, high pass percentage, excellent placement record and unique student projects. Amal Jyothi is a mega complex of nearly 15 lakh sq. ft. built-up area overlooking the busy Kanjirapally - Erumeli stretch of the Kottayam - Sabarimala state highway. The two campus hostels, taken care of by dedicated Catholic priests and nuns, have a capacity of 2400 inmates. The campus has 60 Mbps internet connectivity with Wi-Fi. Amal Jyothi is the only engineering College in the state to have a Catholic priest as Principal who secured first rank in both B. Tech (Calicut University) and M. Tech (IIT Kharagpur), and doctorate in Mechanical Engineering.

Highlights: The only Engineering College in Kerala to have
- Reached the last leg of TIFAC-CORE, under DST, Govt. of India
- An Innovation and Entrepreneurship Development Centre (IEDC) of the DST
- Five-Star rated Remote centre of e-outreach program (Ekalavya) of IIT, Bombay
- Kerala's highest intake of 780 seats for B. Tech across 9 branches, and 192 seats for 7 Master's Programmes (Six M. Techs and MCA in 3 streams)
- Association with Malayala Manorama in the prestigious Yuva Master Mind project contest as technical partner since 2011
- Top spot consistently since 2007 at national level engineering project contests –INFOCOM, Kolkata and TECHTOP, Trivandrum
- 45 Technical and General Clubs, besides two NSS units
- 500-metre skywalk connecting the College with the hostels
- 100 kW Solar Power Plant
- Amal Jyothi Institute for Civil Services mentored by top-rated civil servants, former and present
- TBI (Technology Business Incubator), sanctioned by DST
- Volvo-Eicher Training Centre

- World class kitchen
- Star-rated suites in the Guest House

Other Features:

- The first new-generation engineering College in Kerala to secure NBA accreditation for prime departments
- Fully Wi-Fi campus, centrally managed
- 60 Mbps internet connectivity and state-of-the-art computer network of 1100 machines
- Consistent academic track record with university ranks
- Excellent placements: In 2012, TCS topped with 100
- High-profile, experienced and dedicated Faculty
- Regular classes in Communicative English up to S6 with 67- console Language Lab
- Exclusive aptitude training and personality development programmes
- Institutional monitorship of CAPART, Govt. of India
- Physical Education Department with multi-gym & recreational facilities for gents and ladies
- ITES, streamlining all computing, communication and networking activities
- Two full-time professional counsellors and Faculty mentors for every 20 students
- Five-day orientation course for freshers
- *Amal Jyothi Driving Academy* to impart driving skills
- Back-up Power plant of 620 KVA capacity
- Food Court and Guest House of international standards
- Intensive GATE coaching by in-house trainers and classes for CAT/MAT and Bank tests by a reputed professional agency
- Authorized centre for GATE, JEE, ICE(I) and IBPS exams
- MoU for collaborative programmes signed with the University of Ontario Institute of Technology, Canada; Deakin University, Australia; Dr. MGR University, Chennai. Also SRM University, Chennai (in process)
- Membership in professional bodies like IEEE, ISTE, ISBA, CSI, ECS, IIPE, KMA and IEI
- Fee collection through 1000 odd branches of the Federal Bank spread across India
- A full-fledged Research Square, with global level conference hall
- AICERA and other International Conferences

7.1 Environment Consciousness

Amal Jyothi College of Engineering (AJCE) has an eco-friendly environment with litter free and plastic free campus situated on the top of a hill with picturesque scenery around.

7.1.1 Conduct of Green Audit of the Campus and Facilities of the Institution

AJCE has not yet conducted any official Green Audit by an external agency. However, AJCE maintains a clean and green campus.
- Dustbins at strategic locations
- AJCE has been declared as a litter and plastic free zone
- Unused areas are converted into lawns and saplings are planted.
- Separate maintenance department with sufficient laborers

AJCE has developed an environmental policy which states its commitment to protect and sustain ecological resources and their equilibrium, particularly within the campus. Conscious efforts to inculcate a sense of responsibility towards the environment among students are taken. For instance, Sustainability Focus is included as one of the Graduate Attributes. The College is located on the eastern side of Kottayam District, adjacent to the eco sensitive Western Ghats of Kerala. In this context, the College makes attempts to enlighten the stakeholders and the local community about the significance and constructive response required.

7.1.2 Institutional initiatives to make the campus eco-friendly

- ➤ **Energy conservation initiatives:**
- Solar power supply to conserve and minimize energy consumption.
- Observe earth hour
- CFL lamps
- Split air conditioners
- Minimizing use of vehicle to reduce fuel consumption
- Evening check for switching off lights, fans and air conditioners
- Faculties are asked to switch off computers and printers while leaving office
- Stickers to remind switching of lights and fans at suitable places.
- Sewage treatment plant and reuse of water for irrigation

- ➤ **Use of renewable energy:**
- 100 kW solar power supply

- ➢ **Water harvesting**:
- • Rain water harvesting is practiced at AJCE
- • Watering plants and lawns by harvested water

- ➢ **Check dam construction:**
- • A pool is maintained in the campus to store rain water

- ➢ **Efforts for Carbon neutrality:**
- • All AJCE vehicles are regularly checked for pollution control
- • Biogas plant installed in central kitchen
- • Faculty members are encouraged to make group transport arrangements

- ➢ **Plantation:**
- • New trees are planted every year.
- • Full time Gardeners work in the campus to maintain a Green campus

- ➢ **Hazardous Waste Management:**

- ➢ **Solid Waste Management:**
- • Vermi composting unit installed in the campus
- • Disposal of sanitary napkins, batteries etc done without causing any damage to the campus
- • STP on solid waste management

- ➢ **E - Waste Management:**
- • Old computers and their accessories sold as scrap.

- ➢ **Paperless Campus**

- • College has been taking all efforts to reduce the use of paper
- • All communications between staff and students by e-mail
- • Leave management, student feedback etc all done on-line
- • Considerable reduction in the use of paper
- • Efforts have resulted in saving an estimated 25000 sheets of paper every year
- • This in turn reduces cutting trees to make paper

- ➢ **Plastic free campus**
- • Efforts taken to ensure that the campus is free of waste plastics
- • Students and staff made aware of the harmful effects of plastic waste
- • An efficient waste management system in place

7.2. **Innovations**

7.2.1. Innovations introduced during the last four years which have created a positive impact on the functioning of the College

AJCE has introduced the following innovations in academics, administration and other levels of functioning to enable students to shape themselves in this fast changing educational scenario.

Innovative efforts in academics:
- LCD projector in each class room
- Library resources beyond statutory requirements
- AES software
- Software to update the library
- Internet/Wi-Fi on the campus and hostels
- Laboratory facilities beyond statutory requirements
- Awards to meritorious students: subject/semester/university level
- Gem/Crown of AJCE awards
- Awards to the faculty, including the recently introduced P.G. George Endowment

Innovative efforts in teaching quality assurance:
- Organizing Faculty Development Programmes
- Feedback from students
- Compulsory self-assessment report
- Compulsory answer script preparation of University examination
- Compulsory course file
- Advanced course plan

Innovative efforts in student control:
- College identity card for each student, identifying Year of study and whether Hosteller or Day scholar
- One mentor for every 20 students
- Faculty to monitor the dress code of the students.
- Cell phones not allowed for students on the campus and hostels
- Dedicated student counselors

Innovative efforts in research activity:
- Cash awards to paper publication in research journals
- Technical fests and paper presentation by students
- Laboratory facility open to external students and faculties

Innovative co-curricular Programmes
- Induction programmes for newly joined faculty
- Orientation programme for new batches
- Orientation programme during semester break
- Value-added and skill-oriented add-on courses

Personality Development Programmes
- English and foreign language classes
- Personality development and communication skills
- Physical fitness centre
- Annual sports and cultural meet
- Academic Journal of the College

Entrepreneurship Development
- IEDC (Innovation and Entrepreneurship Development Cell)

Professional Body Membership
- Membership in Professional body Chapters (IEEE, CSI, ISTE, IIM and many others)

Institutional linkages/collaborations
- MoU with Foreign/Indian Universities
- MoU with Research Institutions
- MoU with Industries

Student Support Services:
To cater to the intellectual, psychological and social needs of the students and to enrich the learning experience, the following activities/facilities are initiated.
- Campus interview and Placement Cell
- Group e-mail id for each batch
- Remedial classes
- Students' Council
- Various clubs, technical and general
- Students' Welfare Cell
- Women's Grievances Redressal Cell
- Photocopying facility
- Canteen facility
- Laundry facility at College hostel
- Indoor and outdoor playgrounds

7.3. Best Practices

7.3.1. Any two best practices as per the annexed format which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the College

There are several practices followed in the Institution, which we think, have significantly contributed to its academic growth. The details of a few such practices, five in numbers, are given below.

Best Practice I: Inculcation of Research Culture among the Faculty and Students

Aims of the Practice
- To develop research culture in the Institute and life- long learning skills among faculty and students
- To identify the state-of-art areas of research and development and to organize conferences, workshops, seminars & symposia.
- To motivate the students to do their final year projects in-house by research.
- To motivate the faculty to pursue higher studies such as Ph.D. and Post doctoral research
- To create the awareness about patent/innovating intellectual rights
- To encourage consultancy in related areas.
- To create awareness about various funding agencies like AICTE, DST, DRDO, DAE, BRNS etc., and motivate the faculty to prepare good research proposals.

Context
- AJCE offers 9 UG and 8 PG degree programmes in various engineering departments.
- Teaching faculty members require some level of research competency
- Teachers are responsible to inculcate effective learning/research methodology in students to understand various engineering concepts.
- Teachers need to be creative and innovative in their approach to teaching/ research activities and should possess a holistic idea about the subjects they teach.

The Practice
- AJCE encourages faculty members to publish the research papers,
- A JCE encourages attending National/ International conferences
- AJCE encourages the faculty to carry out consultancy work.

- AJCE provides cash awards to those who publish research articles in national/ International journals. MoUs have been signed between the institution and various industries to carry out the research and consultancy activities.
- MoUs are also signed between Foreign/Indian Universities to expose the faculty members to the current research areas.
- State-of–the-art laboratory facilities
- A separate building for post graduate studies, research and development activities
- All research and development activities coordinated by Dean, Research.

Evidences of Success
- The number of faculty members registered for Ph.D. has increased considerably.
- Increase in the number of papers published by the faculty.
- Increase in number of research projects sanctioned.
- In-house research projects by B. Tech students

Problems Encountered and Resources Required
- Lack of time to carry out research due to their teaching commitments.
- Quarters are required to encourage the faculty to stay in the campus to carry out research.
- Financial constraints for imported laboratory facilities.
- More money allocation for recurring and non recurring expenditure.

Best Practice II: Student Mentoring Programme

Aim of the practice:
- To counsel students and to interact with them for doubt clearance and problem solving
- To improve teacher-student relationship
- To guide students to choose right career paths for job, higher studies, entrepreneurship, etc
- To train students for improving their behavior and quality of life in the society.

Context
- Immature students take own decisions.
- Mentorship programme of AJCE guides and counsels the students in academic, non-academic and personal matters to achieve their best in life
- The programme aims at addressing deficiencies of students in their attitudes, habits, and knowledge on learning process.

The Practice
- A group of 20 students is usually placed under a mentor.
- Mentor has direct communication with the group

- Mentors meet the students on Tuesdays and Thursdays from 4:10 pm to 5:00 pm
- Parents/Guardians of poor attendee/performance students are called to meet the mentors
- Corrective and preventive actions are implemented for further improvement.
- Mentors take initiative to arrange remedial and tutorial classes for slow learners.
- Each mentor maintains a record which is examined by the HOD, the class teacher and counsellors. Mentors take active initiative to arrange student feedback.
- Mentors discuss issues relating to good and bad study habits, study planning and techniques, health, personal relations, examination preparation etc.
- AJCE regularly arranges mentorship awareness/training programs for newly recruited faculty members. The faculty finds these very useful.
- Academic Journal
- Personality and character documentation

Evidence of Success
- Improved attendance after counseling by mentors.
- Improved teacher-student relationship.
- Better academic performance.
- Enhanced participation in extra-curricular activities.
- More disciplined and stress free students.
- Ragging-free campus.
- Based on feedback received from mentors, a training programme was organized for them in July 2014. Experts from outside imparted two-day training.

Problems Encountered and Resources Required

- The newly joined faculty members are not accustomed with the mentorship programme.
- Additional orientation course on mentorship to the new faculty
- Lack of sufficient time for one-to-one student interaction.
- Appreciation of mentors through the annual faculty appraisal.
- Financial requirements to organize workshops by hiring experts on mentorship, organizational behavior and stress management on regular basis.
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Best Practice III: Online Students' Feedback System

Aims of the practice:

1. To help the teachers improve their teaching methodologies
2. To provide students a role in the teaching-learning process

Context

1. This scheme was initiated for active student participation in the quality enhancement strategies.
2. Online Feedback is collected on a regular basis at the middle of the semesters.
3. This is used to analyze the performance of the faculty and corrective measures are taken if required.

The Practice

1. Every mid-semester, there is a provision for an online feedback system through AES, where the students evaluate their teachers on the basis of certain criteria given in the feedback form.
2. Dean (Academic), along with the help of AES staff, arranges the entire process
3. Circulates the schedule (i.e. time, day and date for student feedback) to every HOD for arrangements
4. Batch- wise students are taken to the Central Computing Facility to give online feedback for all the courses and labs.
5. Dean (Academic) collects the feedback reports.
6. System of reward/ corrective measures is based on AJCE Faculty Appraisal Policy. The policy has four components for evaluation
    i. HOD's assessment based on the Individual Development Plan (filed at the beginning of the academic year) and the annual report (filed at the end of the academic year) by each faculty member
    ii. Confidential report filed by HOD on the performance of the faculty member
    iii. Course feedback obtained from students on all courses taught in an academic year
    iv. Evaluation by the Faculty Appraisal Committee (Manager, Principal and Deans)
7. On the basis of the report of evaluation
        (i) Counseling of teachers is done by Principal/Dean/ HOD/Professors to take corrective action.
        (ii) Top performing faculty are rewarded.

Listed below are the criteria for student feedback and weightage provided for each attribute

Knowledge of the subject	A - Exceedingly well informed	B - Adequately informed	C - Not well informed	D - Scantily informed
Ability to Explain	A - Clear and well defined	B - Adequate	C - Inadequate	D - Totally Inadequate
Attitude towards	A - Sympathetic	B - Usually sympathetic and	C - Avoids personal	D - Cold and

students/Behavior	And helpful	helpful	contact	hostile / arrogant
Opportunity for question and discussion	A - Ample opportunity	B - Occasional opportunity	C - Rare opportunity	D - Never
Presentation of the class material	A - Well organized	B - Adequately organized	C - Inadequate organization	D - Confused AND Unsystematic
Content of tests - severity of questions	A - Satisfactory	B - Too detailed	C - Not comprehensive enough	D - Wrong type of test
Assignments	A - Assignments clear and reasonable	B - Clear but too long	C - Not clear	D - Always unclear and unreasonable
Fairness and impartiality	A - Fair and impartial	B - Usually fair	C - Rarely fair	D - Always unfair
Punctuality in academic work lectures assignments drawing sheets answer scripts	A - Very punctual	B - Usually punctual	C - Rarely punctual	D - Never punctual
Proficiency of English	A - Excellent teaching in English	B - Adequate use of English	C - Frequent explanation Malayalam	D - Classes mostly in Malayalam
Pace of teaching and coverage of syllabus	A - Excellent	B - Moderate	C - Poor	D - Unfinished syllabus
Alternate arrangement of classes	A - Mostly sticks to schedule	B - Occasionally with prior intimation	C - Occasionally without prior intimation	D - Frequently without prior intimation
Use of mobile phones during the class	A - Never	B - Occasionally with the permission of the students.	C - Sometimes	D - Frequently
Overall rating of the Teacher	A - Very good	B - Good	C - Fair	D - Poor

Points for each attribute grade: A: 4;   B: 3;   C: 2;   D: 1

Evidence of Success

1. Top performing faculty members are awarded cash prize and appreciation letters

2. List of such faculty displayed in the College website

Problems Encountered and Resources Required

1. Weakness of the faculty members is found and accordingly, training and orientation programmes are to be arranged for them as corrective action.

Best Practice IV: Academic Enterprise Solution (AES)

Aims of the practice:

1. To help staff, students and parents to automate all the administrative tasks.
2. To enable paperless administrative implementation.
3. To support easy communication and cost effective data storage.

Context

1. Commercial off-the-shelf applications were not suitable for our multi-purpose.
2. The College has developed proprietary College Automation software which has enabled automation of all areas of operation.
3. Its integration with Google-powered cloud storage, email service, SMS service and online payment via Federal Bank payment gateway to all the staff and students make it cost effective.
4. The workflow starts from online registration during admission and culminates in the issue of the Transfer Certificate to the student.
5. Parents can view the attendance; marks obtained and fee details using user authenticated system.

The Practice

1. Fully automated online application, verification and rank list generation based on the HSS and KEAM marks, along with category and community reservations.
2. Staff and students get their personalized email id in College domain which is integrated with Google cloud storage.
3. Students can apply for all the permissions and certificates online.
4. Students' attendance and mark entry are done by teachers online.

5. Teachers apply for leave and related issues online via computer as well as smart phone application and the authorities approve it online.
6. Teachers' attendance entry via figure-print reader.
7. Students can pay their fees via online through any payment gateway which is integrated with AES.
8. Parents receive E-mail and SMS on their wards' marks, attendance, fee-payment and out-pass.
9. Five professional software developers are assigned for the daily maintenance of AES and the College Website.

Evidence of Success
1. Increase in the number of applications from abroad as well as from different parts of the country, within days of application commencement.
2. Teachers and students can save a lot of time and money; they can apply for leave or any other permission while they are on the move.
3. Paperless communication saves trees.
4. Two servers located inside the campus runs on solar-powered energy.

Illustrative screen shots from AES are reproduced below

Problems Encountered and Resources Required

1. Students' attendance entry was done in paper at first, now and then in system; we need to provide Wi-Fi connected Tablets to all class rooms so that teachers can enter attendance directly to the system.

2. QR Code integration with Students ID Card and QR Code readers should be installed in entry points.

Best Practice V: Amal Jyothi Educational Charitable Society (AJECS)

Aims of the practice:
1. To extend financial help to backward classes in the society
2. To provide primary education to children
3. To provide guidance and financial support to students facing problems to pursue higher education due to financial constraints.
4. To avail appropriate development schemes (housing, sanitation, drinking water programmes etc.) to the needy.
5. To provide relief to victims of any natural or manmade tragedy.
6. To promote the use of green technology, organic farming and herbal plantation.
7. To provide financial assistance to the medical needs of the faculty, staff and students

Context

The following reasons contributed to the initiation of Amal Jyothi Education and Charitable Society (AJECS)
1. Financial requests from many people in need, both inside and outside the campus, to the members in Amal Jyothi Family, led to a decision of formation of a charitable society where, centralized collection and distribution of funds can be done
2. Instances where students who were good in academics had to abate their studies due to financial constraints
3. Lack of funds for the sudden medical expenses faced by the faculty and students
4. Lack of funds in helping teachers with their family needs like marriages

The Practice

1. Financial assistance for payment of tuition fees is provided to students on the basis of the applications received from among them. Assistance is provided on thorough verification and confirmation that the cases are genuine
2. Medical aid provided for faculty and students
3. Medical aid provided in genuine cases outside the campus on being referred by the members on the campus
4. Financial assistance for the conduct of marriages of girls from backward classes of the society
5. Financial support for construction of houses for the poor and the homeless.

Evidence of Success

1. Provided financial help for the treatment of heart disease of a small boy
2. Financial aid for kidney transplantation of a patient
3. Conducted wheel chair distribution for the handicapped
4. A good amount is contributed yearly towards payment of fees of students performing well in academics and at the same time requires financial aid.

Problems Encountered and Resources Required

1. Raising funds to meet the requests reaching the charitable society every year is a real challenge. The main contributors being faculty members and a few of the parents, the amount raised every year is limited.
2. Lack of students' interest to contribute to the charitable society
3. The Society being active only in a small circle, tax exemption towards charity cannot be availed by contributing to this society, which is pulling back many of the willing contributors.

Best Practice VI: Personality & Conduct Appraisal System (PCAS) at AJCE
Aims of the practice:

1. Incremental improvement and growth of students in key facets of Personality and Conduct (P&C) traits.
2. To make students aware of the quality traits required to be good individuals acceptable to employers, individuals and communities across the globe.

Context

1. The manual system followed earlier was based on a few traits which were not defined clearly for awarding the certificate of P & C.
2. The general procedure followed earlier to award P & C was based on Academics, Discipline and Extracurricular Skills only.
3. The former system could not help the individuals to provide an insight delineation of the finer traits for better opportunities.
4. A reasonable judgment was also not possible because of the lack of awareness of mentors about clearly defined quality traits.

The Practice

1. The software for the PCA System is in place from January 2015.

2. Currently the system is implemented in all departments through Google Drive Spreadsheet. The Principal, Deans and HODs are given full rights to access the progress of each student of the 10 Departments.

3. Faculty members follow a continuous system of personality and conduct evaluation through a student counseling system where 20 students are mentored by a faculty mentor in each semester

4. The progress of each student is monitored under a set of desirable and observable personality and character traits. Traits are given in the figure given below. The first four traits define the Personality and the rest four reveal the conduct of an individual.

5. Based on the letter grade obtained against each of these traits, a Semester Personality & Conduct Point Average (SPCPA) is computed and notified to the students at the end of each semester to enable them to make necessary improvements.

Traits
1. Leadership & Team Skills
2. Discipline & Perseverance
3. Communication skills
4. Innovativeness & Creativity
5. Integrity, Courtesy & Kindness
6. Social Responsibility
7. Ethical Values
8. Extra Curricular Skills

6. The final Course Personality & Conduct Point Average (CPCPA) is the average of the individual Weighted Average Trait Score (WATS) obtained against each trait at the end of the course

7. CPCPA score determines the overall personality and conduct of the student as *EXCELLENT, VERY GOOD, GOOD* or *SATISFACTORY.*

8. Grading Procedure: At the end of each semester (end of S2 for first year B. Tech), the performance of each student is appraised by the faculty mentor on a 10 point scale. The eight different personality and conduct traits are awarded letter Grades S (5), A(4), B(3), C(2), D(1) with scores as given in bracket against each trait. The Semester Personality & Conduct Point Average (SPCPA) is computed using the formula SPCPA (Semester j) = $(G1j + G2j + G3j + G4j + G5j + G6j + G7j + G8j)/8$ which yields a numerical score

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between 2 and 10 where *Gij* denotes the numerical score corresponding to the letter grade awarded for *trait i* for *semester j*. Weighted Average Trait Score (WATS) at the end of the final semester for individual traits are calculated using the formula

$$WATS(i) = 0.15Gi2 + 0.10Gi3 + 0.10Gi4 + 0.15Gi5 + 0.15Gi6 + 0.15Gi7 + 0.20Gi8$$

where Gij are scores for trait *i* for the semester *j*.

9. At the end of the eighth Semester, Course Personality and Conduct Point Average CPCPA is calculated as $CPCPA = \sum WATS(i)/8$. Based on the value of CPCPA obtained, personality and conduct certificate is issued to students.

Evidence of Success

1. PCAS is at its infant stage now; so it is difficult to provide an evidence of success.
2. The system will definitely help mentees as well as mentors to explore new features for the promotion and progress of their Personality and Conduct.
3. This objective type of P&C appraisal, we hope, would be acceptable to all stakeholders.

Problems Encountered and Resources Required

1. The system is running at its crest through software implementation which is in practice since January 2015.
2. We have been using Google Drive Spreadsheet to execute the PCA System for the last semester [July – Dec 2014 session].
3. The results are the best in terms of interface and access to the system.
4. Current PCAS provides with many challenges while developing the software and during its implementation.

EVALUATIVE REPORTS

OF

DEPARTMENTS

1. Department of Automobile Engineering

1. Name of the department   Automobile Engineering
2. Year of Establishment   2009
3. Names of Programmes /Courses
   Offered (UG, PG, M. Phil., Ph.D.,
   Integrated Masters; Integrated
   Ph.D., etc.)   B. Tech
4. Names of Interdisciplinary courses
   and the departments/ units involved   Nil
5. Annual/ semester/choice based credit
   System (programme wise)   Semester wise
6. Participation of the department in the courses offered by other departments

Branch	Subject	Course
Civil Engineering	Engineering Graphics (EN010 105)	First Year CE – A, B batches
Civil Engineering	Basic Mechanical Engineering (EN010 107)	First Year CE – A Batch
Mechanical Engineering	CAD/CAM Laboratory (ME010 507)	Fifth Semester ME A &B Batches
M. Tech - Machine Design	Computer Integrated Manufacturing (MMD 205-2)	Second Semester
M. Tech - Machine Design	Industrial Instrumentation (MMD 106-4)	First Semester
M. Tech - Machine Design	Computer Aided Design and Manufacture(MMD 204)	First Semester

ADD-ON Courses

• Drafting	AutoCAD
• Design	CATIA Pro-E Solid works
• Analysis	ANSYS
• CNC	Part programming Operation & maintenance

7. Courses in collaboration with other
   Universities, industries, foreign
   Institutions, etc.   Nil

8. Details of courses/programmes
   discontinued (if any) with reasons   Nil

9. Number of Teaching posts   (Calculation based on total students from
Second Year)

	Sanctioned	Filled
Professors	1	2
Associate Professors	3	1
Asst. Professors	8	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.
    /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience
Prof. Tomy Joseph	B. Sc (Engg.)	Professor & Dean, Administration	Mechanical Engineering	Academic- 13 years Industry – 17 years

Prof. K Vijayan	B.E (Auto), M.E	Professor & Head	Production Engineering	Academic - 42 years
Prof. Sherin Sam Jose	M.E	Associate Professor	Computer Integrated Manufacturing	Academic - 16 years
Mr. J. P. Ajithkumar	M.E	Assistant Professor	Manufacturing Engineering	Academic - 8 years
Mr. M. N. Muralidharan	B. Sc (Engg)	Assistant Professor	Mechanical Engineering	Academic – 7 years Industry - 22 Years
Mr. Reynold Jose	B. Tech, M.E	Assistant Professor	Automobile Engineering	Academic – 3 years 7 months
Mr. Thomas Abraham	B. Tech (Auto),M. Tech	Assistant Professor	Industrial Engineering & Management	Academic – 3 years 7 months
Mr. H. Sreeram	B. Tech (Auto),M. Tech	Assistant Professor	CAD/CAM	Academic – 3 years Industry- 8 years 9 months
Mr. K. J. Mathew	B. Tech (Auto),M. Tech	Assistant Professor	Manufacturing	Academic - 3 years 3 months
Mr. C. V. Anoop	B. Tech (Auto) (Study leave)	Assistant Professor	Automobile Engineering	Academic - 3 years
Mr. Abin Mathew	B. Tech (Auto)	Assistant Professor	Automobile Engineering	Academic - 2 years 7 months
Mr. V. Devkumar	B. Tech (Auto)	Assistant Professor	Automobile Engineering	Academic - 3 years 7 months Industry – 1year 2 months
Mr. Jinesh Vinayachandran	B. Tech (Auto),M.E	Assistant Professor	Industrial Engineering	Academic – 1 year 6 months

11. List of senior visiting faculty   Nil

12. Percentage of lectures delivered and
     Practical classes handled (programme   Nil
     wise) by temporary faculty

13. Student -Teacher Ratio (programme-
     wise)   1:14   (Calculation based on total
                                          Students from Second Year)

14. Number of academic support staff (technical) and administrative staff;
Sanctioned and filled

	Sanctioned	Filled
CAD Trainer	1	1
CNC Trainer	1	1
Senior Workshop Instructor	1	1
Lab Assistant	3	3

15. Qualifications of teaching faculty with D. Sc/ D. Litt/ Ph. D/ M. Phil / PG.: PG- 8
16. Number of faculty with ongoing
    projects from a) National
    b) International funding agencies
    and grants received   Nil
17. Departmental projects funded by DST
    FIST; UGC, DBT, ICSSR, etc. and
    Total grants received

Name of the Faculty	Funding Agency	Grants Received (Rs)
Sherin Sam Jose	DST-National	1,00,000/-
Sree Ram H.	DST-National	1,00,000/-
Sree Ram H.	SCPWD, Govt of Kerala	75,000/-
Sree Ram H.	CDS, Govt of Kerala	20,000/-
Total grants received		2,95,000/-

18. Research Centre /facility recognized   Nil
    by the University
19. Publications:

* a) Publication per faculty   1.38
* Number of papers published in peer-reviewed journals (national /international) by the faculty and students –

> * Number of publications listed in International Database (For Example, Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
>
>   : 4 No.
>
> * Monographs   : 7 No.
> * Chapter in Books   : NIL
> * Books Edited   : NIL
> * Books with ISBN/ISSN numbers with details of publishers   : NIL
> * Citation Index   : NIL
> * SNIP   : NIL
> * SJR   : NIL
> * Impact factor   : NIL
> * h-index   : NIL

20. Areas of consultancy and income
    Generated   :

Area of Consultancy	Income Generated (Rs)
CAPART	15,000/-
Amal Jyothi Driving Academy	2,00,000/-
CAD Training	7,00,000/-
Amal Jyothi Auto Care Centre	350/-
CNC Training	3500/-
Total	9,18,850/-

21. Faculty as members in
    a)National committees b) International Committees c) Editorial Boards….

Name of the Faculty	Designation	National/ International	Committee/Board
Prof. K Vijayan	Expert Member	National	State Consumers Dispute Redressal Forum, Tamil Nadu.
Prof. K Vijayan	Selection Committee member	National	Centre for Brackish Water and Aquaculture, Govt. of India.
Prof. Sherin Sam Jose	Co-ordinator IEDC	National	Innovation & Entrepreneurship Development Centre, Department of Science and Technology, Government of India.
Prof. Sherin Sam Jose	Co-ordinator IEDC	International	Represented India in "India Innovation Growth Programme" held at Texas University, United States of America.

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme   100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies   NIL

23. Awards / Recognitions received by faculty and students

Name of the Faculty/ Student	Faculty/ Student	Awards / Recognitions	Organisation
Prof. Tomy Joseph	Faculty	Gold medal for B. Sc (Engg.) First rank	Hindustan Machine Tools
Prof. Mathew K J	Faculty	Gold Medal for M. Tech First rank	VIT University
Prof. Sherin Sam	Faculty	Best project award	Department of Technical

Jose			Education, Madras
Prof. Sherin Sam Jose	Faculty	Best faculty award	Jayamatha Engineering College, Arulvaimozhi.
Prof. Sree Ram H	Faculty	Best Technical Employee	Rocket Engineering Corporation Private Limited, Kolhapur
Prof. Sherin Sam Jose	Faculty	Special award	Amal Jyothi College of Engineering
Prof Ajith Kumar J P	Faculty	Special award	Amal Jyothi College of Engineering
Mr. Rony Scaria	CAD Trainer	Best staff award	Amal Jyothi College of Engineering
Mr. Rony Scaria	CAD Trainer	First prize in the International competition	Parametric Technological Corporation (PTC) , USA
Prof. Reynold Jose	Faculty	Certificate of appreciation	Amal Jyothi College of Engineering
Febin Raphel, Febin Francis, Sajil N Sreedharan, Melvin PhilipMathew, Dennis Thomas, Justus Daniel P, JubinAbraham, Ashik P Azeez, Allen Tom Sanju Sabu, Tisson George Michael, Tony Augustine, Althaf Hussain	Students	Director's Honors	Amal Jyothi College of Engineering

24. List of eminent academicians and scientists/visitors to the department

Name	Designation	Organisation/Industry/Department

Mr. Sujit Banerjee	Scientist 'F'	Department of Science and Technology
Dr. Ragendra Jagdale	Additional Chief Secretary	Govt. of Maharashtra & Director General, STEP, Pune University
Mr. K. C. Chandrasekharan Nair	CFO	Technopark, Trivandrum
Mr. Shaji Mathew	Director	External Services (South Asia), Volvo India(Passenger Car)
Mr. K. Nandakumar	Head, Customer Service	Volvo India Private Limited
Mr. Anantha Narayanan	Managing Director	PSN Automobiles Private Limited
Mr. Sanjeev Kumar	DGM Corporate	PSN Automobiles Private Limited
Mr. Ganapathy	Senior Executive	Training, Royal Enfield, Chennai
Mr Anoop	Service Trainer	Royal Enfield, Chennai
Mr. Thanikaivel	Service Trainer	Bajaj Auto Limited, Pune

25. Seminars/ Conferences/Workshops organized & the source of funding
    a) National   :

Topic	Seminars/Conferences/Workshop/FDP	Year	Funding Agency
Two Wheeler Maintenance	Workshop	2013	Bajaj Auto Limited
Entrepreneurship	Faculty Development Programme	2013	DST, Govt. of India.
Design & Development	Workshop	2013	Royal Enfield
Product Modelling through Software practices	Technology Based Entrepreneurship Development Programme	2013	DST, Govt. of India.
Entrepreneurship	Awareness Camp	2013	DST, Govt. of India.

Systematic approach to Automobile Engine and Chassis components	Entrepreneurship Development Programme	2013	DST, Govt. of India.
Intellectual Property Rights	Workshop	2013	KSCSTE. Govt. of Kerala.
All Kerala project contest "Yuva Mastermind	All Kerala project contest	Every year	AJCE & Malayala Manorama Daily
Innovation Ideas Unleashed contest (I^2U)	Annual Project contest	Every year	AJCE
Entrepreneurship	Faculty Development Programme	2014	DST, Govt. of India.

 b) International   NIL

26. Student profile programme/course wise:

Year	Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
2009- 10	B. Tech - AUE	18	18	18	--	11.76
2010- 11	B. Tech - AUE	63	63	63	--	NA
2011- 12	B. Tech - AUE	37	37	37	--	NA
2012- 13	B. Tech - AUE	52	52	52	--	NA
2013 -14	B. Tech - AUE	53	53	53	--	NA

27. Diversity of Students

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2009- 10	B. Tech - AUE	100	NIL	NIL
2010- 11	B. Tech - AUE	100	NIL	NIL
2011- 12	B. Tech - AUE	100	NIL	NIL
2012- 13	B. Tech - AUE	100	NIL	NIL
2013 -14	B. Tech - AUE	100	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defence Services, etc.? : NIL

29. Student progression

Student progression	Against % enrolled				
	2009-10	2010-11	2011-12	2012-13	2013-14
UG to PG	5.88%	----	----	----	----
PG to M.Phil.	NA	NA	NA	NA	NA
PG to Ph.D.	NIL	----	----	----	----
Ph.D. to Post-Doctoral	NIL	----	----	----	
Employed • Campus selection • Other than campus recruitment	NIL 52.9%	----	----	----	----
Entrepreneurship/Self-employment	NIL	----	----	----	----

30. Details of Infrastructural facilities
   a) Library   : No of Texts-210, News Papers-2
   Magazine   : 2
   b) Internet facilities for Staff &
      Students   : Total 100 MBPS with Wi-Fi facility
   c) Class rooms with ICT facility   : 4
   d) Laboratories   : 1. Automobile heat engines laboratory
                                           2. Automobile computer laboratory
                                           3. Auto chassis laboratory
                                           4. Fuels and lubricants laboratory
                                           5. Auto electrical and electronics
   laboratory
                                           6. Cam laboratory
                                           7. Vehicle re-conditioning laboratory
                                           8. Mechanical engineering laboratory (Common
   with ME)
                                           9. Electrical and electronics laboratory
   (Common with EEE)
                                           10. Fluid mechanics laboratory (Common with
   ME)
                                           11. Machine shop (Common with ME)
                                           12. Mechanical measurements laboratory
   (Common with ME)
                                           13. Strength of materials laboratory (Common

with CE)

31. Number of students receiving financial assistance from the College, University, Government or other agencies

Batch	No. of Students
2009-2013	6
2010-2014	7
2011- 2015	5
2012- 2016	5
2013- 2017	3

32. Details on student enrichment programmes (special lectures/ workshops /seminar) with external experts :

Sl.#	Topic	External Expert
1	Importance of a good project and job opportunities	Mr. Kevin D J, Kairali Ford
2	Group Discussion & Interview	Mr. Benson Thomas, Trainer
3	Education a student perspective	Mr Joseph James, IAS Academy Student
4	Challenges of an Entrepreneur	Mr. George Kulangara (Chairman Labor India Group, Marangattupilly)
5	Business plan preparation	Mr. Jijo P, HR- Manager, Sunny Diamonds
6	Value-based Entrepreneurship	Mr. Benson Thomas George(CEO- Rise-High)

33. Teaching methods adopted to improve student learning   :
   1. Visual aids for learning by using power point presentations and videos
   2. Lab visits – to understand the concepts deeper.
   3. Old school method using Black board and chalk

4. Classroom demonstration of equipment, parts and demo-models for better understanding.
5. Real life problem solving for making them good designers apt for the industry.
6. Industrial visits / training related to the topics of study
7. Invited lectures by academicians, industrialists, entrepreneurs and the alumni.
8. Seminars, Assignments and Case studies

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:

Sl.#	No of Students	Address of the Workplace/Social Activity location	Year	No. of days	Activities done
1	9	Neezhoor Grama Panchayat, Neezhoor P.O., Kottayam Dst.	2013	15	Cleaned drainage, Constructed roads, helped an orphanage
2	15	Sevanavaram at Kalanjoor Gramapanchayat, Ward XX, Kalanjoor Panchayat, Pathanapuram, Pathanamthitta Dst	2013	15	Sevanavaram, Cleaning activities,awareness classes
3	1	Bethlehem Abhaya Bhavan, Perumbavoor, Ernakulam Dst	2013	15	Cleaning, transportation of requirements

35. **SWOC analysis of the department and Future Plans**

Strengths	Well- qualified faculty and staff
	Full-time faculty teach most classes, and there is a strong bond and a high level of interaction between the faculty and students
	Adequate infrastructure
	Adequate lab facilities
	Well furnished classrooms
	Projectors fitted in every classrooms
	Operation of Volvo-Eicher training facility
	Entrepreneurship awareness activities
Weaknesses	University results are to be improved
	Placements also are to be improved
	University syllabus is not up-to-date suiting the requirements of the industry
	Communication skills of some of the students are to be improved, as they have had their schooling in Malayalam medium schools.

Opportunities	More tie-ups with automobile majors Faculty-exchange programmes with foreign universities Student-exchange programmes with foreign universities Automobile servicing centre in the department itself, for servicing the vehicles of the public.
Challenges	College is located in a rural area Railway station is located about 50 kms & airport about 100 kms away. Lack of major Automobile manufacturing facilities in Kerala
Future plans	Tie-ups with Automobile majors Increase the number of placements Developing an Automotive Skill Development Centre on the campus in association with Industry partners. Developing communication skills of students imparting continuous training. More guest-lectures by eminent industrialists and educationalists Improving the academics of the students

2. Department of Civil Engineering

1. Name of the department :   Civil Engineering
2. Year of Establishment :   2006
3. Names of   Programmes /Courses
   Offered (UG, PG, M. Phil., Ph.D.,   UG: B. Tech.
   Integrated Masters; Integrated   PG: M. Tech- Structural Engineering and
   Ph.D., etc)   :   Construction Management
                                                M. Tech- Computer Aided Structural
                                                                 Engineering

4. Names of Interdisciplinary courses
   and the departments/ units involved: Structural Analysis (Civil and Mechanical)
                                                  Fluid Mechanics (Civil and Mechanical)
                                                   AutoCAD (Civil and Mechanical)

5. Annual/ semester/choice based credit
   System (programme wise)   Semester wise
6. Participation of the department in the
   Courses offered by other departments

Course	Subject	Branch
All First Year Batches	Engineering Mechanics (EN010 104) Basic Civil Engineering (EN010 106)	Automobile Engineering Chemical Engineering Computer Science Engineering Electronics and Communication Engineering Electrical and Electronics Engineering Information Technology Mechanical Engineering Metallurgy
All Batches in Fourth Semester	Material Testing Lab	Automobile Engineering Mechanical Engineering Metallurgy

ADD-ON Courses

AutoCAD	● Drafting

ANSYS	● Analysis

7. Courses in collaboration with other
   Universities, Industries, Foreign
   Institutions, etc.   Nil

8. Details of courses/programmes
   discontinued (if any) with reasons   Nil

9. Number of Teaching posts   (Calculation based on total students from
   Second Year onwards)

Designation	Sanctioned	Filled
Professors	3	3
Associate Professors	3	2
Assistant Professors	28	29

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. / Ph.D. / M. Phil. etc)

Name	No. of Years of Experience	Specialization	Designation	Qualification
Sr. Claramma Rosary	Academic:35 Years	Environmental Engineering	Professor & Head	M. Tech
Mr. T. K Georgekutty	Academic: 5 years Industry:31Years	Aeronautical Engineering	Professor	M. Tech
Mr. L. V. Prakashan	Academic: 6 years Industry: 31 years	Structural Analysis and Construction Management	Professor	M. Tech*

Dr. Mini Mathew	Academic: 11years	Ground Water Modelling	Assoc. Professor	PhD
Mr. Binu M Issac	Academic: 2 Years Industry: 20 Years	Structural Analysis and Design	Assoc. Professor	PhD*
Ms. Jiss Abraham	Academic: 8years	Structural Engineering	Asst. Professor	M. Tech
Ms. Jessy George	Academic: 6years	Structural Engineering	Asst. Professor	M. Tech
Ms. Dhanya Krishnan	Academic:6years	Structural Engineering	Asst. Professor	M. Tech
Ms. Annie Maria Issac	Academic:6years	Environmental and Water Resources Engineering	Asst. Professor	M. Tech
Ms. Soumya Anand	Academic:4years	Computer Aided Structural Design	Asst. Professor	M. Tech
Ms. Margret Sherin James	Academic: 10 years	Transportation Engineering	Asst. Professor	M. Tech
Ms. S. Minu	Academic: 2years	Remote Sensing	Asst. Professor	Ph D*
Mr. Bevin V Cherian	Academic: 2years	Structural Engineering	Asst. Professor	M. S
Ms. Jyothis George	Academic: 2years	Water Resources Engineering	Asst. Professor	M. Tech
Mr. C. S. Belarmin Xavier	Academic: 2.5 years Industry: 2 year	Construction Engineering and Management	Asst. Professor	M. Tech PhD*
Ms. Neenu K Mathew	Academic: 4years	Environmental Engineering	Asst. Professor	M. Tech
Ms. Linu Theresa Jose	Academic: 1year	Structural Engineering	Asst. Professor	M. Tech
Mr. Nirmal George	Academic: 1year	Structural Engineering	Asst. Professor	M. Tech
Mr. Jeena B Edayadil	Academic: 1year	Structural Engineering	Asst. Professor	M. Tech

Mr. Jose Joseph	Academic: 1year	Transportation Engineering	Asst. Professor	M. Tech
Mr. George Mohan	Academic: 1year Industry: 3 years	Transportation Engineering	Asst. Professor	M. Tech
Mr. Deepak John Peter	Academic: 1year Industry: 1 year	Transportation Engineering	Asst. Professor	M. Tech
Mr. Dharmesh Lal	Academic: 1 year	Geotechnical Engineering	Asst. Professor	M. Tech
Mr. George M Varughese	Academic: 1 year	Structural Engineering	Asst. Professor	M. Tech
Ms. Priya Philp	Academic:0.2 year	Water Engineering and Management	Asst. Professor	M. Tech
Ms. Anitta P Jose	Academic: 0.2 year	Energy and Environment	Asst. Professor	M. Tech
Ms. Deepthi I Gopinath	Academic: 0.2 year	Marine Structures	Asst. Professor	M. Tech
Ms. Sharon Jacob	Academic:0.2 year	Transportation Engineering	Asst. Professor	M. Tech
Mr. Kiran S Padiyara	Academic: 0.2 year	Geo Informatics	Asst. Professor	M. Tech
Ms. Maria Michael	Academic: 0.2 year	Construction Management and Technology	Asst. Professor	M. Tech
Ms. Minu M. M	Academic: 0.2 year	Structural Engineering	Asst. Professor	M. Tech
Anjana P	Academic: 2.5 year	Structural Engineering	Asst. Professor	M. Tech
Jency Sara Kurian	Academic: 0 year	Structural Engineering	Asst. Professor	M. Tech

* Currently doing

11. Percentage of lectures delivered and Practical classes handled (programme- wise) by temporary faculty   Nil

12. List of Senior Visiting Faculty: 1

13. Student -Teacher Ratio (programme-
    wise)   15:1   (Calculation based on total
                                                     Students from Second Year)

14. Number of academic support staff (technical) and administrative staff sanctioned and
    filled:

Post	Sanctioned	Filled
Workshop Instructor	1	1
Lab Assistant	9	8
Site Supervisor	1	1
Administrative Assistant	1	1

15. Qualifications of teaching faculty
    with DSc/ D. Litt/ Ph. D/ MPhil / PG.   : PhD: 1+3*, PG: 30

16. Number of faculty with ongoing   :
    Projects from a) National
     b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants
    received

Project Title	Total Grants Received (Rs.)	Funding Agency
Water Quality Assessment in Manimala River during Sabarimala Season	12,500	KSCSTE
Development of Natural Rubber Latex Modified Concrete and Effect of Nano Graphite on Compressive Strength of Concrete	12,500	KSCSTE
Development of Natural Rubber Latex Modified Concrete		

and Effect of Nano Silica on Compressive Strength of Concrete	12,500	KSCSTE
Waste Water Treatment by Vetiver System	1,00,000	IEDC
Study on the properties of natural rubber latex and nano-graphite modified concrete	10,000	I^{2}U (College)
STABILIZATION OF SUBGRADE CLAYEY SOIL USING FLY ASH AND COIR GEOTEXTILE	10,000	I^{2}U (College)
USE OF LATHE WASTE AS STEEL FIBER REINFORECED CONCRETE	10,000	I^{2}U (College)

18. Research Centre /facility recognized by the University: Nil
19. Publications:

    a) Publication per faculty   1.21

    b) Number of papers published in peer reviewed journals (national /international) by faculty and students: 38

∗ Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

             : NIL.

∗ Monographs   : 17
∗ Chapter in Books   : NIL
∗ Books Edited   : NIL
∗ Books with ISBN/ISSN numbers
    with details of publishers   : NIL
∗ Citation Index   : NIL
∗ SNIP   : NIL
∗ SJR   : NIL
∗ Impact factor   : NIL
∗ h-index   : NIL

20. **Areas of consultancy** and income generated   :

Income Generated (Financial year)	Income Generated (Financial year)	Income Generated (Financial year)	Income Generated (Financial year)	Income Generated (Financial year)	Income Generated (Financial year)	Item
2013-2014	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009	
Rs.52,500	Rs.105,100	Rs.131,750	Rs.132,550	Rs.143,500	Rs.180,250	Land survey using total station
175800	RS.134,850	Rs.75,550	Rs.120,000	Rs.41,750	-	Maintenance of lab equipment
Rs.97300	Rs.22,450	Rs.75,550	Rs.6900	Rs.3300	Rs.900	Lab consultancy work in AJCE
-	-	Rs.22,500	-	-	-	Consultancy work related to building construction
All civil engineering works as per request from self- governing bodies undergo a big consultancy work with block Panchayath from which we will get 3% of the total amount as consultancy charge. Project cost is very high. It is from Jalanidhi project of the government						

21. Faculty as members in

    a) National committees b) International Committees c) Editorial Boards

Committee/Board	National/ International	Designation	Name of the Faculty
Institution of Engineers India (IEI)	National	Life Fellow	Sr. Claramma Rosary
Indian Society of Technical Education (ISTE)	National	Life Member	Sr. Claramma Rosary

		National Council	
Indian Road Congress	National	Member (2009-2010)	Prof. T. K. Georgekutty
Indian Road Congress	National	Member	Prof. T. K. Georgekutty
Indian Building Congress	National	Member (Life)	Prof. T.K. Georgekutty
Institution of Valuers India	National	Life Fellow	Prof. T. K. Georgekutty
Institution of Engineers India	National	Life Fellow	Prof. T. K. Georgekutty
Institution of Engineers India	National	Member	Dr. Mini Mathew
Institution of Engineers India	National	Associate Member	Jessy George

22. Student projects
    a)   Percentage of students who have
          done in-house projects including inter
          departmental/programme   100%
    b)   Percentage of students placed for
          Projects in organizations outside the
          Institution i.e.in Research laboratories/
          Industry/ other agencies   NIL
23. Awards / Recognitions received by
    Faculty and students

Faculty/Staff Awards:

Year	Award	Name
2008-09	Best Faculty Award	Ms Jiss Abraham
2009-10	Best Faculty Award	Ms Jiss Abraham

2012-13	Best Faculty Award	Ms Margaret Sherin Joseph
2013-14	Best Faculty Award	Ms. Annie Maria Issac
2011-12	Best Lab staff Award	Ms. Sheena P. Abraham
2013-14	Best Lab staff Award	Ms. Sheena P. Abraham

Student Awards:

Semester/Category	Award	Name	Batch
S1S2	AJCE Faculty scholarship	Reena Elizebeth John	2013-2017
S4	AJCE Faculty scholarship	Bella Rose Tom	2012-2016
S6	AJCE Faculty scholarship	Anu Susan Joseph	2011-2015
S1S2,	AJCE Faculty scholarship	Shaise K John	2012-16
S1S2 & S3	AJCE Faculty scholarship	Nivea Thomas	2011-15
S4,S5	AJCE Faculty scholarship	Reshma Thankachan	2011-15
S3,S4,S5,S6,S7,S8	AJCE Faculty scholarship	Sherry Rose Jose	2010-14
S1S2	AJCE Faculty scholarship	Nithin Thomas Sam	2010-14
S1S2 & S5	AJCE Faculty scholarship	Christy Jose	2009-13
S3,S6	AJCE Faculty scholarship	Roshni Ramachandran	2009-13
S4,S8	AJCE Faculty scholarship	Elvi Maria Emmanuel	2009-13

S7	AJCE Faculty scholarship	Arunima L. George	2009-13
S1S2,S3,S6,S8	AJCE Faculty scholarship	Jeenu Mathai	2008-12
S4,S5	AJCE Faculty scholarship	Tina Maria Sunny	2008-12
S7	AJCE Faculty scholarship	Aparna Ben	2008-12
S1S2,S3,S4,S5,S6,S7,S8	AJCE Faculty scholarship	Bijo M.D	2007-11
S1S2	Annamma & Mathew Vattakkunnel memorial scholarship	Shaise K John	2012-16
S1S2	AJCE Faculty scholarship	Nivea Thomas	2011-15
S1S2	AJCE Faculty scholarship	Jillu Jose	2011-15
S1S2	AJCE Faculty scholarship	Akhila Jobie Eapen	2011-15
Crown of AJCE	Linsa Anie Abraham memorial scholarship	Jeenu Mathai	2008-12
GEM OF AJCE	Special Awards	Elvi Maria Emmanual	2009-13
Crown of AJCE	Linsa Anie Abraham memorial scholarship	Sherry Rose Jose	2010-2014

24. List of eminent academicians and scientists / visitors to the department:

Organization/Industry/Department	Designation	Name
Habitat Technology Group	Founder and Chief Architect	G. Shankar
Rajeev Gandhi Institute of Technology, Pampady, Kottayam	Prof & Head, Department of Civil Engineering	Dr. Bino I Koshy
Qatar Aluminum Company , QUTALUM	Head of Environment	Mr. Joy Abraham M.

		Tech
Mar Athanasios College of Engineering, Kothamangalam	Professor	Dr. Mathews M.Paul
Centre For Earth Science Studies	Scientist	Mr. B. K Jayaprakash
Civil Engineering Department, NITC	Professor	Dr. V Mustafa
HOD, Civil Engineering, Vidya Academy of Science and Technology	Professor	Prof. K.V. Leela
Center for Water Resources Development and Management	Scientist E2	Dr. George Chakacherry
Ultra Tech Cements, Cochin	Technical Manager	Er. M. A. Joseph
PWD-Tamil Nadu, Indian Institute of Technology , Madras	Retd. AEE, Technical Consultant	Dr. P K Suresh
RMC, Ready Mix, Cochin, Indian Concrete Institute, Cochin Chapter	Manager, Technical, President	Er. Shelly S Fernandez
RMC, Ready Mix, Bangalore	Technical Person	Mr. Ravi Prakash
Reliance Industries, Recrone Wing	General Manager	K.R.S. Narayanan

25. Seminars/ Conferences/Workshops organized & the source of funding:
   a) National   :

Funding Agency	Year	Seminars/Conferences/ Workshop/FDP	Topic
Department of Civil Engineering, AJCE	2014	Seminar	Integrated Water Resource management
Department of Civil Engineering, AJCE	2013	Seminar	Construction Engineering
Department of Civil Engineering, AJCE	2013	Seminar	Ready Mix Concrete

Department of Civil Engineering, AJCE	2012	Seminar	Recent Advances in Civil Engineering
ISTE	2011	FDP	Recent Advancements in Civil Engineering
Department of Civil Engineering, AJCE	2010	Seminar	Applications of Geoinformatics in Civil Engineering
Department of Civil Engineering, AJCE	2009	Video seminar	Modern Construction Methods

b) International   NIL

26. Student profile programme/ course wise:

Pass Percentage	Enrolled		Selected	Applications received	Name of the Course/programme
	*F	*M			
75.8	41	21	62	3235(Total)	B. Tech.(2008-2009)
82.5	37	27	64	2586(Total)	B. Tech (2009-2010
82.2	59	36	95	405	B. Tech (2010-2011)
NA	52	39	90	319	B. Tech (2011-2012)
NA	72	53	125	275	2012-2 013 (50% Management quota only)
NA	74	50	124	302	2013-2014(50% Management quota only)
NA	72	53	126	277	2014-2015(50% Management quota only)
NA	18	5	24	50	M Tech 2012-2013(SECM)
NA	15	9	24	75	M. Tech 2013-2014(SECM)
NA	15	8	23	45	M. Tech 2014-2015(SECM)

| NA | 8 | 1 | 9 | 25 | M. Tech 2014-2015(CASE) |

27. Diversity of Students

Percentage of students from abroad	Percentage of students from other States	Percentage of students from the same state	Name of the Course
0	0	100	Civil Engineering (2006-2010)
0	0	100	Civil Engineering (2007-2011
0	0	100	Civil Engineering (2008-2012)
0	0	100	Civil Engineering (2009-2013)
0	0	100	Civil Engineering (2010-2014)
0	0	100	Civil Engineering (2011-2015)
0	0	100	Civil Engineering (2012-2016)
0	0	100	Civil Engineering (2013-2017
0	0	100	M Tech 2012-2013 (SACM)
0	0	100	M. Tech 2013-2014(SACM)
0	0	100	M. Tech 2014-2015(SACM)
0	0	100	M. Tech 2014-2015 (CASE)

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

TANSET	GATE	Batch
	1	2006-2010
4	5	2007-2011
5	8	2008-2012
4	15	2009-2013
5	13	2010-2014

29. Student progression:

Against % enrolled	Student progression
3.5	UG to PG (2006-2010)
56	UG to PG (2007-2011)
42	UG to PG (2008-2012)
30	UG to PG (2009—2013)
30	UG to PG (2010—2014)
2 Nos	PG to Ph.D.

30. Details of Infrastructural facilities

a) Library: No. of Text books: 1100, Monographs: 17, Collection of previous year
   university question papers with solved answers, Series exam question papers,
   Internet facility for staff and students   Total 100 MBPS with Wi-Fi facility
   c) Class rooms with ICT facility   :   8
   d) Laboratories: 1. Survey Laboratory
                            2. Geotechnical Laboratory
                            3. Computational Labs
                            4. Material Testing-I Laboratory
                             (Common to CE, ME, AUE & MTG)
                            5. Transportation Laboratory
                            6. Environmental Laboratory
                            7. Fluid mechanics laboratory (Common with ME)
                            8. Material testing Laboratory -II

31. Financial assistance from the College, University, Government or other agencies:

a)   Amal Jyothi Educational and Charitable Society

2014-2015	2013-2014	2011-2012	2010-2011	Batch
7	9	10	3	No of students

b)   Merit Cum Means Scholarship instituted by the state government for providing financial
   assistance to minority community students.

No of students who availed scholarship	Students Intake	Batch
	57	2006- 2010
	63	2007-2011
	64	2008-2012

	62	2009-2013
3	91	2010-2014
2	90	2011-2015
3	120	2012-2016

32.   Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- A 'health awareness class' was given to all students by Dr .P. J Joseph ,Director, Radiation Safety, Govt. of India in association with the Civil Dept.

- As part of the Social service and community interaction programme, the Department made a visit to Prathyasa Bhavan, Kunnamthanam, a charity institution with socially backward, mentally retarded, poor, handicapped people, also are given proper care and consideration. There was an attitudinal change in the students after the visit.

- A seminar on 'Application of geo-informatics in civil Engineering' was held for 2nd 3rd & 4th year students. The talk was led by Scientist (Centre for Earth Science Studies) Mr. BK Jayaprasad. The students were introduced to the topics of GIS, Remote Sensing Surveying etc. Field exposure in GPS also was given to the students.

- A one-day workshop was held on 18th July, 2014 for the final year B. Tech and M. Tech students, under the initiative of Indian Concrete Institute (ICI) and the Civil Engineering Department. The chief guest was Er. M. A Joseph, Ultra Tech Cements, who gave training on mix proportioning.
- A one day seminar was conducted on 21st July 2014 on "Research in Civil Engineering". Dr. P.K. Suresh, Retd. Asst. Executive Engineer (TN) was the resource person.
- A one day lecture on "Integrated Water Resources Management" was conducted on 27th August 2014 led by Dr. George Chackacherry, Scientist E and Head of CWRDM Trivandrum division.
- A one-day seminar was conducted on 18th September on " Fibre-reinforced concrete" Mr. K R S Narayan, General Manager, Recron Wing, Reliance Industries

- 12 of our pre final year students took a Finishing School course (Sunday batch) under the Indian Concrete Institute, Cochin
- An Induction programme of one day was given to the second and third year students by Eldos Paulose, a professional trainer in order to motivate the students in physical, mental and spiritual levels.

:

Add-on Courses:

Total Station (Pre-Final & Final Yrs)
AUTO CAD (5th Semester)
STADD (6th Semester)
PRIMAVERA: (6th Semester)
AUTODESK REVIT (7th Semester)
GATE Coaching (7th Semester)

33. Teaching methods adopted to improve student learning   :
   ● Blackboard-chalk,
   ● Presentations,
   ● Laboratory demonstrations and Experiments
   ● Videos to supplement teaching
   ● Group discussions
   ● Expert lectures by eminent faculties
   ● Showing models

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:
   ● Students have to conduct a community service as part of their syllabus in the pre-final year, during which they conduct various socially relevant works like solid waste management, water quality analysis etc
   ● To stimulate social commitment in students, they are encouraged to pay visits to orphanages, old age homes, cancer treatment centres etc.
   ● Before finishing the sixth semester students have to undertake a 15- day community activity programme   in order to shape their attitude towards life.
   ● All students have to undertake industrial training for 15 days in any reputed company to make them acceptable to the industry after completing B. Tech

35. **SWOC analysis of the department and Future plans:**

Strengths:

   ● The Department has high academic profile with more than 30 faculty members and supporting staff

   ● Faculty members are post graduate degree holders in different specializations of Civil Engineering.

- Faculty members have experience working in the industry, academic institutions and research centres. The vast exposure in these areas helps in providing solutions to many of the practical problems in Civil Engineering.

- The department has well-equipped laboratories. This helps in carrying out consultancy works.

- Classrooms are technology-enabled with LCD projectors. These enable faculty members and students to make presentations on important topics.

- Specialized trainings and workshops are organized for the faculty, which enable them to get updated on recent trends and innovations in different areas of Civil Engineering.

- The department has access to some of the high impact factor journals which again allow faculty members to stay tuned to some of the cutting-edge research works carried out elsewhere.

- The department undertakes special teaching initiatives for weak students.

- Students aspiring for higher studies are supported with the GATE coaching classes, organized by the department.

Weaknesses:

- The department still finds it difficult to retain adequate number of faculty members in each specialized area of Civil Engineering.

- Inadequate soft skills of faculty members.

Opportunities:

- Industrial trainings and internships for students in outside industry.

- The College offers conducive atmosphere for students to excel in their studies.

- The high demand for Civil engineering among students in recent times

Challenges:

- Improving the quality of students with better analytical and reasoning skills.

- Attracting good students to the College in spite of tight competition from other colleges

Future Plans:

- Conduct more soft skill development programs.

- Initiate frequent training programmes on analytical and logical reasoning for students and conduct of multi faceted student development programmes

- Inculcate a research culture among faculty members and attract more research funding from different agencies

- Make the Department one of the best Civil Engineering Departments in the State

- Make Industry-Institution interaction strong enough by conducting more classes/seminars/workshops led by experts from the construction sector.

3. Department of Computer Science & Engineering

1. Name of the department: Computer Science & Engineering
2. Year of Establishment: 2001
3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph. D etc)

Sl. No.	Name of Programmes	Course Duration
1	B. Tech Computer Science & Engineering	4 Years
2	M. Tech Computer Science & Engineering	2 Years

4. Names of Interdisciplinary courses and the departments/units involved

Sl. No.	Name of Course	Course Code	Semester	Name of Department
1	All courses of B. Tech First Year	EN10101-EN10111	S1S2 CSE	Basic Sciences, Humanities, CE, ECE, EEE, ME,
2	Engineering Mathematics II	EN010301 B	S3 CSE	Basic Sciences
3	Economics and Communication Skills	EN010 302	S3 CSE	Humanities
4	Switching Theory and Logic Design	CS010 305	S3 CSE	ECE
5	Electronics Devices and Circuits	CS010 306(EC)	S3 CSE	ECE
6	Logic Design Lab	CS010 308	S3 CSE	ECE
7	Engineering Mathematics III	EN010401	S4 CSE	Basic Sciences
8	Signals and Communication Systems	CS010 404	S4 CSE	ECE
9	Electronic Circuits and Communication Lab	CS010 408(EC)	S4 CSE	ECE
10	Engineering Mathematics IV	EN010501 B	S5 CSE	Basic Sciences
11	Principles of Management	EN010 502(ME)	S5 CSE	Humanities
12	Digital Signal Processing	CS010 504(EC)	S5 CSE	ECE
13	Hardware and Microprocessors Lab	CS010 508	S5 CSE	ECE
14	Computational Intelligence	MCSCS101	S1 M. Tech CSE	Basic Sciences

5. Annual/ semester/choice based credit system (programme wise)

Sl. No.	Name of Programmes	
1	B. Tech Computer Science & Engineering	Semester based credit system
2	M. Tech Computer Science & Engineering	Semester based credit system

6. Participation of the department in the courses offered by other departments

Sl. No.	Name of Programme	Semester	Name of Course	Course Code
1	B. Tech ECE	3rd	Computer Programming	EC010 306
2	B. Tech ECE	3rd	Programming Lab	EC010 308
3	B. Tech CE	5th	Computer Programming	CE010 502
4	B. Tech CE	5th	Computing Techniques Lab	CE010 507
5	B. Tech MT	3rd	Programming in C	MT010 305
6	B. Tech MT	3rd	Computer Programming Laboratory	MT010 307

7. Courses in collaboration with other universities, industries, foreign institutions, etc.   NIL

8. Details of courses/programmes discontinued (if any) with reasons   NIL

9. Number of teaching posts

Posts	Sanctioned	Filled (2014)	Filled (2013)
Professors	1	1	2
Associate Professors	0	0	0
Asst. Professors	25	25	28

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil.

Name	Quali-fication	Desgn. P-Prof., AP-Asst. Prof.	Specialization	Years of Experience		No. of Ph. D Students guided during the last 4 years
				In AJCE	Other Inst.	
Manoj T Joy	M. Tech, Ph D*	P	Network Communication & Security	11.1	1	--
Shiney Thomas	M. Tech	AP	Network Communication & Security	10.9	1.3	--

Resmipriya M.G.	ME	AP	Computer Science and Engineering	6.8	0	--
Santhoshkumar G S	M. Tech	AP	Computer & Communication	8	0.5	--
Syam Gopi	ME	AP	Computer Science and Engineering	5.6	5	-
Elisabeth Thomas	ME	AP	Computer Science and Engineering	4.8	11 months	-
Ashji S Raj	M. Tech	AP	Cyber Security	4.7	0	-
Jerin Thomas	ME, Ph D*	AP	Computer Science and Engineering	4	3	-
Anishamol Abraham	ME	AP	Computer Science and Engineering	3.7	4 months	-
Niya Joseph	M. Tech	AP	Computer Science and Engineering	3.4	0	-
Tintu Alphonsa	M. Tech	AP	Software Engineering	3.4	0	-
Sumy Joseph	M. Tech	AP	Software Engineering	3.3	6 months	-
Jayakrishna V	M. Tech, Ph D*	AP	Computer and Information Technology	3.3	2. 1	-
Neenu R	ME	AP	Computer Science and Engineering	3	0	-
Ansamol Varghese	ME	AP	Computer Science and Engineering	3	2.5	-
Krishnalal. G	ME, Ph D*	AP	Computer Science and Engineering	2.7	8	-
Neethu C Sekhar	M. Tech	AP	Computer Science & Information Systems	2.7	1 month	-
Anjana V	M. Tech	AP	Computer Science and Engineering	2.1	5 months	-
Sruthi.S	M. Tech	AP	Computer and Information Science	2.1	6 months	-

Sharon Sunny	M. Tech	AP	Computer Science and Information	2.1	2 months		-
Deepu Benson	ME	AP	Computer Science and Engineering	1.6	2.6		-
Teenu Therese Paul	M. Tech	AP	Computer Science and Engineering	7 months	1		-
Shany Jophin	M. Tech	AP	Computer Science and Engineering	7 months	1		-
Sunil K.S	M. Tech Ph. D*	On Study Leave					
Arun K.S	M. Tech Ph. D*	On Study Leave					

11.　List of senior visiting faculty　　　　　　　　　　　　　NIL

12.　Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty　　　　　　　　　　　　　　　　　　　NIL

13.　Student -Teacher Ratio (programme wise)

Programme	S-T Ratio
B. Tech	15:1
M. Tech	12:1

14.　Number of academic support staff (technical) and administrative staff; sanctioned and filled

Posts	Sanctioned	Filled
Support staff (technical)	6	6
Administrative staff	2	2

15.　Qualifications of teaching faculty with D. Sc/ D. Litt/ Ph. D/ M. Phil / PG.

Qualification	Number of faculties
PG	25
Ph. D	2*+ 4#

* doing PhD (On leave), # doing PhD

16.　Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

National	International
1	NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Projects	Funding Agency	Grants
R4radio	IEDC-NSTEDB	Rs.1 lakh
Web Doctor	IEDC-NSTEDB	Rs.1 lakh

18. Research Centre /facility recognized by the University   NIL

19. Publications:
    * a) Publication per faculty: 2.15
    * Number of papers published in peer reviewed journals (national / International) by faculty and students: 15
        * Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
            * Monographs
            * Chapter in Books
            * Books Edited
            * Books with ISBN/ISSN numbers with details of publishers
            * Citation Index
            * SNIP
            * SJR
            * Impact factor
            * h-index

Name	Publications	No: of Publications listed in international databases	Monographs	Chapter in books	Books edited	Books with ISBN/ISSN No.	Citation index	SNIP	SJR	Impact Factor	h-index
Prof. Manoj T Joy	9(C), 3(J)	1									
Shiney Thomas	8(C), 5(J)	3					1				1
Resmipriya M G	1(C), 1(J)										
Santhoshkumar G.S	4(C), 4(J)	1									
Syam Gopi	5(C) 2(J)										
Elisabeth Thomas	1(C)										
Ashji S Raj	1(C)										
Jerin Thomas	1(C), 1(J)										
Anishamol Abraham	3(C)										
Niya Joseph	5(C), 2(J)										
Tintu Alphonsa Thomas	1(C), 3(J)										
Sumy Joseph	5(C), 3(J)										
Jayakrishna V	6(C), 7(J)	1									
Neenu R	1(C), 2(J)										
Ansamol Varghese	1(C)										
Krishnalal.G	4(C), 4(J)										
Neethu C Sekhar	4(J)										
Anjana V	1(C)										

Sruthi S	1(C)											
Deepu Benson	1(C), 2(J)											
Teenu Therese Paul	3(C), 1(J)											
Shany Jophin	1(C), 1(J)											

C- Conference/s, J- Journal/s

20. Areas of consultancy and income generated: NIL

21. Faculty as members in
    a)National committees b) International Committees c) Editorial Boards

Committees	Name of Faculty	Description
National committees	NIL	
International Committees	NIL	
Editorial Boards	Prof. Manoj T. Joy	International Journal- IJERA

22. Student projects
a) Percentage of students who have done in-house projects including inter departmental/programme
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Name of Programme	Year	In-house Projects (in %)	Project done in outside organizations (In %)
B. Tech CSE	2009-2010	100	--
	2010-2011	100	--
	2011-2012	100	--
	2012-2013	100	--
	2013-2014	100	--
M. Tech CSE	2011-2012	44	56
	2012-2013	67	33
	2013-2014	100	--

23. Awards / Recognitions received by faculty and students:
    Faculty Awards/Recognitions

Sl.	Name	No of Awards
1	Prof Manoj T Joy	3
2	Ms. Shiney Thomas	2
3	Mr. Arun K S	1
4	Mr Sunil K S	2
4	Mr. Santhoshkumar G S	1
5	Mr. Deepu Benson	1
6	Mr. Krishnalal G	1

Student Awards/Recognitions

Name	Batch	Event Name	Category	Date	Venue	Prize/Awards
Shafeena Basheer	M Tech 2011-2013	MG University Rank	Academic	-	-	First
Tina Maria Thomas	M. Tech 2012-2014	MG University Rank	Academic	-	-	Third
Joe Cherri Ross	2002-2006	GEM of AJCE 2006	Overall Topper	-	AJCE	Overall Topper
Jishnu Murlikrishna	2010-2014	National Level Robotics Championship	Robotryst	2-5 March 2012	IIT Kharagpur	Second
Francis Alexander, Alex Thomas	2012-2016	Dyuthi'15	Black Track	19-21 Feb 2015	Govt. Engg College, Thrissur	First
Francis Alexander, Joe N Sabu	2012-2016	Dyuthi'15	Ultimate Geek	19-21 Feb 2015	Govt. Engg College, Thrissur	Second
Francis Alexander, Joe N Sabu, Joel Varghese Joy	2012-2016	Dyuthi'15	Capture The Flag	19-21 Feb 2015	Govt. Engg College, Thrissur	Second
Joe N Sabu	2012-2016	Dyuthi'15	Play Along	19-21 Feb 2015	Govt. Engg College, Thrissur	Second
Amal Krishna	2012-2016	Dyuthi'15	Web Bully	19-21 Feb 2015	Govt. Engg College, Thrissur	First
Thomas Mathew	2013-2017	NAKSHATRA '15	Android App Development	23-01-15	Saintgits College of Engg, Kottayam	Second

Delma Varghese, Fathima Zaya Imthiaz, Dhanya Mary George, Geethu Alphonsa Thomas, Treesa Joy, Riya Rose Sebastian	2013-2017	NAKSHATRA '15	Amazing Race	22-01-15	Saintgits College of Engg, Kottayam	Third
Stephinmon Antony, Loveena Mathew, Sanjana Joshy	2011-2015	Ajce-ISTE Best Final Project	Audio Enabled Dictionary	Aug-Sept 2014	Amal Jyothi College of Engg., Kanjirapally	Second
Scaria Dixon, Ben George	2013-2017	NAVIGATOR'14	Quiz	27,28-08-14	Marian College Kuttikanam	Second
Selin C Oommen, Tess Zacharas	2011-2015	Azure	Broadway	14-16 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	First
Maria Thomas Thrian, Faizal Ashraf, Sanjana Joshy, Shilpa Susanna Mathew	2011-2015	Nakshatra	Ethnicity	28th Feb - 1st March 2014	Saintgits College of Engg., Kottayam	First
Anjali Tom	2010-2014	Nakshatra	Mr and Mrs Nakshatra	28th Feb - 1st March 2014	Saintgits College of Engg., Kottayam	Second
Jerry Kurian Mathew, Joemon Jacob	2010-2014	Lumiere'14	C Debugging	10-11 Feb 2014	College of Engineering, Kidangoor	Second
Stephinmon Antony, Tony Thomas	2011-2015	CSI Regional Student Convention –	Scramble	6-7 Sept 2013	Rajagiri School of Engineering and Technology Kochi	First
Allen M Mathew	2011-2015	Azure 13	C-Cryptex	14-17 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	Second
Allen M Mathew	2011-2015	Azure 13	Tech-o-casa	14-17 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	Second

Jewel John, Albin P Albert, Amal Paul, Jishnu Muralikrishnan	2010-2014	Ascend 2013	Arcade Raider	2 Aug 2013	Saintgits College of Engg., Kottayam	Second
Amal Krishna	2012-2016	Dyuthi'13 National Level Multi Fest	Web Bully	11-13 Sept 2013	Govt. Engineering College Thrissur	First
Francis Alexandar, Joe N Sabu	2012-2016	Dyuthi'13 National Level Multi Fest	Capture The Flag	11-13 Sept 2013	Govt. Engineering College, Thrissur	First
Francis Alexandar, Joe N Sabu, Allen Mathew	2012-2016	Dyuthi'13 National Level Multi Fest	Backtrack	11-13 Sept 2013	Govt. Engineering College, Thrissur	First
Joe N Sabu	2011-2016	Dyuthi'13 National Level Multi Fest	Ultimate Geek	11-13 Sept 2013	Govt. Engineering College, Thrissur	First
Sachin	2013-2017	ARENA 2014	Basketball	3-6 March 2014	Amal Jyothi College of Engg., Kanjirapally	Second
Tess Zacharias	2011-2015	Elartel 14	Short Story Writing	March 4-5 2014	Amal Jyothi College of Engg., Kanjirapally	Third
Haritha B	2009-2013	MG University Youth Festival	Light Music	26 Feb 2013	MG University	Second
Adarsh Mathew	2009-2013	MG University InterZone	Chess Tournament	26 Feb 2013	MG University	Runner Up
Tess Zacharias	2011-2015	Elartel 14	Poetry Writing	March 4-5 2014	Amal Jyothi College of Engg., Kanjirapally	Third
Tess Zacharias, Selin C Oommen	2011-2015	Rang De	Mime	15-16 March 2013	Amal Jyothi College of Engg., Kanjirapally	Third

24. List of eminent academicians and scientists / visitors to the department

Sl No	Date	Event	Academician/Speaker
	23-24 Nov-2010	General Informatics	Mr. Jacob Job (Superintendent of Police-Telecommunications)
1	26, 27 Nov 2010	Workshop on "Opportunities in Sponsored Research for Academic Institutes" "Thrust for Research in Academic Institutions: Need of the Hour"	Padmashri Prof. R. M. Vasagam, Outstanding Scientist, ISRO, and Former Vice Chancellor , Anna University.
		"Research Strategy Using TRIZ (Theory of Inventive Problem Solving - Systematic Innovation)"	Prof. P. Achutha Rao Professor, National Institute of Design, Bangalore
		"Tapping of Funds for R&D in Science & Technology Institutions"	Dr. P.I. Paulose Professor, R&D Department, Toc H Institute of Science and Technology, Ernakulam
		"Network Model for R&D Funding: Need of the Hour"	Dr. K. Gopalakrishnan Member – Board of Governors, National Design & Research Forum (NDRF), Bangalore
		"Funding Opportunities and Mission Projects of MHRD"	Dr. Samita Maitra Prof. and HoD, Dept. of Chemical Engg., BMS College of Engineering, Bangalore
		"Digital Manufacturing Technologies: Evolving Trends and R&D Opportunities"	Dr. U. Chandrashekhar, Additional Project Director, GTRE, Defence Research and Development Organisation (DRDO), Bangalore
	28-30 April 2011	AICERA 2011	Dr. M. K. Radhakrishnan,,Director – Nano Rel, Singapore
			Dr. Vinod Chandra S. S. Director, Computer Centre, University of Kerala
			Mr. Jitender Rawal, Senior Project Manager – Cognizant Technology Solutions
			Topic: Cloud Computing - Mr. Dileepan Moorkanat, L & D Manager, Hewlett Packard

			Topic: Cache Memory Design for Embedded Systems - Dr. T. S. B Sudarshan, Amrita Vishwa Vidya Peetham University Topic: General-Purpose Computation on Graphics Processing Unit -Mr. Chaitanya Adapa, VPG/IAG, Intel India Topic: Turnit-in - Mr. Sanjib Panigrahi, Group Infotech Mr. Man Mohan Kapur, Managing Director, SAPREV - South East Asia
2	21 Oct 2011	Bussiness Analytics	Dr. Reji Mathew, AVP (Analytics) GENPACT LLC
3	21-Sep-2013	Effective usage of Scientific Calculator	Mr Solomon George, Civil Engineer, Chief Quantity Surveyor in UAE
4	28-Sep-2013	CISCO Training	Mr. Thomas Dominic - BB TAC Engineer at CISCO Systems Bangalore, Mr. Guru Murthy A CISCO Systems.
5	5-Oct-2013	Creative Teaching	Mr. Abraham Kurian IPS(former DGP, Govt. of UP), Prof. Dr. Sabu Thomas (Director School of Chemical Science MG University) Rev. Dr. Tomy Tharayil (Director Danahalaya, Punnapra)
6	18-Jan-14	Carrier Guidance and Training Program	Mr.Nithin Chandy, Ms.Dona Sebastian , HR-IBS
7	24-Jan-14	Opportunities in Start-up village	Mr. Sreerag, Mr. Meera & Mr. Akash from Start -up village
8	27-Jan-214 to 01-Feb-2014	Android App Development	Aceware Technologies, Trivandrum
9	29-Jan-14	Cloud Computing	Mr. Arun Eapen , Red Hat ,IPSR
10	11-Feb-14	Cyber Security & Information Protection	Mr. Joseph Ponnoly, Cyber Security evangelist , USA
11	15-Feb-14	Effective usage of Scientific Calculator	Mr Solomon George, Civil Engineer, Chief Quantity Surveyor in UAE
12	18-19 March-2014	Ethical Hacking and Cyber Security	Mr. Manu Zacharia, Information Security evangelist, Creator & Chief Architect of Matriux - Asia's first Security & Penetration Testing Operating
13	29-Mar-14	CSI-AJCE Student Branch Inauguration	Mr. Sijo Kuruvilla George, CEO of Startup Village
14	19-Sept-2014	Two day National e-Seminar on Steps 2	Prof. Dr. D. B. Phatak Department of Computer Science, IIT Bombay

		Research	Project Coordinator Project - T10KT, NMEICT
		NMEICT activities and T10KT project in IIT B	Dr. Mukta Atrey (Senior Project Manager, Project T10KT
		Research issues in Massive IT literacy drive in India	Prof. Dr. Kannan M. Moudgalya, Department of Chemical Engineering, IIT Bombay
		Engineering Research, Incubation and Technology Transfer - The Technopark Story	Mr. G. Vijayaraghavan, Former CEO Techno Park, Member - State Planning Board Kerala
		Obstacles of Research	Dr. K. Alexander Principal, S.D. College, MG University
	20-Sept-2014	Management of Research Process - Philosophy & Practical Tips	Dr. Achuthsankar S. Nair, Centre for Bio Informatics, Trivandrum
		From Teaching to Research in Teaching, "The process of Action Research"	Dr. Sahana Murthy, CDEEP, IIT Bombay

25. Seminars/ Conferences/Workshops organized & the source of funding
   a) National   b) International

a)National Level:

Sl No.	Seminars/ Conferences/Workshops	Date	Source of Funding
1	Two-week ISTE Workshop on Cyber Security	10-20th July 2014	ISTE & Ekalavya@IIT Bombay, under National Mission on Education through ICT (MHRD, Govt. of India).
2	Two-week ISTE Workshop on Computer Networking	June-July 2014	
3	Two-week ISTE workshop on Computer Programming,	June 2014	
4	Two week ISTE workshop on Database Management Systems	May 21 – 31, 2013	
5	Aakash Android Application Programming Workshop for Students	23rd & 24th Feb and 2nd & 3rd March 2013	
6	Two-day ISTE workshop on Aakash for Education	Nov 10 – 11, 2012	
7	Two-Week ISTE workshop on Introduction to Research Methodologies	June 2012	
8	Two day ISTE workshop on Writing Papers for	18-19th	

	Technical Conferences	February 2012	
9	Two-week ISTE workshop on Software Development Techniques for Teachers of Engineering and Science Institutes	Nov 2011	
10	One-day National level Workshop on "A-View Training with Certification"	14th Dec 2012	Amritha E-Learning Lab, Kollam
11	Four-Days ISTE workshop on Aakash Android Application Programming	23-24th Feb,2-3rd March2013	ISTE Kerala Section
12	Creative Teaching	5-Oct-2013	ISTE Kerala Section
	Six-day LATEX -Document Typesetting Tool Workshop	7-8,11-12,19-20 Nov 2013	CSI Cochin Chapter
13	Ethical Hacking and Cyber Security	18th -19th February 2014	CSI, Cochin Chapter
14	2- day "Hands-on Workshop on OpenGL"	24th & 25th of March 2014	CSE & MCA Depts. AJCE
15	CEASTHA'14- Coding Competition	29th March 2014	CSI Cochin Chapter
16	Mozilla Firefox "APP DAY" and "WEBMAKER PARTY" Workshop...	5th April 2014	CSI Cochin Chapter
17	The CSI Golden Tech-Bridge Programme	9th August 2014	CSI Cochin Chapter
18	Two-day National e-Seminar on Steps 2 Research	19-20th Sept. 2014	ISTE Kerala Section & CSI Cochin Chapter
19	Six-day LATEX Document Typesetting Tool Workshop	1-4,22-23 Nov 2014	ISTE Kerala Section

b) International Level:

Sl No.	Seminars/ Conferences/Workshops	Date	Source of Funding
1	AICERA 2011, International Conference on Emerging Research Areas	28th -30th April 2011	Department & AJCE

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)		Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
B. Tech CSE	2010-2014	266	90	41	49	58.89
	2011-2015	311	91	25	66	--
	2012-2016	243	90	37	53	--
	2013-2017	286	111	55	56	--
	2014-2015	277	126	59	65	--
M. Tech CSE	2011-2013	18	18	3	15	100
	2012-2014	122	18	2	16	100
	2013-2015	69	24	5	19	--
	2014-2016	17	12	0	12	--

*M = Male   *F = Female

27. Diversity of Students

Name of the Course	Percentage of students from the same state	Percentage of students from other States	Percentage of students from abroad
B. Tech CSE	100%	--	--
M.Tech CSE	100%	--	--

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	Year	Exam	No. of students
B. Tech CSE	2010-11	GATE	3
		MAT	1
	2011-12	GATE	14
	2012-13	GATE	1
	2013-14	GATE	2
		MAT	3

29. Student progression

Student progression	Against % enrolled			
	2009-10 (64)	2010-11 (64)	2011-12 (62)	2012-13 (91)
UG to PG		28%	38%	25%
PG to M. Phil.		--	--	--
PG to Ph.D.		--	--	--
Ph.D. to Post-Doctoral		--	--	--
Employed • Campus selection • Other than campus recruitment		68% 4%	43% 17%	8% 14%
Entrepreneurship/Self-employment		4%	--	--

30. Details of Infrastructural facilities
    a) Library: Well established department library
        No of volumes: 1070
        No of titles: 447
    b) Internet facilities for Staff & Students: Fully Wi-Fi campus with 100 Mbps
    c) Class rooms with ICT facility: Available in all classrooms
    d) Laboratories:
        • Advanced Systems Lab,
        • Project Lab
        • Programming Lab
        • Hardware & Networking Lab
        • M Tech Lab

31. Number of students receiving financial assistance from the College, University, Government or other agencies.
        • Scholarships: AJECS,MCM,GATE-STIPEND (Sample entries listed below)

    AJECS

Batch	Name of student
2009-13	Hima Anns Roy, 2009 B.Tech – CSE
2009-13	Hima Anns Roy, 2009 CSE (S6)
2009-13	Roselin Joseph, 2009 CSE (S4)
2009-13	Sandra Elizabeth Salim, 2009 CSE(S1S2)
2009-13	Deepa Rose Thomas, 2009 CSE (S3)
2009-13	Hima Anns Joy, S7 CSE
2010-14	Ann Maria Thomas, 2010 B.Tech CSE
2010-14	Chinnu T.P., 2010 CSE (S4)

2010-14	Ajil Jose, 2010 CSE (S1S2)
2010-14	Sneha Rachel Thomas, S5 CSE

Linsa Annie Memorial - Branch Topper CSE

Batch	Name of Student
2013	Sandra Elizabeth Salim, 2009
2012	Tina Maria Thomas,2008
2011	Arjun Gopal, 2007
2010	Teena Elizabeth Sebastian, 2006
2009	Deepak Abraham, 2005
2008	Soumya Ann Thomas, 2004

MCM Scholarship 2009-10 List of Sanctioned Students CSE

Jubil T Sunny	Rs. 30,000
Roshan T Haleel	Rs. 30,000
Salman P.S	Rs. 30,000
Tobin Joseph	Rs. 30,000

MCM Scholarship 2010-11 List of Sanctioned Students CSE

Roshan T Haleel	Rs. 30,000

MCM Scholarship 2011-12 List of Sanctioned Students

1	Anju P Sebastian	Rs. 30,000
2	Neenu Sebastian	Rs. 30,000

MCM Scholarship 2012-13 List of Sanctioned Students

1	Anju Sebastian	Rs. 25,000

32. Details on student enrichment programmes (special lectures/workshops /seminar) with external experts

Sl. No	Date	Event	Academician/Speaker
1	21-Sep-13	Effective usage of Scientific Calculator	Mr Solomon George, Civil Engineer, Chief Quantity Surveyor in UAE
2	28-Sep-13	CISCO Training	Mr. Thomas Dominic - BB TAC Engineer at CISCO Systems Bangalore, Mr. Guru Murthy A CISCO Systems.
3	18-Jan-14	Career Guidance and Training Program	Mr.Nithin Chandy, Ms. Dona Sebastian , HR- IBS

4	24-Jan-14	Opportunities in Start-up village	Mr. Sreerag, Mr. Meera & Mr. Akash from Start -up village
5	27-Jan-2014 to 01-Feb-2014	Android APP Development	Aceware Technologies, Trivandrum
6	29-Jan-14	Cloud Computing	Mr. Arun Eapen, Red Hat
7	11-Feb-14	Cyber Security & Information Protection	Mr. Joseph Ponnoly, Cyber Security evangelist ,USA
8	15-Feb-14	Effective usage of Scientific Calculator	Mr Solomon George, Civil Engineer, Chief Quantity Surveyor in UAE
9	10-Mar-14	Introduction to IBM application development tools	IBM Kerala Sector
10	18-19 Feb-2014	Ethical Hacking and Cyber Security	Mr. Manu Zacharia, Information Security evangelist, Creator & Chief Architect of Matriux - Asia's first Security & Penetration Testing Operating
11	29-Mar-14	CSI-AJCE Student Branch Inauguration	Mr. Sijo Kuruvilla George, CEO of Startup Village
12	5-April 2014	Mozilla Firefox "APP DAY" and "WEBMAKER PARTY" Workshop	Mozilla Firerfox Community Ambassadors
13	18-June2014	Motivation class for S3 CSE	Benson Thomas George, International Trainer
14	15-July-2014 to 16-July 2014	Training program on Basics of Electronics for S3 CSE	Bony Thomas, Anoop Mathew, Abin Thomas, Joseph Akshay, Entrepreneurs
15	25th Sept. 2014	Big Data Analysis-Technical Talk	Viju Chacko, Senior HR Consultant, TCS
16	27th Aug 2014	Association of CSE Inauguration	Mr. Thomas Antony,AVP, Startup Village, Cochin

33. Teaching methods adopted to improve student learning
- Assignments.
- Lectures.
- Power point Presentations/Animations.
- Quizzes.
- Review questions and class discussion.
- Programming assignments.
- Using the Internet to find the recent information related to the course.
- Tutorial.
- Homework.
- Case studies.

- Exercises.
- Simulations.
- Preparation of Course plans, Course files , LAN Manuals and Monographs
- Spoken Tutorial
- Webinars

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sl. No.	ISR & Extension Activities	Remarks
1	Community Extension Developmental Cell (CEDC) of CSE Dept. Project : Societal Technology Educational Programme(STEP)	* Career Guidance programme for +2 students in 1) Govt.HSS , Edakkunam (25/11/2014) 2)St Antony's HSS, Poonjar(21/11/2014) *Technical Talk for students in SMV HSS, Poonjar(24/8/2013) *Interactive sessions on Computer Literacy for students of 1)R.V. Government H.S. School, Chenappady (14/10/2009,16/10/2009) 2)Government VHS School, Ponkunnam,(15/10/2009) 3)Mary Queen's School of Nursing, 26th Mile, Kanjirappally (29/10/2009, 30/10/2009) 4)St. Mary's Higher Secondary School, Kanjirappally (2/11/2009, 5/11/2009)
2	NSS coordinator from department & active NSS activities	Ms. Minu George, Various camps organized
3	Social Service undertaken by Students	As a part of their curriculum.
3	Services to other institutions and society	

35. **SWOC analysis of the department and Future plans**

Strengths:
- Well-equipped infrastructural facilities like laboratories, seminar halls, class rooms with necessary teaching aids.
- A good central and Departmental library with a good collection of books & magazines, internet facilities, collection of national & international journals.
- Faculties with good teaching & industrial experience.
- Training & placement activities.

Weakness:
- Lack of a Research Centre.

Opportunities:
- Providing opportunities for the students to get placed in various MNCs through campus interview.
- Creating awareness to students about the latest technologies through Guest Lectures, Industrial visits etc.
- Providing students real time experience by making them undergo in-plant training in various companies.
- Providing necessary aids to enable students to present their ideas as projects on the campus.
- Encouraging students to participate in workshops, seminars & projects in other colleges and industries.
- Encouraging the students to be entrepreneurs and leaders in various fields and research activities

Challenges:
- Changes in technologies
- Continuous revision of syllabus.
- Students with low cut off marks.
- Continuous assessment of student activities in academics.

Future Plans:
- Introduce more faculty members and students to do research.
- Collaboration with industries and foreign institutions.
- Orchestrate international/national funded projects and conferences.

4. Department of Electronics and communication Engineering

1. Name of the department : Electronics and Communication Engineering

2. Year of Establishment : 2001

3. Names of Programmes / Courses offered: UG- Electronics and Communication Engineering
PG- Communication Engineering

4. Names of Interdisciplinary courses and the departments/units involved:

Semester	Subject	Department
S3 ECE	EN010 301Engineering Mathematics II	Basic Sciences
S3 ECE	EN010 302English (Communication Skills)	Basic Sciences
S3 ECE	EN010 302Economics and Communication Skills	Humanities
S3 ECE	EC010 308Programming Lab	Computer Science
S3 ECE	EC010 306Computer Programming	Computer Science
S4 ECE	EN010 401Engineering Mathematics III	Basic Science
S4 ECE	EN010 402(ME)Principles of Management	Humanities
S5 ECE	EN010 501AEngineering Mathematics	Basic Sciences
S5 ECE	EC010 504(EE)Electrical Drives and Power Electronics	Electronics and Electrical Engineering
S5 ECE	EC010 508(EE)Electrical Drives and Power Electronics Lab	Electronics and Electrical Engineering
S1 M-Tech	Applied Mathematics for Communication Engineering	Basic Sciences

5. Annual/ semester/choice based credit system (programme-wise) : Semester-based
Credit system

6 Participation of the department in the courses offered by other departments:

Subjects taken for S1 S2 (13 batches)		Hours/week	Credit
S1 S2 AUE Automobile Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 CE A&B Civil Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 CH Chemical Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 CSE A&B Computer Science Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 ECE A&B Electronics and Communication Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 EEE	EN010 109 Basic Electronics Engineering.	3	5

Electrical & Electronics Engineering	& Information Technology		
S1 S2 IT Information Technology	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 ME A&B Mechanical Engineering	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
S1 S2 MET Metallurgy	EN010 109 Basic Electronics Engineering. & Information Technology	3	5
Subjects taken for S3 CSE two batches		Hours/week	Credit
CS010 306(EC)	Electronics Devices and Circuits	4	4
CS010 305	Switching Theory and Logic Design	4	4
CS010 308	Logic Design lab	3	2
Subjects taken for S3 IT		Hours/week	Credit
IT010 303 (EC)	Discrete and Integrated Electronic Circuits	4	4
IT010 305	Principles of Communication Engineering	4	4
IT010 307 (EC)	Electronic Circuits and Communication Lab	3	2
Subjects taken for S5 CSE two batches		Hours/week	Credit
CS010 504	Digital Signal Processing	4	4
CS010 508	Hardware and Microprocessors Lab	3	2

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:
    LabVIEW in association with, National Instruments

8. Details of courses/programmes discontinued (if any) with reasons   : Nil

9. Number of teaching posts:

Posts	Sanctioned	Filled
Professors	3	3
Associate Professors	NIL	NIL
APs	28	28

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience	No. of PhD projects guided
Dr. James Jacob	Ph.D.	Professor	CAD for VLSI	25	6

Mr. K.G. Satheeshkumar	M. Tech.	Professor	Network Communication	22	Nil
Dr. K.Karunakaran Nair	PhD	Professor	Electronics	34	Nil
Mrs. Therese Yamuna Mahesh	M. Tech.	AP	Network Communication	19	Nil
Mr.Geevarghese Titus	M. Tech.	AP	Network Communication	11	Nil
Ms. Darsana P	M. Tech.	AP	Communication Engineering	10	Nil
Mr. Jose J Edathala	M. Tech.	AP	Sensor System Technology	8	Nil
Mr. Sunish Kumar O	M. Tech.,	AP	Optoelectronics	7	Nil
Mr. Anu Abraham Mathew	M. Tech.	AP	Communication Engineering	6	Nil
Ms Indu Reena Varughese	M. Tech.	AP	Sensor System Technology	6	Nil
Ms. Praseetha B. Nair	M. Tech.	AP	Communication Engineering	5	Nil
Ms. Divya R.S	M. Tech.	AP	VLSI DESIGN	5	Nil
Mr. C. S. Jaison	M. Tech.	AP	Applied	6	Nil
Mr. Binoshi Samuel	M. Tech.	AP	SIGNAL PROCESSING	6	Nil
Ms. Osama Sebastian	M. Tech.	AP	Optical Communication	5	Nil
Ms. Moth Sebastian	M. Tech.	AP	Communication Engineering	5	Nil
Mr. Baedeker K M	M. Tech.	AP	Embedded system	6	Nil
Mr. Shinto Sebastian	M. Tech.	AP	Communication	6	Nil
Ms. Ranjitha Rajan	M. Tech.	AP	Optical	8	Nil
Ms. Jomy Susan Ipe	M. Tech.	AP	Digital Electronics	4	Nil
Mr. Binu C Piliai	M. Tech.	AP	VLSI DESIGN	5	Nil
Ms. Careena P	M.E.	AP	Communication	4	Nil
Ms. Reeju Elisa	M.E.	AP	VLSI DESIGN	3	Nil
Ms. Agi joseph George	M.E.	AP	VLSI DESIGN	3	Nil
Mr. Binu Mathew	M.E.	AP	Communication	3	Nil
Mr. Ajai Mathew	M.E.	AP	Communication	3	Nil
Ms. Ria Maria George	M.E.	AP	Communication Systems	2	Nil
Ms. Tessy Annie	M. Tech.	AP	Communication	3	Nil

Mr. Midhun Joy	M. Tech.	AP	Communication	3	Nil
Mr. Mathew George	M. Tech.	AP	Communication	1	Nil
Ms. Merene Joseph	M. Tech.	AP	Communication	1	Nil

11. List of senior visiting faculty: Dr. M K Radhakrishnan, Scientist, Academician and Technical Consultant – Nanorel, Singapore

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student -Teacher Ratio (programme wise):

B. Tech.:15:1
M. Tech.: 6:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Technical Staff-9
Administrative Staff-1

15. Qualifications of teaching faculty with DSC/ D.Litt/ Ph.D. / MPhil / PG

Name	Qualification
Dr. James Jacob	PhD
Mr. K.G. Satheeshkumar	M. Tech.
Dr. K .Karunakaran Nair	PhD
Ms. Therese Yamuna Mahesh	M. Tech.
Mr.Gee Varghese Titus	M. Tech.
Ms.Darsana P	M. Tech.
Mr. Jose J Edathala	M. Tech.
Mr.Sunish Kumar O S	M. Tech., MBA
Mr.Anu Abraham Mathew	M. Tech.
Ms Indu Reena Varughese	M. Tech.
Ms.Praseeta B.Nair	M. Tech.
Ms.Divya R.S	M. Tech.
Mr.C.S. Jaison	M. Tech.
Mr.Binoshi Samuel	M. Tech.
Ms. Osama Sebastian	M. Tech.
Ms.Elsa George	M. Tech.
Ms. Moth Sebastian	M. Tech.
Mr. Baedeker K M	M. Tech.
Mr. Shinto Sebastiam	M. Tech.
Ms. Ranjitha Rajan	M. Tech.
Ms. Jomy Susan Ipe	M. Tech.
Mr. Binu C Piliai	M. Tech.
Ms. Careena P	M.E.
Ms. Reeju Elisa Baby	M.E.

Mr. Agi joseph George	M.E.
Mr. Binu Mathew	M.E.
Mr. Ajai Mathew	M.E.
Ms. Ria Maria George	M.E.
Ms. Tessy Annie Varghese	M. Tech.
Mr. Midhun Joy	M. Tech.
Mr. Mathew George	M. Tech.
Ms. Merene Joseph	M. Tech.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

S. No:	Project	Year	Amount In Rs.	Status	Funded by
1	Intelligent Light Dimmer for Automobiles	2008	216,000	completed	KSCSTE
2	Driver's Assistant	2009	100,000	completed	DST
3	Green Hearth	2014	100,000	completed	IEDC
4	Virtual-i	2015	50,000	ongoing	CeDS
5	Blind Assistance Technology	2015	50,000	ongoing	CeDS

18. Research Centre /facility recognized by the University: Nil

19. Publications:

i.	Publication per faculty-	3.45
ii.	Number of papers published in peer reviewed journals (national /international) by faculty and students	23
iii.	Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)	Nil
iv.	Monographs	31
v.	Chapter in Books	Nil
vi.	Books Edited	1
vii.	Citation Index	Shown below
viii. SNIP		Nil
ix.	SJR	Nil
x.	Impact factor	Shown below

Sl No	Name of Faculty	No. of Publications	No. of Journal Publications	Monographs	Books Edited	Citation Index	h-index
1	Dr. James Jacob						
2	KG Satheesh Kumar	5	1	6			
3	Dr. K. Karunakaran Nair	2		1			
4	Therese Yamuna Mahesh	1	6	1			
5	Geevarghese Titus	10	2	1		3	1
6	Darsana P	1	3	1			
7	Jose J Edathala	7	1	1			
8	Sunishkumar OS	16	6	1	1		
9	Anu Abraham Mathew	1		1			
10	Indu R Varghese	1		1			
11	Praseeda B Nair	1	2	1			
12	Divya R S	4		1			
13	Jaison C S	3		1			
14	Binoshi Samuel	3		1			
15	Osama Sebastian	2		1			
16	Moth S	1		1			
17	Baedeker K M	6	2	1			
18	Shinto Sebastian			1			
19	Ranjitha Rajan	1		1			
20	Jomy Susan Ipe	1		1			
21	Binu C Piliai	2	1	1			
22	Careena P	1	1	1			
23	Reeju Elisa Baby	1		1			
24	Agi Joseph George	1		1			
25	Binu Mathew	1		1			
26	Ajai Mathew	1		1			
27	Ria George	2		1			
28	Midhun Joy	1		1			

29	Mathew George	2		1			
30	Merene Joseph	2		1			

20. Areas of consultancy and income generated:

Prof K G Satheeshkumar visited Chempakapara for evaluation of the project titled "providing drinking water trough roof top structures" by CAPART (Council for Advancement of People's Action Rural Technology)) Income generated is Rs. 10,000/-

21. Faculty as members in
    a) National committees b) International Committees c) Editorial Boards.

    i. Mr. Sunish Kumar O. S. –Editorial Board Member of 3 International Journals

    ii. Mr. Geevarghese Titus- Editorial Board Member of 2 International Conferences

22. Student projects
    i. Percentage of students who have done in-house projects including inter departmental/programme
    ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Batch -Year	a) % of In house Projects	b) % of Projects Outside the Institution	Batch -Year
M. Tech (2009-2011)	20	80	M. Tech.(2009-2011)
M. Tech (2010-2012)	0	100	M. Tech.(2010-2012)
M. Tech (2011-2013)	8	92	M. Tech.(2011-2013)
M. Tech(2012-2014)	92	8	M. Tech(2012-2014)
B. Tech (2007-2011)	92	8	B. Tech (2007-2011)
B. Tech (2008-2012)	100	0	B. Tech (2008-2012)
B. Tech (2009-2013)	100	0	B. Tech (2009-2013)
B. Tech (2010-2014)	100	0	B. Tech (2010-2014)

23. Awards / Recognitions received by faculty and students:
I. Awards won by the Faculty: 14

2014	Its Rank in M. Tech.in MG University	Ms. Merene Joseph
2014	Best paper award at International Conference on Circuit Power and Computing Technologies ICCPCT 2014	Mr. Mathew Joseph
2013-2014	Best Faculty Award	Ms. Parsed B. Nair, Ms. Merene Joseph, Mr. Serenity C.S., Mr. Rajesh M.G.
2012-	Best Faculty Award	Prof. K. G. Scathes Kumar, Mr. Gee

2013		Varghese Titus, Mr. Binu Mathew, Mr. Rajesh M. G.
2012	Its Rank in M. Tech	Ms. P. Dasani
2012	3rd Rank in M. Tech	Mr. Akas G. Kamal
2011	Baba Sahib Dr. Ambedkar National Fellowship Award instituted by Bharadhiya Dalit Sahithya Academy (BDSA)	Mr. Sunishkumar O. S.
2011-2012	Best Faculty Award	Mr. Akas G. Kamal
2010-2011	Best Faculty Award	Mr. Geevarghese Titus

ii. Awards won by students:

Year	Name of award	Recipient
201	M/s Sunny Diamonds Award of Excellence	Mr. Jilt Sebastian, S8
201		Mr. Bittu Sebastian, S8
2009-10	MCM Scholarship 2009-10	Jijo George Abraham
		Linu Maria James
		Pooppy George
2010-2011	MCM Scholarship 2010-11	Anit Baby Mathew
		Anjana John
		Jerrin Babu
		Jibin P. John
		Jose Thomas
		Kqiny Sabin
		Lia Loy
		Linu Maria James
		Maria Sonny
		Olassayil Sancy
2011-2012	MCM Scholarship 2011-12	Aleena Jose
2012-2013	MCM Scholarship 2012-13	
2013-2015	PG Scholarship scheme for GATE qualified students from AICTE	Rinku Sebastian
		Divya Mohanan
		Subin Kuriakose
		Ann Maria Mathew
2012-2014	PG Scholarship scheme for GATE qualified students from AICTE	Rosy John
		Asha R Nair
		Shefeequ M
		Devadathan.S
		Parvathy .S
		Jobin T Phlip
		Ratheesh
2011-2013	PG Scholarship scheme for	Merene Joseph

	GATE qualified students from AICTE	Rekha K
		Jins Lal CL
		Rajeswari S
		Manju Bhavadas
2010-2012	Annamma & Mathew Vattakkunnel memorial scholarship	Amalu Anna Joshy, 2012 B. Tech (Overall topper)
2007-2011	GEM of AJCE	Jilt Sebastian
2009-2013	CROWN of AJCE	Maria Terese Gracian (2009-13)
2010-2014	3rd prize in intercollegiate Basketball Tournament, at Devamatha College , Kuravilangad	Justin Jose
		Renjin Thomas Abraham
2011-2015		Kevin Vincent
2012-2016		Ovanalil Jerry Mathews
2010-2014	Intercollegiate Chess Championship, HB College Melukavu	Jithin J
2013	Selected for finals of TECHTOP 13	Dennis, Ajith, Geet, Sreedev
2013	Second Prize at INFOCOM Kolkata	Dennis, Ajith, Geet, Sreedev,
2013	Third Prize at NATCON (KCSTE) Wayanadu "Green Hearth"	Dennis, Abhilash, Ajith, Geet, Sreedev
2014	Selected for Centre for Disability Studies (CeDS) funding of Rs. 50,000	Dennis, Ajith, Geet, Sreedev, Abhilash
2014	Selected for Centre for Disability Studies (CeDS) funding of Rs. 50,000	Dennis, Ajith, Geet, Sreedev,
2014	First Consolation Prize at Techtop 14 Thiruvananthapuram	Dennis, Ajith, Geet, Sreedev , Abhilash
2013	1st YANTRA at Nakshatra 2k13	Abel,Alen
2014	3rd for BEST Choreogrraphy at Nakshatra	Abel,Sidharth,Alen
2013	1st for best acoustic band at MA College	Akhil P Kumar
2013	1st for robowar in horizon and nakshatra	Denson K Shaji
2013	Best Actor award at MA college	Akhil P Kumar
2013	IPL Bidding	Jacob Shibu, Jerin Varghese
2013	Circuit Debugging at Live wire	Alan Jose

24. List of eminent academicians and scientists / visitors to the department: 22 visitors during the last 4 years

S. No	Name	Designation
1	Dr. Achuthsankar .S Nair	(Hon. Director) Centre for Bioinformatics, University of Kerala
2	Dr.R. Rajesh	Bharathiar University, Coimbatore
3	Jayaraj. U Kidav	National Institute of Electronics and Information Technology (NIELIT), Calicut
4	Arun Gopalakrishnan	CDAC, Trivandrum
5	Rajesh.R.	CDAC, Trivandrum
6	Sujith.K. J	CTS, Cochin
7	Dr.M.K.Radhakrishanan	Nano Rel, Singapore
8	Dr. Prashanth .B Bhat	CTO, Manipal Dot Net
9	Dr.Sreelal.S.Pillai	VSSC, Trivandrum
10	Joseph Thomas	Synopsys Bengaluru
11	Jiju John	LEOS, ISRO, Bengaluru
12	Dr.S.Ganesh Vaidyanathan	SVCE, Chennai
13	Dr. Gopikrishna M	Govt. Poly, Kalamaserry
14	Dr. Sameer Bataineh	Professor and Acting Dean, College of Information Technology, United Arab Emirates University
15	Prof. Chris Rodgers	Professional Engineers Ontario (PEO), Seneca College, Canada
16	Dr. R. M. Vasu	Professor, Dept. of Instrumentation & Applied Physics, Indian Institute of Science, Bangalore
17	Dr. V. N. Mani	Scientist-E, C-MET, Department of Electronics & Information Technology, Govt. of India, Hyderabad
18	Dr. Sreelal S Pillai	Engineer-SF, Section Head, BSED / CDSG, VSSC / ISRO, Trivandrum
19	Dr. A. Sreekumaran Nair	Amrita Centre for Nanosciences, Cochin

20	Meena D	Scientist F, LRDE DRDO, Bangalore
21	Dr. Gladston Raj S	Department of Computer Science, Government College, Trivandrum
22	Dr. S. Jayaraj	Professor, Mechanical Engineering Department, National Institute of Technology, Calicut

25. Seminars/ Conferences/Workshops organized & the source of funding a)
    National

S. No:	Seminars/ Conferences/Workshops organized	Date	Source of Funding
1	National Science Day Celebrations- Talk by eminent personalities	28th Feb 2014	Department of ECE / AJCE
2	LabView Application (Workshop)	February, 2014	Department of ECE / AJCE
3	Electronics Circuits Design on By Dr. Madhavan Nair, Rtd Professor CE Trivandrum (Workshop)	23-24 February 2010	Department of ECE / AJCE
4	One day seminar on 'Intellectual Property Rights'	Nov 2010	Funded by KSCSTE for an amount of Rs.25000
5	One day seminar on 'Communication Engineering' & "How to Handle Final Year Projects" by Dr. V M Pandharipanda, Director Centre of Excellence in Microwave Engg, Osmania University, Hyderabad.	30 August 2010	Department of ECE / AJCE
6	Signals and System and Advanced Programming in Matlab by Ascent Technology (Workshop)	13 and 14 February 2009	Department of ECE / AJCE
7	Two-week ISTE workshop on 'Basic Electronics'	June 28 to July 8, 2011	IITB & MHRD
8	Two-week ISTE workshop on 'Signals and Systems'	December 2013	IITB & MHRD
9	Two-week ISTE workshop on 'Control Systems'	December 2 to 12, 2014	IITK & MHRD

b. International

S. No:	Seminars/ Conferences/Workshops organized	Date	Source of Funding
1	AICERA 2014- Annual	4-6 June 2013	AJCE

	International Conference on Emerging Research Areas - 'Microelectronics, Communication and Renewable Energy'			

26. Student profile programme/course wise:

Name of the Course B. Tech	Applications received	Selected	Enrolled%		Pass percentage
			*M	*F	
2009-2013	2586	120	27.34	72.66	73.0
2010-2014	745	126	32.54	66.67	68
2011-2015	670	124	33.88	66.12	66.12*
2012-2016	448	123	36.36	63.63	61.02*
2013-2017	286	106	42.45	57.54	74.42*
2014-2018	192	119	39.49	60.5	-

* Result based on years completed

Name of the Course M. Tech	Applications received	Selected	Enrolled%		Pass percentage
			*M	*F	
2009-2011	80	18	27.78	72.22	100
2010-2012	75	17	23.53	76.47	94
2011-2013	68	18	23.53	82.35	100
2012-2014	65	24	16.67	83.33	100
2013-2015	61	24	12.50	87.50	*
2014-2016	54	15	13.33	86.67	*

*M = Male   *F = Female *Result to be declared

27. Diversity of Students

Name of the Course: B-Tech	% of students from the same state	% of students from other states	% of students from abroad
2007-2011	100	0	0
2008-2012	100	0	0
2009-2013	100	0	0
2010-2014	100	0	0
2011-2015	100	0	0
2012-2016	100	0	0
2013-2017	100	0	0

Name of the Course: M. Tech	% of students from the same state	% of students from other States	% of students from abroad
2009-2011	100	0	0
2010-2012	100	0	0
2011-2013	100	0	0
2012-2014	100	0	0
2013-2015	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?:   10%

29. Student progression:

Student progression	Against % enrolled
UG to PG	12-15%
PG to M.Phil.	Nil
PG to Ph.D.	0.1%
Ph.D. to Post-Doctoral	Nil
Employed • Campus selection • Other than campus recruitment	35-40% 10%
Entrepreneurship/Self-employment	2%

30. Details of Infrastructural facilities Infrastructural facilities:

a) Library	Department Library provided in Room No.: DB208 No: of Titles: 1388 No.: of Journals and Magazines:163 No: of Seminar Reports:740 No: of Mini Project Reports :694 No: of B. Tech Main Projects: 187 No: of M. Tech Main Project: M. Tech: Industrial Training Report:30 Seminar Report:104 M. Tech Thesis Report:65: Mini-Project:30
b) Internet facilities for Staff & Students	100Mbps OFC backbone , Wi-Fi for the entire Department 30 PCs provided to Staff 25 PCs provided for PG Students 60 PCs provided to UG Students
c) Class rooms with ICT facility	10 class rooms provided with Green board, projector.
d) Laboratories	6 laboratories provided in the department Electronics Circuits lab, IC lab, Advanced Communication lab, Project lab, Systems lab, PG lab

31. Number of students receiving financial assistance from college, university, government Or other agencies:

S. No.	Name of Scholarship	Year	Recipients
1	AJCE Faculty Scholarships for meritorious students of all departments	2012-16	Amalu Anna Joshy
		2011-15	Prathiba S Nair
		2011-15	Sanjana Mathews
		2011-15	Sanjana Mathew &Jerin Jose S3
		2010-14	Alakananda Nair S7 ,
		2010-14	Chikku Mareeta John, S6,
		2010-14	Golda Simon, ECE (S4)
		2009-13	Maria Terese Gracian, 2009 B.Tech – ECE
		2009-13	Jeffy Treesa Joseph, 2009

		2009-13	Tarat Alexander, S7
2	MCM Scholarship	2009-10	Jijo George Abraham
			Linu Maria James
			Pooppy George
		2010-2011	Anit Baby Mathew
			Anjana John
			Jerrin Babu
			Jibin P. John
			Jose Thomas
			Kqiny Sabin
			Lia Loy
			Linu Maria James
			Maria Sonny
			Olassayil Sancy
		2011-2012	Aleena Jose
3	Annamma & Mathew Vattakkunnel memorial scholarship	2012	Amalu Anna Joshy, B. Tech. Overall topper – Rs 3000/-
4	Linsa Anie Abraham memorial scholarship	2009	Maria Terese Gracian, 2009, Crown of AJCE
		2007	Jilt Sebastian, 2007
		2006	James G. Vettickattu, 2006, Crown of AJCE
		2004	Amrutha Harichandran, 2004, Crown of AJCE
5	PG Scholarship scheme for GATE qualified students from AICTE	2013-2015	Ann Maria Mathew, Communication Engineering
		2013-2015	Rinku Sebastian, Communication Engineering
		2013-2015	Divya Mohanan, Communication Engineering
		2013-2015	Subin Kuriakose, Communication Engineering
		2013-2015	Alina John, Communication Engineering
		2012-2014	Rosy John, Communication Engineering
		2012-2014	Asha R Nair, Communication Engineering
		2012-2014	Shefeequ M, Communication Engineering

		2012-2014	Devadathan.S, Communication Engineering
		2012-2014	Parvathy .S, Communication Engineering
		2012-2014	Jobin T Phlip, Communication Engineering
		2011-2013	Merene Joseph, Communication Engineering
		2011-2013	Rekha K, Communication Engineering
		2011-2013	Jins Lal CL, Communication Engineering
		2011-2013	Rajeswari S, Communication Engineering
		2011-2013	Manju Bhavadas, Communication Engineering
6	Scholarships to minority community students	2012-2013	Akil Benny
			Alka John
			Alphones Maria
			Amlu Anna Joshy
			Angel Kurien
			Ann Mary Antony
			Anu V Thomas
			Bibin M. Mathew
			Binila Treesa Babu
			Christy Kurian
			Delvin C Varghese
			Elna Ryson
			Juhi Elz George
			Mahinsha P Shaji
			Mareena James
			Markose Babu
			Pious Joseph
			Roshmi Rose Shaji
7	Award of Excellence from M/s Sunny Diamonds	2011-12	Bittu Sebastian, S8
		2010-11	Jilt Sebastian, S8
8	Fee Waiver from the College	2014	Abhuith V. Prabha
			Aji Mathew
			Anilamol Sebastian
			Kunnel Gopi Padmesh
			Parvathi P.
			Shintu Kurian

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

S. No.	Seminars/ Conferences/Workshops organized	Date	Source of Funding
1	National Science Day Celebrations- Talk by eminent personalities	28th Feb 2014	Department of ECE
2	LabView Application (Workshop)	February, 2014	Department of ECE
3	Electronics Circuits Design on By Dr. Madhavan Nair, Rtd Professor CE Trivandrum (Workshop)	23-24 February 2010	Department of ECE
4	One-day seminar on 'Intellectual Property Rights'	November 2010	Funded by KSCSTE for an amount of Rs.25000
5	Seminar on 'Communication Engineering' & "How to Handle Final Year Projects" by Dr. V M Pandharipanda, Director, Centre of Excellence in Microwave Engg, Osmania University, Hyderabad.	30 August 2010	Department of ECE
6	Signals and System and Advanced Programming in Matlab by Ascent Technology (Workshop)	13 and 14 February 2009	Department of ECE

33. Teaching methods adopted to improve student learning:

Interactive Lectures, Discussions, Quizzes, Seminars, Power point presentations, Industrial visits, open source lectures, practical sessions.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:
1. Social activities by S8 Students (2010-2014 batch)
2. Social activities by S6 Students (2011-2015 batch)
3. Social activity by staff of the Department

35. SWOC analysis of the department and Future plans:

Strengths	1. The vision, mission and objectives of Electronics and Communication Engineering Department, of Amal Jyothi College of Engineering are framed in clear terms. 2. Committed faculty and staff for ensuring quality in every aspect of higher education. 3. Policies, systems and procedures in place for most of the activities in the department. 4. Senior academicians visit students through student enrichment programmes. 5. Conducive physical learning environment with state-of-the-art infrastructure. 6. Majority of undergraduate and post-graduate students stay in hostels. 7. Presence of multi-skilled and multi-talented students in the department. 8. Continous power supply backup
Weakness	1. The affiliated system with only limited academic freedom to the Department. 2. Lack of college transportation facilities for those who stay back.
Opportunities	1. Higher Education of Faculty members. 2. A good database of well-positioned alumni across the globe 3. Opportunities for the department to design unconventional courses and training programmes.
Challenges	1. To motivate students from diverse socio-economic background. 2. Media and peer-group influence negatively affecting the academic orientation of students. 3. Lack of autonomy inhibiting implementation of innovative academic programmes and administrative practices. 4. Remote geographic location in comparison with other colleges located in towns.

Future Plans	1. To emerge as a centre which provides professional education of global quality at UG and PG levels 2. Develop a strong research initiative among the faculty and students leading to doctoral engineers. 3. Promote growth by actively participating in community empowerment projects. 4.To start a research centre

5. Department of Electrical and Electronics Engineering

1. Name of the department   :   Electrical & Electronics Engineering

2. Year of Establishment   :   2001

3. Names of Programmes / Courses offered (UG, PG, M.Phil. Ph. D., Integrated Masters; Integrated Ph.D., etc.)

B. Tech.	Electrical & Electronics Engineering
M. Tech.	Power Electronics & Power Systems
M. Tech.	Energy Systems

4. Names of Interdisciplinary courses and departments/units involved:

Sl.No	Name of Course	Course Code	Semester	Name of the Department
1	All subjects of B. Tech. first year	EN 010 101-EN 010 111	S1 S2 EEE	Basic Sciences, Humanities, CE, ME, ECE, CSE
2	Engineering Mathematics II	EN 010301A	S3 EEE	Basic Sciences
3	Economics and Communication Skills	EN010 302	S3 EEE	Humanities
4	Mechanical Technology	EN 010306	S3 EEE	Mechanical Engineering
5	Mechanical Laboratory	EN 010 308	S3 EEE	Mechanical Engineering
6	Engineering Mathematics III	EN 010 401	S4 EEE	Basic Sciences
7	Engineering Mathematics IV	EN 010501A	S5 EEE	Basic Sciences
8	Principles of Management	EN 010 502	S5 EEE	Humanities

5. Annual/semester/choice based credit system (Programme-wise): Semester-based credit system is applied for both U.G (B. Tech.) and P.G (M. Tech) courses.

6. Participation of the dept. in the courses offered by other depts.   :

Sl No	Department	Courses
1	Department of Automobile Engineering	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 AU
		Electrical Technology – AU 010 406(EE)
		Electrical & Electronics Lab – AU 010 508(EE)
2	Department of Civil Engineering	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 CE
3	Department of Computer Sciences & Engineering	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 CSE
4	Department of Electronics & Communication Engineering	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 ECE
		Electrical Drives and Control – EC 010 504(EE)
		Electrical Drives and Power Electronics Lab – EC 010 508(EE)
5	Department of Information Technology	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 IT
6	Department of Mechanical	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 ME
		Electrical Technology – ME 010 406(EE)
		Electrical & Electronics Lab - ME 010 508
		Mechatronics & Control System - ME 010 605
7	Department of Metallurgy	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2 Metallurgy
		Electrical Technology -MT 010 306
		Electrical and Electronics Lab- MT 010 308
8	Department of Chemical Engineering	Basic Electrical Engineering- EN-010-108
		Electrical Workshop for S1S2

7. Courses in collaboration with other universities, industries, foreign

Institutions, etc. **:** Nil

8. Details of courses/programmes discontinued (if any) with reasons : Nil

9. Number of teaching posts

	Sanctioned		Filled
	UG	PG	
Professors	1	2	3
Associate Professors	4	3	-
Asst. Professors	11		23

10. Faculty profile with name, qualification, designation, specialization, (D. Sc / D.

Litt. / Ph.D. / M. Phil. etc.)

Name	Qualific-ation	Designation	Specialization	No. of Years of Experience			No. of Ph. D Students guided for the last 4 years
				Academic			
				In AJCE	Other Inst.	Industry	
V I Cherian	M. Tech.., FIE	Professor, Dean-Academic	Power Systems	8 Years		31 years	NA
P C Thomas	M. Tech.., MIE	Professor, HOD	Reliability Engg.	14 Years	4 Years	13 Years	NA

K J Thomas	M. Tech.., FIE	Professor,	Control Systems	3 Years 7 Months		25 Years	NA
Arun S	M. Tech.	Asst. Professor, PG Coordinator	Power Electronics	5 Years 1 Month	3 Years 2 Months	1 Year	NA
Victor Jose	M. Tech.	Asst. Professor, PG Coordinator	Energy Systems	3 Years 3 Months		2 Years 3 Months	NA
Vidya M Nair	M. Tech.	Asst. Professor	Power Electronics & Power Systems	7 Years	1 Year		NA
Sreekala P	M. Tech.	Asst. Professor	Power Electronics & Power Systems	6 Years 9 Months	2 Years 6 Months		NA
Sreeja C	M. Tech.	Asst. Professor	Power Electronics & Power Systems	7 Years			NA
Joffie Jacob	M. Tech.	Asst. Professor	Power Electronics & Power Systems	5 Years 9 Months		3 Years 7 Months	NA
Neenu Rose Antony	M. Tech.	Asst. Professor	Power Electronics & Power Systems	3 Years 3 Months	2 Years 5 Months		NA
Reshmi V	M. Tech.	Asst. Professor	Power Systems	4 Years 2 Months			NA

Shinosh Mathew	M. Tech.	Asst. Professor	Power Electronics	2 Years 2 Months			NA
Manjusha V A	M. Tech.	Asst. Professor	Power Electronics & Drives	3 Years 3 Months	6 Months		NA
Bobin Mathew	M. Tech.	Asst. Professor	Integrated Power systems	3 Years	1 Year	1 Year 10 Months	NA
Anish Benny	M. Tech.	Asst. Professor	Industrial Instrumentation & Control	2 Years 11 Months	1 Year	3 Years	NA
Rani Chacko	M. Tech.	Asst. Professor	Energy Systems	2 Years 2 Months			NA
Dona Sebastian	M. Tech.	Asst. Professor	Power Electronics & Power Systems	1 Year 2 Months	8 Months		NA
Nidhi M J	M. Tech.	Asst. Professor	Energy Engineering	1 Year 2 Months	4 Months		NA
Sreenath B	M. Tech.	Asst. Professor	Power and Energy Systems	1 Year 2 Months			NA
Sonia Sunny	M. Tech.	Asst. Professor	Industrial Drives & Control	1 Year 6 Months			NA

Anumodu D M	M. Tech.	Asst. Professor	Power Systems	1 Year 2 Months	2 Years			NA
Aju S Nair	M. Tech.	Asst. Professor	Energy Management Auditing and Lighting	4 months	4 Years			
Midhu Das B	M. Tech.	Asst. Professor	Machines Drives & Power Electronics	4 months			8 Months	

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty: Nil

13. Student -Teacher Ratio (programme- wise):

Programme	Total Number of Faculty	Number of Students	Student -Teacher Ratio
B. Tech	23	224	15:1
M. Tech.		56	12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Academic Support Staff (technical)	11	10
Administrative staff	1	1

15. Qualifications of teaching faculty with D.Sc. / D. Litt. / Ph. D/ MPhil /PG.

Sl: No	Qualification	Total No
1	P.G (M. Tech), PhD	1
2	P.G (M. Tech)	22

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Duration	No of Projects	Sponsoring Agency	Amount (Rs)
2009-10	1	DST	100,000
2010-11	2	DST	200,000
2011-12	1	DST	100,000
2012-13	2	DST	200,000
		Total Amount : 600,000	

18. Research Centre /facility recognized by the University: Nil

19. Publications:

  a) Publication per faculty : 7.87

  b) Number of papers published in peer reviewed journals (national / international)

Type	Total no
International Conference	115
International Journal	2

Journal	13
National Conference	51
Total	181

20. Areas of consultancy and income generated: **Nil**

21. Faculty as members in

    a) National committees: **Nil**

    b) International Committees: **Nil**

    c) Editorial Boards: **Nil**

22. Student projects

    a) Percentage of students who have done in-house projects including inter departmental/programme**:** 100% of B. Tech. / M. Tech.

    b) Percentage of students placed for projects in organizations outside institution i.e.in Research laboratories/Industry/other agencies: **0 %**

23. Awards / Recognitions received by faculty and students

Best Faculty Awards

Faculty	Designation	Year
Mr. Edstan Fernandez	Lecturer	2008-09
Mr. R. Sreeraj	Lecturer	2009-10
Mr. Arun S	Asst. Professor	2010-11
Mr. Robins Anto	Asst. Professor	2011-12
Ms. Rajitha Rajan	Lab Instructor	2011-12

Recognitions received by the faculty

| Mr. Arun S | Asst. Professor | 2012-13 |
| Mr. Manoj K M | Lab Instructor | 2012-13 |

Faculty	Recognitions received by faculty
Mr. Anish Benny	Highest Grade Certificate (Kerala University) for M Tech - Industrial Instrumentation and Control, Kerala University
Ms. Sreeja C	1st Rank in M Tech - Power Electronics and Power System, M G university
Ms. Manjusha V A	1st Rank in M Tech - Power Electronics and drives, Anna University
Mr. Dinto Mathew	1st Rank in M Tech - Power System, Kerala University
Mr. Aju S Nair	1st Rank of M. Tech. in Energy Management, MIT Manipal in 2013
Ms. Sonia Sunny	3rd Rank in M Tech - Industrial Drives & Control
Mr. Anish Benny	Resource person for a TEQIP funded program on software ORCAD/PSPICE for B. Tech students at GEC, Painav, Idukki

Students Achievements: Students have also participated in various technical events and arts fest, on and outside the campus.

University ranks in M. Tech. PEPS

Sl No	Name	Position Held	Year
1	Nisha Prakash	First Rank	2012-14
2	Bijo Reji	Third Rank	2012-14
3	Ashna Mohan	First Rank	2011-13
4	Anju G Pillai	First Rank	2010-12
5	Anu George	Second Rank	2010-12
6	Sruthi V.S	Third Rank	2010-12
7	Sreeja C	First Rank	2009-11

| 8 | Sini Xavier | Second Rank | 2009-11 |
| 9 | Aswathy B Raj | Third Rank | 2009-11 |

University rank in B. Tech

Sl No	Name	Position Held	Year
1	Justin Kurian	First Rank	2002-06

GEM of AJCE – Awarded to the top multi-faceted performer of the passing out B. Tech. batch

Sl No	Name	Year
1	Gladwin Thomas	2001-05
2	Derek John Mullassery	2006-10

CROWN of AJCE – Awarded to the overall topper in semester examinations of every passing out B. Tech. batch

Sl No	Name	Year
1	Justin Kurian	2002-06
2	Babu Thomas	2003-07

24. List of eminent academicians & scientists/visitors to the department: **Nil**

25. Seminars/ Conferences/Workshops organized & the source of funding
   a) National: Nil
   b) International : AICERA - 2014

26. Student profile programme/course wise:

Year (YOP)	Programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2012	B. Tech	3235	61	27	34	72.13%
2013		2586	61	31	30	75.41%
2014		2533	60	25	35	25%
2015		2274	59	34	25	
2016		1713	49	34	15	
2017		1705	48	33	15	
2011	M. Tech (PEPS)	34	18	4	14	94.44%
2012		28	17	6	11	70.58%
2013		31	18	13	5	94.44%
2014		27	15	11	4	93.33%

27. Diversity of Students

Year (YOP)	Total	% of students from the same state	% of students from other States	% of students from abroad
2012	61	100	0	0
2013	61	100	0	0

2014	62	100	0	0
2015	62	100	0	0
2016	51	100	0	0
2017	49	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil & Defense Services: **13 qualified GATE**

29. Student progression

Student progression	YOP(Batch)	Total	Count	Against % enrolled
UG to PG	2014	63	2	Now in S8
	2013	61	6	10%
	2012	61	15	25%
	2011	65	6	10%
PG to M.Phil.				
PG to Ph.D.	2012	18	1	5.55%
Ph.D. to Post-Doctoral				
Employed				
• Campus selection	2014	63	6	10%
	2013	61	8	14%
	2012	61	11	19%
	2011	65	13	20%
• Other than campus recruitment	2014	63	0	0
	2013	61	5	9%
	2012	61	7	12%
	2011	65	0	0

Entrepreneurship/Self-employment				

30. Details of Infrastructural facilities

a) Library

Books	1320	M. Tech. Project Reports	29	Question Banks	8
Periodicals	4	M. Tech. Mini Project Reports	17	Lab Manuals	87
News Paper	1	B. Tech. Seminar Reports	288	General Books	26
Monogram	15	B. Tech. Project Reports	56	Competitive Exam Oriented Books	18
Course File	230	M. Tech. Seminar Reports	6	Industrial Visit Report	2
CD Tower	160	Industrial Training Report	10	Question paper solutions	33

b) Internet facilities for Staff & Students: Internet connection is provided through dedicated OFC cable and is fully Wi Fi connected. Personal Computers are provided to all faculty members with internet connection. In addition 2Nos of Notepads and 1 No Laptop is also provided. 2 Personal Computers with net connection is provided in the Dept Library for students.

c) Class rooms with ICT facility: 8 Classrooms with projector facilities.

d) Laboratories

Degree	Semester	Lab1	Lab 2	Lab 3
B. Tech.	S1S2	Electrical Workshop	Mechanical workshop	Civil Workshop
	S3	Electrical Measurement Lab	Mechanical lab	
	S4	Electronic Circuits Lab	Computer Programming	
	S5	Electrical Machines I Lab	Circuits Lab	
	S6	Microprocessor & Microcontroller Lab	Power Electronics Lab	
	S7	Control and Simulation Lab	CAD Lab	
	S8	Electrical Machines II Lab		
M. Tech. PEPS	S1	Power System Simulation Lab		
	S2	Power Electronics Lab		
M. Tech. ES	S1	Energy Systems Lab		
	S2	Non conventional Energy Systems Lab		

31. Number of students receiving financial assistance from college, university, government or other agencies: 87 students

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts: **13 events**

33. Teaching methods adopted to improve student learning:
   - Conducted Open book examinations for the weak students based on the series test results and made corrective measures.
   - Used demo models available in the model room in the classrooms.
   - Live demonstrations are given in the labs.

- Improvise models in the classrooms.
- Power Point Presentation and Audio-Visual aids.
- Case Study method and Group Discussion Method.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: NSS programs and other Social service activities

35. **SWOC analysis of the department and Future plans**

Strengths: Very supportive management, Equipment of first order in place, Committed faculty and staff, and relatively high disciplined students.

Weakness: Rural setting, the average scholastic ability of students is not very creditable, Retention factor of faculty is low, difficult to draw city-based resource persons, and we have not been able to capitalize on funds available from Govt. organizations

Opportunities: Our academic plans are thwarted by university guidelines. The possibility of becoming an autonomous institution is on the cards. If this materializes, a high degree of autonomy/flexibility will be made possible. By virtue of our credentials and infrastructure, we are in a position to apply for funds made available by Govt. organizations

Challenges: The average results of our graduates is on a declining trend. Continued disinterest of students is a worrying factor. Placement figures are not impressive

Future Plans: The Dept. of EEE has ambitious plans in the years to come. While these are essentially academic-centric, there are several spin-offs (Implies several

gains in placement, results, etc.)

The flagship programme, B. Tech. (EEE) to be nurtured into a most-sought after one.

The two Master's programmes to be closely tied with a set of preferred corporates.

In order to encourage young faculty to acquire doctoral qualifications, tie-ups with leading deemed universities will be explored.

6. Department of Information Technology

1. Name of the department   Information Technology

2. Year of Establishment   2001

3. Names of Programmes / Courses
   Offered (UG, PG, M.Phil., Ph.D.,
   Integrated Masters;
   Integrated Ph. D., etc.)   UG   B. Tech Information Technology

4. Names of Interdisciplinary courses
   and the departments/units involved   Nil

5. Annual/ semester/choice based credit
   System (programme wise)   B. Tech IT- Semester wise

6. Participation of the department in the courses offered by other departments

Sl. No	Programme	Name of the Departments
1		Mechanical Engineering
2	UG	Automobile Engineering
3		Chemical Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc.   Nil

8. Details of courses/programmes discontinued (if any) with reasons   Nil

9. Number of teaching posts

	Sanctioned	Filled
Professors	1	1
Associate Professors	--	--
Asst. Professors	10	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience	No. of Ph.D. Students guided for last 4 years

Ms. Sandhya Ramakrishnan	M. Tech, Ph. D *	Professor	M. Tech Computer & Information Science	13	--
Mr. Thomas Varughese	M. Tech	Asst. Professor	ME (Computer Science &Engineering)	11	--
Mr. Shiju George	MS	Asst. Professor	MS (Software Systems)	12	--
Mr. Melbin Varghese John	ME	Asst. Professor	ME (Computer Science &Engineering)	8	--
Ms. Midhuna Jyothi R.	ME, Ph. D*	Asst. Professor	ME (Software Engineering)	8	--
Ms. Saumya Sadanandan	M. Tech	Asst. Professor	M. Tech (Computer Science &Engineering)	8	--
Ms. Reshma P.	M. Tech	Asst. Professor	M. Tech (Computer Science and Engineering)	6	--
Mr. Joms Antony	M. Tech	Asst. Professor	M. Tech (Computer Science and Engineering)	6	--
Ms. Alfin Abraham	M. Tech	Asst. Professor	M. Tech (Computer and Communication)	3.5	--
Ms. Jincy Lukose	M. Tech	Asst. Professor	M. Tech (Computer Science and Engineering)	3.5	--
Mr. P. V. Shijin	M. Tech	Asst. Professor	M. Tech (Embedded Systems)	5	--

11. List of senior visiting faculty   Nil

12. Percentage of lectures delivered
     and practical classes handled
       by temporary faculty   Nil

13. Student -Teacher Ratio (programme-
     wise)   UG: B. Tech – 14:1

14. Number of academic support staff (technical) and administrative staff; Sanctioned and
     filled

	Sanctioned	Filled
Academic support staff (technical)	6	6
Administrative staff	Nil	Nil

15. Qualifications of teaching faculty with D. Sc/ D. Litt/ Ph. D/ M. Phil / PG.

No. of Faculty with D. Sc / D. Litt	No. of Faculty with Ph. D	No. of Faculty with M. Phil	No. of Faculty with PG
--	0	--	11

16. Number of faculty with ongoing   :

projects from a) National

b) International funding

agencies and grants received: Joms Antony, Technology for Education, Fellowship Grants, NMEICT

17. Departmental projects funded

by DST - FIST; UGC, DBT, ICSSR,

etc. and total grants received   Nil

18. Research Centre /facility

recognized by the University   Nil

19. Publications:

∗   a) Publication per faculty: 2.69

  ∗   Number of papers published in peer reviewed journals (national /International) Faculty and students:
                31

  Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.:4

  ∗   Monographs

  ∗   Chapter in Books

  ∗   Books Edited

  ∗   Books with ISBN/ISSN numbers with details of publishers

  ∗   Citation Index

  ∗   SNIP

  ∗   SJR

  ∗   Impact factor

  ∗   h- index

Name	Publications	No: of Publications listed in international databases	Monographs	Chapter in books	Books edited	Books with ISBN/ISSN No.	Citation index	SNIP	SJR	Impact Factor	h-index

1	Ms. Sandhya Ramakrishnan	6											
2	Mr. Thomas Varughese	2											
3	Mr. Shiju George	6	4										
4	Mr. Melbin Varghese John												
5	Mr. Jobin T. J	1											
6	Ms. Midhuna Jyothi R	2											
7	Mrs. Merin Chacko												
8	Saumya Sadanandan	1											
9	Ms. Reshma P	2											
10	Mr. Joms Antony	6	2						2		1		
11	Ms. Alfin Abraham	2											
12	Ms. Jincy Lukose	1											
13	Mr. P. V. Shijin	1											

20. Areas of consultancy and income generated   Nil

21. Faculty as members in
       a) National committees
       b) International Committees
       c) Editorial Boards….   Nil

22. Student projects
       a) Percentage of students who have
          done in-house projects including
          inter departmental/programme: 100%
       b) Percentage of students placed for
          Projects in organizations outside
          the institution i.e. in Research
          Laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students

Students:

Arun Reji Varghese	MG University Third Rank
Elsa Joseph	Crown of AJCE
John Sebastian	GEM of AJCE
Jilson Thomas and Nikhil Cherian	First Prize - Web Designing in "INCEPTRA 11", held at Mangalam College of Engineering, Ettumanoor
Subin S and Lalet Scaria	First Prize - Web Designing in "INTERFACE" held at School of Computer Science , MG University
Lalet Scaria	First Prize - Technical Quiz in "INTERFACE" held at School of Computer Science, MG University
Abraham K Joseph, Jackson Thomas, Jinu James, Shibin Mathew	Second Prize, Project Exhibition, Fotios2k14, Carmel Engineering College
Johny Thomas, Manu Mathew	First Prize – Web Designing competition, Marian College Kuttikanam
Johny Thomas, Preethy Joshy	Second Prize, C – Debugging, Fotios2k14, Carmel Engineering College

Faculty

Name of the Faculty	Awards / Recognitions
Ms Reshma P.	Best Faculty Award from AJCE
Mr. Shiju George	Best Faculty Award from AJCE
Ms. Sandhya Ramakrishnan	Best Faculty Award from AJCE
Mr. Thomas Varghese	Best Faculty Award from AJCE
Ms. R. Midhuna Jyothi	Best Faculty Award from AJCE
Mr Joms Antony	Third Prize - National Teacher Contest, T4E2014
Mr. Joms Antony	Obtained the Technology for Education, Fellowship Grants, NMEICT-2014
Mr. Joms Antony	Approved as external contributor for Spoken Tutorial Project-IIT Bombay -2014

	Mr. Joms Antony		Second Prize Winner in the Open Source Hardware Projects contest conducted as a part of FOSS Young Professionals Meet 2013 (FYPM2013) supported by IEEE Kerala Section

24. List of eminent academicians and scientists / visitors to the department

Sl. No:	Name	Designation	Organization	Purpose of Visit
1	Dr. Ranjit Abharam	COO ,	Armia Systems, Inforpark	FDP
2	M r Jolly Joseph	Director	(Learning Services), Fathinfotech	FDP
3	Mr. Bobby Varghese	Software Consultant ,	Technopark	FDP
4	Mr. K S Mathew	Associate Professor	Rajagiri School of Engineering and Technology	Guest Lecture
5	Mr. Binoy V C	Partner Technology Manager	Microsoft Corporation (I) Pvt Ltd	FDP
6	Mr. Sunil Athayil		UST Global	FDP
7	Mr. A. Rajagopalan	System Analyst	National Institute of Technology, Calicut	FDP
8	Mr. Mathew J Palackal	Associate Dean	Graduate Studies and Research Informatics Research Institute Indiana University Purdue University	Conference
9	Mr. Prahlad Vadakkepat	Associate Professor,	Electrical & Computer Engineering National University of Singapore,	Conference

10	Mr. Gordon Hunder	Professor	Kingston University	Conference
11	Mr. Petheru Raj Chelliah	Infrastructure Architect	IBM Global Cloud Center of Excellence	Conference

25. Seminars/ Conferences/Workshops organized & the source of funding
   a) National

Sl. No	Year	Name of the Seminar/Conference /Workshop/FDP	Date(s)	Source of funding
1	2008 -2009	FDP on Best Practices in Software Project	11.5.2009 to 20.05.2009	AICTE
2		One-day Seminar on Graph Theory and Cryptography	08-08-2008	MG
3	2013 - 2014	Workshop on CASE Tools	14.07.2013 to	AJCE
4		Workshop on CASE Tools	30.12.2013 to 02.01.2014	AJCE

   c) International

Sl. No	Year	Name of the Seminar / Conference /Workshop/ FDP	Date(s)	Source of funding
1	2009 -2010	International Conference on Advanced Computing and Communication (ICACC-2010)	3 - 4 May 2010	AJCE
2	2010 - 2011	Semantic E- business and Enterprise Computing 2010	15-17 August 2010	Kingston University
2	2013 -2014	International Conference on Semantic E- Business and Enterprise Computing(SEEC-2013)	18-19 December 2013	Department Fund

	2013-14	International Conference on Cloud Computing and Services engineering (CLUSE - 2013)	18-19 December 2013	Department Fund
3				

26. **Student profile programme/course-wise: B. Tech**

Batch	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2005 – 2009		54	20	34	56.36
2006 - 2010		62	23	39	64.52
2007 – 2011		63	25	38	84.13
2008 - 2012	3235	59	18	41	71.19
2009 - 2013	2586	46	18	28	47.82
2010 – 2014	2533	53	19	34	33.9
2011 – 2015	2274	54	15	39	--
2012 -2016	1713	43	8	35	--
2013 - 2017	1705	29	14	15	

*M = Male   *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Tech IT	100%	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	Year	Exam	No. of students
B. Tech IT	2010-11	GATE	1
	2011-12	GATE	1
	2012-13	GATE	
	2013-14	GATE	

29. Student progression

Student progression	Against % enrolled				
	2008 –	2009 – 2010	2010 - 2011	2011 –	2012 -
UG to PG	12.96	19.357%	12.89%	16.94%	10.8%
PG to M.Phil.	--	--	--	--	--
PG to Ph.D.	--	--	--	--	--
Ph.D. to Post-Doctoral	--	--	--	--	--
Employed • Campus selection • Other than campus recruitment	62.96%	62.90%	71.42%	62.7%	60.8%
Entrepreneurship/ Self-employment	--	--	--	5.08%	4.3%

30. Details of Infrastructural facilities

a) Library

The central library has nearly 2735 books; apart from that, the department maintains a small library with 528 books

b) Internet facilities for Staff & Students

- 10 Mbps NME (National Mission for Education through Information & Communication Technology)
- 40 Mbps dedicated line from Reliance
- 10 Mbps dedicated line from BSNL (back up)

c) Class rooms with ICT facility: 04

d) Laboratories

Name of the laboratory	Total Area of lab	Major equipment	PC Configuration	No of Equipments	Software Installed
Database Lab (IT Lab-1)	94.25 sq. m	Computers	Intel Core 2 Duo Processor, Asus P5KPL Motherboard, 2GB DDR2 RAM, 500GB SATA HDD, Logitech Keyboard+ Mouse, Samsung 18.5" LCD Monitor.	34	Microsoft Windows XP Professional, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10, Star UML, Java, My SQL, Microsoft Security Essentials, Microsoft Visio 2007.

			Intel Core 2 Duo Processor, Intel DG31PR Motherboard, 1GB DDR2 RAM, 80GB SATA HDD, Logitech Keyboard+ Mouse, Samsung 17" LCD Monitor.		Microsoft Windows XP Professional, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10, Star UML, Java, My SQL, Microsoft Security Essentials, Microsoft Visio 2007.
Project Lab (IT-Lab-2)	94.25 sq. m	Computers		26	
Multimedia Lab, Internet Lab (IT Lab-3)	94.25 sqm	Computers	Intel CORE 2 Duo 2.8 GHZ, DG 41 M/B, 2GB DDR2, ATX SMPS, 160 GB SATA HDD, Samsung 15" CRT Monitor.	30	Microsoft Windows XP Professional, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10, Java, My SQL, Wamp Server, Dream Viewer, CISCO Packet Tracer 6.0
Programming Lab (IT Lab-4)	94.25 sq. m	Computers	i3 PROCESSOR,INTEL DH61 M/B, 3 GB RAM,500 GB HDD,,KB/MOUSE, Samsung 18.5" LCD Monitor.	60	Microsoft Windows 7 Professional & Ubuntu, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10,Java, My SQL.

31.   Number of students receiving financial assistance from college, university, Government or other agencies

Agency	No of Students Receiving financial assistance				
	2009-10	2010-11	2011-12	2012-13	2013-14
College	9	7	6	6	3
University	Nil	Nil	Nil	Nil	Nil
Govt.	Nil	Nil	Nil	Nil	Nil

Other Agencies	Nil	Nil	Nil	Nil	Nil

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Title of the Programme	Special Lecture/Workshop/Seminar	Date(s)
Good Manners and Etiquettes		01.02.2010
Work Strategies for the 21st century Workplace	Special Lecture	13.02.2010
Selecting and Executing a Student Project	Workshop	
Microsoft Top Five Secrets	Technical Talk	15.03.2010
First Step to MAC	Workshop	23.07.2010
"I am an Entrepreneur" Introduction to android platform, Facilities offered by Innovation lab	Seminar	05.07.2011
Object-Oriented Software Development using Java	Workshop	31.312.2012 to 17.01.2013
Employability and its Challenges	Seminar	16.01.2013
Android application and Development	Workshop	25.9.2013 to 27.09.2013
Linux	Spoken Tutorial Workshop	3- 4 Dec 2013
Shell Programming	Spoken Tutorial Workshop	25.09.2014 & 29.10.2014

33. Teaching methods adopted to improve student learning
- ICT enabled classroom

- Beyond Syllabi training
  Students are encouraged to undertake additional training programmes
- Practical Oriented Teaching
  In addition to the labs mentioned   in the university syllabus, additional practical modules are incorporated into the curriculum to reinforce the theory concepts.
   Laboratories are kept open beyond the working hours for doing practice on basic languages.
- Performance Enhancement Tests
  To integrate continuous evaluation into the teaching-learning progress, Tests are conducted frequently. Through this evaluation the teacher continuously monitors the progress of the students and takes appropriate remedial measures

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Year	Name of the Activity	Date
2009	Workshop on 'Basics of Computing', for students of SD College, Kanjirapally.	23.01.2009
2009	Vacation classes for X, X1 and X11 students on 'Introduction to programming languages C and	17.04.209 to 06.05.2009
2009	Computer Awareness Programme" for the women of the locality	06.05.09 and 30.05.09
2011	workshop on "Internet, Networking and Social Networking Sites"	26.05.2011
2013	Street play 'Pennkunju' in Kanjirappally town and bus stand on International Women's Day	08.03.2013
2014	Street play 'Inspiring Change' on International Women's Day	08.03.2014

35. **SWOC analysis of the department and Future plans**
  Strengths:
  - The department has a strong student mentoring and support system
  - Additional practical training is provided to reinforce theory concepts
  - The department organizes placement support activities like aptitude training, mock interviews, group discussions etc.

  Weaknesses:
  - IT is the least sought after B. Tech course. So the quality of the student intake is poor.

  Opportunities:
  - Research activities can be improved by undertaking funded projects
  - Industry involvement can be improved organizing seminars by experts from industry to reduce the gap between academia and industry
  - Alumni resources need to be tapped as an opportunity for generating endowments etc.

  Challenges:

  - Delayed admission process by the state government leads to unfilled seats

- Lack of awareness among the public about B. Tech. Information Technology course
- Less number of days for teaching due to improper schedule of University Examination and Valuation
- Delayed examination results

Future plans:

- To start M. Tech. programme in Networking
- Develop a strong research initiative among the faculty members and students by increasing the number of publications and undertaking research projects

7. Department of Mechanical Engineering

1. Name of the department: Mechanical Engineering

2. Year of Establishment: 2001

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph. D. etc.) : (i) B.Tech Mechanical Engineering
   (ii) M. Tech Machine Design

4. Names of Interdisciplinary courses and the departments/units involved: Nil

5. Annual/ semester/choice based credit system (programme-wise): Nil

6. Participation of the department in the courses offered by other departments:

| 1 | Electrical Engineering |
| 2 | Civil Engineering |

7. Courses in collaboration with other universities, industries, foreign institutions, etc. - Nil

8. Details of courses/programmes discontinued (if any) with reasons - Nil

9. Number of teaching posts:

	Sanctioned	**Filled**
Professors	3	3
Associate Professors	-	-
Asst. Professors	26	26

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Name	Qualifi-cation	Desig-nation	Speciali-zation	Years of Experie nce	Ph.D. Stud-ents guided for the last 4 years
Dr. Jippu Jacob	Ph. D,	Professor	Farm Machinery	35	
Prof. K. Sreekumar	M.E	Professor & HOD	Metallurgy	35	
K.P Sundareswaran	M. Tech	Professor	Industrial Engg.	39	--
George Sebastian	M. Tech.	AP	Production Engg	34	
Binu Thomas	M. Tech	AP	Manufacturing Engg.	8.8	
Toms Philip	M. Tech	AP	Engineering Design	7.8	--
Jibin. C. Jacob	M. Tech	AP	Material Science	6.5	--
K.R Arjun	M. Tech	AP	Industrial Engg. & Mngmnt	6	--
Rakesh. R	M. Tech	AP	Engineering Design	4	--
Arun.K. Sukumaran	M. Tech	AP	Thermal Science	6	--
Tenny Thomas	M. Tech	AP	Industrial Engg. & Mngmnt	4	--
Roshan Kuruvila	M. Tech	AP	Production		--
Richu Thomas	M. Tech	AP	Aerospace Engg.	2	--
Mathew. J. Joseph	M. Tech	AP	Manufacturing Engg.	2	--
Abu Mani	M. Tech	AP	Prodn Engg.	1	--
Francis. K	M. Tech	AP	Industrial Engg. & Mngmnt	1	--
Meby Mathew	M. Tech	AP	Manufacturing Systems Management	1	--

Ashwin Chandy Alex	M. Tech	AP	Machine Design	1	--
Rony Thomas Murickan	M. Tech	AP	Manufacturing Engg.	1	--
Bini Koshy Varghese	M. Tech	AP	Mechatronics	1	--
Ajosh Abraham	M. Tech	AP	Energy Engg.	2	--
Subin P George	M.S	AP	Engineering Design	1	
Dr. Kurian Antony	Ph. D	AP	Additive Manufacturing	-	-
Sherin Thampy	M. Tech	AP	Welding Technology	-	-
Manu Moses Jacob	M. Tech	AP	Mat. Sc.	-	-
Richu Zachariah	M. Tech	AP	Energy Engg.	-	-
Vipin Vijayan	M. Tech	AP	Manufacturing	-	-
Abi Varghese	M Tech	AP	Machine Design.	0.5	-
Saju Sebastian	M.E.	AP	Internal Combustion	1.5	--
Amal Sajikumar	M. Tech	AP	Thermal Engineering	-	--
Arun Thomas (Study Leave)	B. Tech	AP	Mechanical	1	--
Nobin Thomas (Study Leave)	B. Tech	AP	Mechanical	1	--
Ginu Thomas (Study Leave)	B. Tech	AP	Mechanical	1	--
Asok Chitarenjan (Study Leave)	M. Tech	AP	Propulsion Engg.	3	--

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: Nil

13. Student -Teacher Ratio (programme wise)

(i) B. Tech Mechanical Engineering: 1: 16

(ii) M. Tech Machine Design: 1: 4

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

No. of Academic support staff sanctioned	No. of Academic support staff filled
10	10

Sl. No.	Name
1	A.N Raman
2	Thomas Joseph
3	Vinu. K. Varghese
4	Jose Mathew
5	V.K Ranjith
6	Jiby Zacharias
7	K. Balachandran
8	T.A Abraham
9	Anwin.M. Mathew
10	Dijo Thomas

15. Qualifications of teaching faculty with M. Tech/ Ph.D.

Faculty with Qualification	Numbers
Ph. D.	2
M. Tech	28

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Project Name	Funding	Faculty Guide
Pepper Separator	Rs.1 lakh DST funding.	Ajosh Abraham
Soil Mithra	Rs. 1 lakh DST Funding	Toms Philip

18. Research Centre /facility recognized by the University - Nil

19. Publications:

    ∗ a) Publication per faculty – 6.6
    \# No. of publications of faculty in conferences and journals: 185

    ∗ Number of papers published in peer reviewed journals (national /international) by faculty and students

    ∗ Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

    ∗ Monographs

    ∗ Chapter in Books

    ∗ Books Edited

    ∗ Books with ISBN/ISSN numbers with details of publishers

    ∗ Citation Index

    ∗ SNIP

    ∗ SJR

    ∗ Impact factor

    ∗ h-index

20. Areas of consultancy and income generated - Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Board

Sl. No	Faculty Name	Name of the journal which is reviewed
1	Dr. Kurian Antony	Journal of Engineering Manufacture – SAGE Publication

22. Student projects

    a) Percentage of students who have done in-house projects, including inter-departmental/programme - 100

    b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies - Zero

23. Awards / Recognitions received by faculty and students

Name	Award	Year
Prof. Arjun K.R	Best Faculty award constituted by the college	2013-2014
Prof. Richu Thomas	Best Faculty award instituted by the college	2013-2014
Dr. Jippu Jacob	'Eminent Engineer Award' instituted by Institution of Engineers	2014
Prof. Mathew Joseph	Best Faculty award instituted by the college	2012-2013
Prof. Richu Thomas	Best Faculty award instituted by the college	2012-2013
Prof. Arjun K.R	Best Faculty award instituted by the college	2009 - 2010
Mr. Balachandran K	Best staff award instituted by the college	2012-2013

24. List of eminent academicians and scientists / visitors to the department

1. Prof. R. A. D Pillai, Former Deputy Director, VSSC.
2. Dr. K. Padmanabhan, VIT, Vellore
3. Capt. George Kurian, Former Director, Coal India Ltd.

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

Sl. No	Topic of the program	Duration	Sponsoring Agency
1	Spotlight on Risk Management of Chemical Plants/Oil Refineries	27th April – 9th May 2009 (2 weeks)	AICTE
2	Recent Trends in Nano-Composites	15th July 2014 (1 day)	ISTE AJCE Chapter

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled *M	Enrolled *F	Pass percentage
B.Tech(ME)-(2008-2009)	3235	62	62	-	50
B.Tech(ME)-(2009-2010)	2586	96	96	-	42
B.Tech(ME)-(2010-2011)	2533	91	91	-	42. 6
B.Tech(ME)-(2011-2012)	2274	117	117	-	47. 6
B.Tech(ME)-(2012-2013)	1713	121	120	1	57.3
B.Tech(ME)-(2013-2014)	1705	123	122	1	44

*M = Male   *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Tech (ME)-(2008-2009)	100	Nil	Nil
B. Tech (ME)-(2009-2010)	100	Nil	Nil
B. Tech (ME)-(2010-2011)	100	Nil	Nil
B. Tech (ME)-(2011-2012)	100	Nil	Nil
B. Tech (ME)-(2012-2013)	100	Nil	Nil
B. Tech (ME)-(2013-2014)	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.?

Name of the Competitive examination	No. of students qualified				
	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013- 2014
GATE	1	2	3	3	3
GRE	--	--	--	--	--
NET	--	--	--	--	--
Civil Services	1	--	--	--	--
Defense Services	--	--	--	--	--
CAT	--	--	--	--	--
MAT	--	--	--	--	--

29. Student progression

Student progression	Against % enrolled				
	2008-2009	2009 – 2010	2010 - 2011	2011 – 2012	2012 - 2013
UG to PG	13%	15%	31.06%	20.47%	-
PG to M. Phil.	--	--	--	--	--
PG to Ph.D.	--	--	--	--	--
Ph.D. to Post-Doctoral	--	--	--	--	--
Employed • Campus selection • Other than campus recruitment	--	--	--	--	--
Entrepreneurship/Self-employment	--	--	--	--	--

30. Details of Infrastructural facilities

a) Library

Items	Department Library
Total No. of Books	1014
Reference Books	55

Periodicals/Journals	30
General books	0
Project reports	75
Seminar reports	350

b) Internet facilities for Staff & Students - Central Computing Facility

c) Class rooms ICT facility: Six

d) Laboratories

1	Fluid Mechanics Lab
2	Hydraulic Machines Lab
3	Machine Tools Lab
4	Heat Engines Lab
5	Mechanical Engineering Lab
6	Heat Transfer Lab
7	Mechanical Measurements Lab

31. Number of students receiving financial assistance from college, university, Government or other agencies: Sixteen

Sl No.	Name of the student	Scholarship Name	Batch
1	Arun J Kannampally	Merit-cum-Means Scholarship	2004-2008
2	Tiitu C Baby	Merit-cum-Means Scholarship	2004-2008
3	Sojy Joy	Merit-cum-Means Scholarship	2004-2008
4	Arun Thomas	Merit-cum-Means Scholarship	2007-2011
5	Ajin Saju	Merit-cum-Means Scholarship	2005-2009
6	Sreeraj P R	Merit-cum-Means Scholarship	2004-2008
7	Vibin Varghese	Merit-cum-Means Scholarship	2006 - 2010
8	Ajin Saju	Merit-cum-Means Scholarship	2005-

			2009
9	Arun Joseph	Merit-cum-Means Scholarship	2007-2011
10	Evin Sebastian	Merit-cum-Means Scholarship	2007-2011
11	Alan Victor Alfred Raju	Annamma & Mathew Vattakkunnel mem scholarship	2011-2015
12	Alan Victor Alfred Raju	Lukes Joy Memorial scholarship	2011-2015
13	Prince Vincent	Lukes Joy Memorial scholarship	2009-2013
14	Richu Gheevarghese Samuel	Lukes Joy Memorial scholarship	2008-2012
15	Afsal A Kareem	Lukes Joy Memorial scholarship	2007-2011
16	Vibin Varghese	Lukes Joy Memorial scholarship	2006-2010

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts

Sl No	Name of the speaker	Seminar/Workshop Topic	Date
1	Prof. Mathukutty Mathew Monipally Professor & Head, Communications Dept. IIM Ahmedabad	Management Education after Engineering	25-04-2013

33. Teaching methods adopted to improve student learning

  (i) Group Discussion
  (ii) NPTE Video lectures

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

(i) Students Association conducted Blood Donation Camps

35. **SWOC analysis of the department and Future plans**.

Strengths:
- Well qualified faculty and staff.
- State of the art lab facilities.
- Well-finished class rooms and infrastructure.

Weaknesses:
- University exams results to be improved.
- Syllabus not up to date with requirements of industry

Opportunities:

- Tie-ups with more core companies.
- University results to be improved.

Challenges:

- Railway station is located about 50 kms and Airport about 100 kms away
- College is located in a rural area.

Future Plans:

- The faculty and students plan to take memberships in more professional bodies.
- The department plans to improve the placement prospects of the students.
- The department plans to improve the industry-institute collaboration.
- The department plans to focus more on research.

8. Department of Metallurgy

1. Name of the department   Metallurgy
2. Year of Establishment   2012
3. Names of Programmes / Courses offered   B. Tech Metallurgy
4. Names of Interdisciplinary courses and the departments/units involved   Nil
5. Annual/ semester/choice based credit system (programme wise)   Semester wise
6. Participation of the department in the courses offered by other departments:

S3, ME	Metallurgy & Material Science
S8, ME	Nuclear Metallurgy (Elective)
S8, ME	Non Destructive Testing (Elective)
S3, AUE	Metallurgy & Material Science

7. Courses in collaboration with other universities, industries, foreign institutions, etc.   Nil
8. Details of courses/programmes discontinued (if any) with reasons: Nil
9. Number of teaching posts: 5

	Sanctioned	Filled
Professors	1	1
Associate	0	0
Asst. Professors	4	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	Experience (years)	Ph.D.Students guided for the last 4 years
Dr. K.G. Samuel	Ph. D	Professor & Head	Mechanical Metallurgy	42	
Jithin Devasia	M. Tech	Asst. Professor	Metallurgy & Material	2	
Manu Harilal	M. Tech	Asst. Professor	Metallurgy & Material	0	
Siva Prasad	M. Tech	Asst. Professor	Metallurgy & Material	0	
M. Rijesh	Ph. D.	Asst. Professor	Metallurgy	0	

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: N/A
13. Student -Teacher Ratio (programme wise): 15:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:
    Technical: 2   Administrative: 0
15. Qualifications of teaching faculty with D. Sc/ D. Litt/ Ph. D/ MPhil / PG.
    Ph. D   : 2   PG   : 3
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Projects	No of Faculty	Grants Received
National	2	Rs 20,000 + Rs. 45.05 Lakh
International	Nil	Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

    1. Project Title: Development of ECAP/ECAE Process in the Warm Working Temperature Range for the Study of Microstructural Stability and Mechanical Properties of Austenitic Stainless Steel.
    Funding Agency: Department of Atomic Energy (BRNS)
    Amount sanctioned: Rs. 45.05 Lakhs
    Duration: 3 Years
    Principal Investigator: Dr. K. G. Samuel

18. Research Centre /facility recognized by the University   Nil
19. Publications:
    Publications per faculty: 10.6

Name of Faculty	Publications					
	No	Journal	Monographs	Books edited	Books with IBSN/ISSN Numbers	h-index
Dr. K.G. Samuel	53	41	Nil	Nil	Nil	10
Jithin Devasia						
Manu Harilal						
Siva Prasad						
M. Rijesh						

20. Areas of consultancy and income generated   Nil

21. Faculty as members in
    a)   National committees   Nil
    b)   International Committees   Nil
    c)   Editorial Boards   Nil
22. Student projects
    a) Percentage of students who have done in-house projects including inter departmental/programme   100%
    b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: N/A
23. Awards / Recognitions received by faculty and students

Name	Category	Amount	Batch	Achievements
Dr. K G. Samuel	Faculty	1000/-		100 % pass in Nuclear Engineering Course for S8 Mechanical-2013
Paulson Varghese	Student	1500/-	2012-16	Overall topper in Eng. Graphics-S1&S2
Paulson Varghese	Student	1000/-	2012-16	Semester topper (Metallurgy-S1&S2)
Paulson Varghese	student	1000/-	2012-16	Semester topper (Metallurgy-S3)

24. List of eminent academicians and scientists / visitors to the department

No	Name	Position	Affiliation
1	Dr. UTS Pillai	Sr. Principal Scientist	CSIR-NIIST, Trivandrum
2	Dr. T P D Rajan	Senior Scientist	CSIR-NIIST, Trivandrum

25. Seminars/ Conferences/Workshops organized & the source of funding
    a) National   Nil
    b) International   Nil
26. Student profile programme/course wise:

Name of the Course / programme (refer question no. 4)	Applied (1st Option)	Selected	Enrolled		Pass percentage
			*M	*F	
B. Tech Metallurgy(2012-16)	2	28	23	5	N/A
B. Tech Metallurgy (2013-17)	1	26	19	7	N/A
B. Tech Metallurgy (2014-18)	8	28	19	8	N/A

*M = Male   *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B. Tech Metallurgy(2012-16)	100	0	0
B. Tech Metallurgy (2013-17)	100	0	0
B. Tech Metallurgy (2014-18)	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc.?   N/A

29. Student progression

Student progression	Against % enrolled		
	2012-16	2013-17	2014-18
UG to PG	N/A	N/A	N/A
PG to M.Phil.	N/A	N/A	N/A
PG to Ph.D.	N/A	N/A	N/A
Ph.D. to Post-Doctoral	N/A	N/A	N/A
Employed • Campus selection • Other than campus recruitment	N/A N/A	N/A N/A	N/A N/A
Entrepreneurship/Self-employment	N/A	N/A	N/A

30. Details of Infrastructural facilities
    a) Library
    b) Internet facilities for Staff & Students
        20Mbps OFC back bone, Wi-Fi for the entire Department
        3 PCs provided to Staff of Metallurgy department
    c) Class rooms with ICT facility
        2 class rooms provided with Green board, projector
    d) Laboratories

Metallography Lab
Specimen Cutting Machine
Specimen Mounting Press using Bakelite
Belt Grinding Machine
Hand Polishing Unit
Double Disc Polishing Unit
Electrolytic etching unit
Optical Microscope with image analyzer

Heat Treatment Lab
Muffle furnace
Tubular furnace
Jominy quench test apparatus
Quenching baths
Mechanical Testing Lab
Screw Driven universal tensile testing machine
Fatigue testing machine
Vickers Hardness testing Machine
Rockwell cum Brinel Hardness testing Machine
Welding Lab
TIG Welding Unit
MIG Welding Unit
MMA Welding Unit
Oxy-Acetylene flame cutting unit
Foundry Lab
Shatter Index Tester
Compatibility tester
Sand rammer
Permeability meter
Mould permeability tester
Flowability tester/meter
Rapid moisture tester
Mould hardness tester
Sieve shaker
Sand weighing scale

31. Number of students receiving financial assistance from college, university, government or other agencies:

No	Batch	No of Students			
		College	University	Government	Others
1	2012-16	-	-	3	--
2	2013-17	-	-	8	-
3	2014-18	--	--	3	--

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts:

    Regular invited lectures by external experts as an activity of the professional body
    (Indian Institute of Metals – AJCE Branch of IIM Trivandrum Chapter

33. Teaching methods adopted to improve student learning:

    Audio visual presentation during lectures, regular class tests, assignments, series tests,

quizzes.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: NSS, Blood Donation, Relief works etc

35. **SWOC analysis of the department and Future plans**

Strengths:

- Qualified faculty and staff
- High level of interaction between faculty and students
- Adequate infrastructure for class rooms and labs
- Entrepreneurship awareness activities

Weaknesses:

- Communication skills of some of the students to be improved
- Pass percentage to be improved
- University syllabus has to be updated with the requirements of the industry

Opportunities:

- Tie up with Metallurgical industries.
- Faculty and student exchange programmes with foreign universities
- Carry out research and development activities with the existing lab facilities.

Challenges:

- Geographical location of the college to attract more students
- Lack of metallurgical industries in Kerala for industrial training

Future Plans

- To establish/upgrade facilities in the coming years for doing in house research for faculty and students.
- Encourage the faculty and students to publish their scientific achievements in reputed journals
- Collaborate with sister departments like Mechanical and Automobile Engineering to undertake joint research

9. Department of Chemical Engineering

1. Name of the department   :Chemical Engineering
2. Year of Establishment   :2013
3. Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)   : B. Tech
4. Names of Interdisciplinary courses and the departments/ units involved   : Nil
5. Annual/ semester/choice based credit System (programme wise)   : Semester wise
6. Participation of the department in the courses offered by other departments

Branch	Subject	Course
Mechanical Engineering	Heat and Mass Transfer	Sixth Semester ME –A Batch
Mechanical Engineering	Mechanical Measurements Laboratory	Eighth Semester ME – A Batch
Mechanical Engineering	Heat Engines Laboratory	Sixth Semester ME –A Batch
Metallurgy	Transport Phenomena (MT010 406)	Fourth Semester MT
Metallurgy	Metallurgical Thermodynamics (MT010 506)	Fifth Semester MT
Metallurgy	Mineral Dressing (MT 010 306)	Third Semester
Metallurgy	Material Testing Laboratory	Fourth Semester MT
Civil Engineering	Hydraulics Lab	Fourth Semester-CE –A Batch
Electrical and Electronics Engineering	Mechanical Laboratory	Third Semester EEE

7. Courses in collaboration with other
   Universities, industries, foreign
   Institutions, etc.   Nil

8. Details of courses/programmes
   discontinued (if any) with reasons   Nil

9. Number of Teaching posts   (Calculation based on total students from
   Second Year)

	Sanctioned	Filled
Professors	1	0
Associate Professors	0	0
Asst. Professors	3	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.
    /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Prof. Jayasree P. K	M. Tech, PhD*	Head in Charge	Process Control.	Academic- 12 Years
Ms. Surya Sathyan	M. Tech	Assistant Professor	Chemical Plant Design	Academic -1Year 2 months

11. List of senior visiting faculty   Nil

12. Percentage of lectures delivered and
    practical classes handled (programme-   Nil
    wise) by temporary faculty

13. Teacher-Student Ratio (programme-
    wise)   1:12   (Calculation based on total
                                                            Students in First and Second Years)

14. Number of academic support staff (technical) and administrative staff;

sanctioned and filled

Non teaching Staff	Sanctioned	Filled
Lab Assistant	2	1

15. Qualifications of teaching faculty
with DSc/ D. Litt/ Ph. D/ M.Phil / PG.   : PG- 2

16. Number of faculty with ongoing
projects from a) National   :Nil
 b) International funding agencies
 and grants received

17. Departmental projects funded by DST   : Nil
FIST; UGC, DBT, ICSSR, etc. and
Total grants received

18. Research Centre /facility recognized   : Nil
 by the University

19. Publications:

∗ a) Publication per faculty   0

∗ Number of papers published in peer reviewed journals (national /international) by faculty and students –

        ∗ Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)
                                  : NIL

        ∗ Monographs   : NIL.
        ∗ Chapter in Books   : NIL
        ∗ Books Edited   : NIL
        ∗ Books with ISBN/ISSN numbers
           with details of publishers   : NIL
        ∗ Citation Index   : NIL
        ∗ SNIP   : NIL
        ∗ SJR   : NIL
        ∗ Impact factor   : NIL
        ∗ h-index   : NIL

20. Areas of consultancy and income

Generated   : Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards….

Name of the Faculty	Designation	National/ International	Committee/Board
Prof. Jayasree P. K	Member	National	Indian Society for Technical Education
Prof. Jayasree P.K	Associate Member	National	Indian Institute of Chemical Engineers
Ms. Surya Sathyan	Associate Member	National	Indian Institute of Chemical Engineers

22. Student projects

a) Percentage of students who have
done in-house projects including inter
departmental/programme   : Not Applicable

b) Percentage of students placed for
projects in organizations outside the
institution i.e.in Research laboratories/
Industry/ other agencies   NIL

23. Awards / Recognitions received by
faculty and students

Name of the Faculty/ Student	Faculty/ Student	Awards / Recognitions	Organisation
Prof. Jayasree.P.K	Assistant Professor	Best faculty award	MET'S School of Engineering
Ms Surya Sathyan	Assistant Professor	2nd Rank in B. Tech- Chemical engineering in 2011	University of Kerala

Ms Surya Sathyan	Assistant Professor	Gold Medal for B. Tech	T K M College of Engineering, Kollam
Sherin Mary Mathew	Student	Second prize in Jam English	Saint Gits College of Engineering, Kottayam
Rinnu Ann Raju	Student	Second Best Artist	Saint Gits College of Engineering, Kottayam
Chandu Das , Muhammed Shafeek, DannJose, Adarsh David Lal	Students	First prize for project Expo (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam
Muhammed Shafeek Adarsh David Lal	Students	First prize for chemist (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam
Chandu Das	Student	First prize for Aqua Rocket (Nakshatra 2K14) I^2U selection	Saint Gits College of Engineering, Kottayam Amal Jyothi College Engineering
Dann Jose Sebin Anto Allen Jose Sbu	Students	Second Prize in Product Launch	Mariam College, Kuttikanam
Amal S Mundayil	Students	First Prize in Paper Presentation (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam

Basil Jose			
Thasleem Ali	Student	First Prize in Pace Tournament In Cricket	St. Joseph College of Engineering, Pala

24. List of eminent academicians and scientists/visitors to the department

Name	Designation	Organisation/Industry/Department
Dr. Arivazhagan	Professor	Department of Chemical Engineering, NIT Trichy
Dr. G. Madhu	Syndicate Member	Cochin University of Science and Technology, Kochi

25. Seminars/ Conferences/Workshops organized & the source of funding
    a) National   : NIL

    b) International   NIL

26. Student profile programme/course wise:

Year	Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
2013 -14	B. Tech - CH	83	62	42	20--	NA
2014 -15	B. Tech - CH	128	63	43	20	NA

27. Diversity of Students

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2013 -14	B. Tech - CH	100	NIL	NIL
2014 -15	B. Tech - CH	100	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defence Services, etc.?   : N/A

29. Student progression: :   N/A

30. Details of Infrastructural facilities

    a) Library   :   No of Texts-185,

       journal   :   6

    b) Internet facilities for Staff &

       Students   : Total 60 MBPS with Wi-Fi facility

    c) Class rooms with ICT facility   : 1

    d) Laboratories   : 1. Physical and Analytical laboratory

                                               2. Software lab (Common with IT)
                                               3. Fluid mechanics laboratory (Common with

    ME)

31. Number of students receiving financial assistance from college, university, government or other agencies

Batch	No. of Students			
	Government	University	College	Other Agencies
2013-2017	23	0	0	0

32. Details on student enrichment programmes (special lectures/ workshops /seminar) with external experts

                 :

Sl.#	Topic	External Expert Name
1	Frontiers for Chemical Engineers	Dr G. Madhu, Syndicate Member , CUSAT

33. Teaching methods adopted to improve student learning   :
       1. Visual aids for learning by using power point presentations and videos
       2. Lab visits – to understand the concepts deeper.
       3. Conventional method (using Black board and chalk)

6. Industrial visits / training related to the topics of study

7. Invited lectures by academicians, industrialists, entrepreneurs and alumni.

8. Seminars, Assignments and Case studies.

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:

Sl.#	No of Students	Address of the Workplace/Social Activity location	Year	No. of days	Activities done
1	8	Govt. Primary Health Centre Malayidamthuruthu (p.o) Aluva - 05	2014	14	Cleaned Hospital Area, Helped office staff and cared patients
2	8	Jeevan Jyothi Orphanage, Erumely	2014	14	Cleaning activities, awareness classes
3	3	Ashabhavan, Kannakarry Ettumanoor (P.O), Kottayam	2014	14	Cleaning activities, awareness classes
4	9	Navajeevan Trust, Villoni (P O) Kottayam	2014	14	Helped in distribution of food in Medical College
5	4	AGCM Karunalayam Mamalakavala, Pazhoor (P. O.) Piravam , Ernakulam	2014	14	Service to inmates of Old Age Home

35. **SWOC analysis of the department and Future Plans**

Strengths:

- Well-qualified faculty and staff
- There is a strong bond and a high level of interaction between faculty and students
- Adequate infrastructure
- Adequate lab facilities
- Well furnished classrooms
- Projectors fitted in every classrooms
- Entrepreneurship awareness activities
- Students are disciplined and motivative.

Weaknesses:

- College is situated in Rural area
- Communication skills of some of the students are to be improved, as they have had their schooling from Malayalam medium schools.

Opportunities:

- Students find their job in sectors such as:
- Chemicals and allied products.
- Pharmaceuticals
- Energy
- Food and confectionaries
- Oil and gas
- Process plant and Equipment design and Consultancy
- Biotechnology
- Mining and Minerals
- Business and Management

Challenges:

- Most of the industries require only a few chemical engineers hence mass recruitment from campus is not usually seen.

Future plans:

- To set up all laboratories required for Chemical Engineering
- To establish a department library
- To start a wing of IIChe student chapter at Amal Jyothi College of engineering
- To start M. Tech programme in Chemical Engineering.
- To have funded projects from various funding agencies

10. Department of Computer Applications

1. Name of the department: Department of Computer Applications
2. Year of Establishment: 2009
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D. etc.) : Dual Degree MCA, MCA Lateral Entry, MCA Regular
4. Names of Interdisciplinary courses and the departments/units involved:

Sl. No.	Name of Course	Course Code	Semester	Name of Department
1	Mathematical Foundations of Computer Science	MCA 101	S1 MCA	Basic Sciences
2	Principles of Management and Accounting	MCA 104	S1 MCA	Humanities
3	Communication and Soft Skills	MCA 108	S1 MCA	Humanities
4	Probability and Statistics	MCA 201	S2 MCA	Basic Sciences
5	Operations Research	MCA 401	S4 MCA	Basic Sciences
6	English	DMCA101	S1 DDMCA	Humanities
7	Mathematical Foundations of Computer Science	DMCA102	S1 DDMCA	Basic Sciences
8	Statistics I	DMCA103	S1 DDMCA	Basic Sciences
9	Technical Communication	DMCA 201	S2 DDMCA	Humanities
10	Statistics II	DMCA 202	S2 DDMCA	Basic Sciences
11	Accounting & Financial Management	DMCA 304	S3 DDMCA	Humanities
12	Microprocessors	DMCA 402	S4 DDMCA	ECE
13	Operations Research	DMCA 501	S5 DDMCA	Basic Sciences
14	IT Infrastructure Management	DMCA 602	S6 DDMCA	Humanities

5. Annual/ semester/choice based credit system (programme-wise): MCA – Semester wise
6. Participation of the department in the courses offered by other departments: NIL
7. Courses in collaboration with other universities, industries, foreign institutions, etc.: NIL
8. Details of courses/ programmes discontinued (if any) with reasons: NIL
9. Number of teaching posts:

	Sanctioned	Filled (2013)	Filled (2012)	Filled (2011)	Filled (2010)
Professors	1	0	2	1	1
Associate Professors	4	0	0	1	1
Asst. Professors	15	15	7	7	3

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Years of Experience		No. of Ph. D Students guided for the last 4 years
				In AJCE	Other Inst.	
Fr. Rubin Thottupuram	MCA, M. Tech, Ph. D (Pursuing)	Assistant Professor	Computer Science and Engineering	3.5	2.5	-
Mr. T.J. Jobin	M.Tech	Assistant Professor	Network Communication	11	2	-
Ms. Merin Manoj	M.Tech	Assistant Professor	Network Communication	7	2	-
Ms. Lisha Varghese	MCA, M.E.	Assistant Professor	Computer Science and Engineering	4. 5	3	-
Mr. Ajith G.S.	MCA, M. Tech	Assistant Professor	Computer Science and Engineering	4.5	9.5	-
Mr. Jinson Devis	MCA, M. Tech	Assistant Professor	Computer Communications	3.25	7.5	-
Ms. Shelly Shiju George	MCA	Assistant Professor	MCA	4	3	-
Sr. Elsin Chakkalackal	M.E.	Assistant Professor	Computer Science and Engineering	3	0	-
Mr. Juby Mathew	MCA, M Phil, M. Tech, Ph. D (Pursuing)	Assistant Professor	Computer Communications	3	7	-

Ms. Jetty Benjamin	MCA	Assistant Professor	Computer Applications	6 Months	10 Months	-
Ms. Gloriya Mathew	M.Tech	Assistant Professor	Computer Science and Engineering	6 Months	5 Months	-
Ms. Dilu Mariya	MCA	Assistant Professor	Computer Applications	6 Months	6 Months	-
Ms. E.C. Nisha	MCA	Assistant Professor	Computer Applications	4	3.8	-
Ms. P.J. Maria	MCA	Assistant Professor	Computer Applications	1	1	-
Ms. Jismy A. Khan	MCA	Assistant Professor	Computer Applications	2	2	-

11. List of senior visiting faculty: NIL
12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty: NIL
13. Student -Teacher Ratio (programme-wise)

S-T Ratio	2013-14	2012-13	2011-12	2010-11	2009-10
MCA	15:1	15:1	15:1	12:1	6:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Course	Sanctioned Lab Instructor	Filled Lab Instructor
MCA	5	5

15. Qualifications of teaching faculty with D Sc/ D. Litt/ Ph. D/ MPhil / PG.

Qualification	Number of faculty
M. Phil	1
PG	15
Ph. D*	2

*- doing PhD

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Number of faculty	National	International
1	1	NIL

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Projects	Funding Agency	Grants
Nil	Nil	Nil

18. Research Centre /facility recognized by the University: NIL
19. Publications:
   a) Publication per faculty: 2.8
   Number of papers published in peer reviewed journals (national / International) by faculty and students: 14
   Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 28
   Monographs, Chapter in Books, Books Edited, Books with ISBN/ISSN numbers with details of publishers, Citation Index, SNIP, SJR, Impact factor, h-index

Name	Publications	No: of Publications listed in international databases	Monographs	Chapter in books	Books edited	Books with ISBN/ISSN No.	Citation index	SNIP	SJR	Impact Factor	h-index
Fr. Rubin Thottupuram	10 (C) 2 (J)	2					3				1
Mr. Ajith G.S	NIL				1						
Ms. Lisha Varghese	5 (C)										
Mr. Jinson Davis	1(C) 1(J)										
Ms. Shelly Shiju George	4(C) 3 (J)										
Sr. Elsin Chakkalackal	2 (C)										
Mr. Juby Mathew	2(C) 5 (J)										
Merin Manoj	NIL										
Mr. T. J. Jobin	1(C)										
Ms. Jetty Benjamin	NIL										
Ms. Gloriya Mathew	2(C) 3 (J)										
Ms. Dilu Mariya	1(C)										

Joseph											

20. Areas of consultancy and income generated: Nil
21. Faculty as members in
    a) National committees b) International Committees c) Editorial Boards: Nil
22. Student projects
    a) Percentage of students who have done in-house projects including inter departmental/programme: 95%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 5%

23. Awards / Recognitions received by faculty and students

Faculty Awards

Sl.	Name	Award	Year
1	Fr. Rubin Thottupuram	Top Performing Faculty in AJCE	2011-2012
2	Mr. Ajith G S	Top Performing Faculty in AJCE	2011-2012
3	Mr. Juby Mathew	Top Performing Faculty in AJCE	2013-2014
4	Ms. Merin Manoj	Top Performing Faculty in AJCE	2013-2014

Student Awards

Sl. No	Name	Batch	Award	Year
1	Anup Joseph, Arjun S., Babin Babu, N.M. Jophi	2010-2013 MCA	Prizes In Various Intercollegiate Technical Events	2011
2.	Rekha Raveendran, Soumya Sunny	2010-2013 MCA	Presented Paper - National Conference on Green Computing, Marian College, Kuttikanam	2011
3.	Chithra Soman, Cicily George, Dilu Maria Joseph, Dona Mol John, Hima Philip	2010-2013 MCA	Presented Paper – UGC Sponsored National Seminar on Cyber Criminology at Baselios Poulose II Catholicos College, Piravam	2011
4.	Arun Sankar, Sreejith, Nikhil K.Prakash	2010-2013 MCA	Presented Paper - National Conference on Green Computing, Marian College, Kuttikanam	2011
5.	Aishwarya Mathew, Annu Sebastian, Chithra	2010-2013 MCA	Presented Paper - National Conference on Green Computing, Marian College, Kuttikanam	2011
6.	Balu Abraham	2011-2014 MCA	First Prize – Intercollegiate Cricket Match, St. Joseph's College Of Engineering, Pala	2014
7.	Alby Joseph, Ann Mary Thomas	2011-2014 MCA	Presented Paper - National Conference on Cloud Computing, Marian College, Kuttikanam	2014
8.	Maathu Michael, Teenu V. Therese	2011-2014 MCA	Presented Paper - National Conference on Cloud Computing, Marian College, Kuttikanam	2014

9.	Shabana Basheer	2011-2014 MCA	Presented Paper – NCIET'13, Musaliar College Of Engineering And Technology, Pathanamthitta	2013
10.	Mathew Michael	2011-2014 MCA	Presented Paper – International Conference on Semantic Web, Amal Jyothi College Of Engineering, Kanjirappally, Kottayam	2014
11.	Emy M. Thomas, Rajasree T.	2012-2015 MCA	Presented Paper – National Conference on Cloud Computing, Marian College, Kuttikanam	2014
12.	Joffin K. Jose	2012-2015 MCA	Second Prize – Web Designing, Detecknista'14, De Paul Institute Of Science And Technology, Angamaly, Ernakulam	2014
13.	Praveen P. Jose	2012-2015 MCA	Second Prize – Web Designing, Detecknista'14, De Paul Institute Of Science And Technology, Angamaly, Ernakulam	2014
14.	Arun Gopinath, Anoop George Muttath	2013-2016 MCA	Presented Paper – National Conference on Cloud Computing, Marian College, Kuttikanam	2014
15.	Anju A. Nair, Maria Mathews	2013-2016 MCA	Presented Paper – National Conference on Cloud Computing, Marian College, Kuttikanam	2014
16.	Sobin K.C., Praveen P. Jose, Nivin C.S., George Philip	2012-2015 MCA	Second Prize – Video Presentation, Navigator'14, Marian College, Kuttikanam	2014
17.	Senchu Thomas, Siju Xavier	2012-2015 MCA	Third Prize – Paper Presentation, Navigator'14, Marian College, Kuttikanam	2014

24. List of eminent academicians and scientists / visitors to the department

Sl No	Date	Event	Academician/Speaker
1	29-Jan-14	Cloud Computing	Mr. Arun Eapen , Red Hat
2	11-Feb-14	Cyber Security	Mr. Joseph Ponnoly, Cyber Security Evangelist ,USA
3	15-Feb-14	Effective usage of Scientific Calculator	Mr. Solomon George
4	18-19 March-2014	Ethical Hacking and Cyber Security	Mr. Manu Zacharia, Information Security Evangelist, Creator & Chief Architect of Matriux - Asia's first Security & Penetration Testing Operating
5	29-Mar-14	CSI-AJCE Student Branch Inauguration	Mr. Sijo Kuruvilla George, CEO of Startup Village
6	12- August – 2014	Department Inauguration	Fr. Dr. Roy Abraham, Principal, Marian College Kuttikkanam
7	July – October	Short Course on Bank	Shri Abraham Kurien IPS, Director AJICS

| | | 2014 | and other Competitive exam preparation | | |

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National   b) International

Sl No	FDP/STTP/WORKSHOP /SEMINAR	Title of the Program	National/ International/Regional Level	Funding Agency/ Sponsored By
1	ISTE Workshop	Ekalavya :-Aakash Android Application Programming	National	IIT Bombay& MHRD
2	ISTE Workshop	Ekalavya :-Database management system under MHRD NMEICT	National	IIT Bombay& MHRD
3	ISTE e- workshop	Creative Teaching	National	ISTE Kerala chapter

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
MCA, 2009	25	11	6	5	60
MCA, 2010	130	56	23	33	69.6
MCA, 2011	110	55	17	38	-
MCA, 2012	70	52	36	16	-
MCA, 2013	80	55	22	33	-
MCA,2014	40	25	15	10	-
LE MCA,2014	115	60	51	9	-
DD MCA,2014	80	59	28	31	-

*M = Male   *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
MCA	100	--	--

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? : NIL

29. Student progression

Student progression	Against % enrolled

UG to PG	NA
PG to M. Phil/M. Tech	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed ● Campus selection ● Other than campus recruitment	10 35
Entrepreneurship/Self-employment	6

30. Details of Infrastructural facilities
    a) Library: Well established department library
       No of volumes: 937
       No of titles: 432
    b) Internet facilities for Staff & Students: Fully Wi-Fi campus with 50 Mbps
    c) Class rooms with ICT facility: Available
    d) Laboratories:

Lab	Space, Number of students	Number of Experiments	Quality of Instruments
Advanced Systems Lab	66	C, C++ -Programming Java Programming DBMS Lab Graphics Lab Mini Projects	Intel i5 Processor with 250GB Hard Disk & 4GB RAM (Wired Network)
Project Lab	33	C , C++ -Programming Java Programming MP Lab DS Lab Hardware & Networking Lab	Intel Dual Core Processor with 40GB Hard Disk & 512MB RAM (Wired Network)
Programming Lab	72	System Software lab Java Programming MP Lab Operating System lab Main Project	Intel i5 Processor with 500 GB Hard Disk & 4GB RAM (Wired Network)
Hardware & Networking Lab	60	Mini Project OS Lab DS Lab, Spoken Tutorial	Intel i5 Processor with 250GB Hard Disk & 4GB RAM (Wired Network)

31. Number of students receiving financial assistance from college, university, government or other agencies

Scholarship from Management: 20
MCM scholarship: 3

32. Details on student enrichment programmes (special lectures/workshops /seminar) with external experts

Date	Title	Conducted by
24, 25 March 2014	"Hands-on Workshop on OpenGL"	Mr. Jinson Devis, Ms. Lisha Varghese Asst. Professor, Amal Jyothi College of Engineering
5th April 2014	Mozilla Firefox "APP DAY" and "WEBMAKER PARTY" Workshop	CSI Cochin chapter
13th Dec 2013	Special Lecture as part of Placement Training	Mr. Dennis Sebastian, KPMG Bangalore
24th July 2014	New Features on JDK 8	Oracle Academy
1st August 2014	New Features on MySQL	Oracle Academy
18-23 August 2014	"Establishing goals in life and how to actively pursue them". Personality Development workshop	Mr. Abraham Stephen, International Trainer of JCI and HRD Consultant
29 September 2014	Cloud Computing	Oracle Academy

33. Teaching methods adopted to improve student learning
- Prior preparation of course plan by teachers.
- Publication of department wise academic calendar with dates on assignment submission and internal exams prior to the commencement of the semester.
- In house micro, mini and mega projects along with the university syllabus.
- Selected top performing final year students are assigned as teaching assistants in labs and in-house projects for juniors.
- Teaching aids like Multimedia projectors
- Assignments
- Lectures
- Spoken Tutorials
- Aptitude Tests
- Homework
- Case studies
- Using the internet to find the recent information related to the course
- Programming Assignments
- Industrial visits
- Guest lectures

- Case studies - Projects
- Practical Records- Linking classroom with real world
- Group activities- Debates, Group discussions
- Audio Classes to improve communication skills
- Mentoring -20 students per staff
- Walk and Talk- To improve Student-Teacher Relationships

34. Participation in Institutional Social Responsibility (ISR) and Extension activities
    1. Outreach programs which helps to develop Social awareness and Responsibility
    2. Conducted Awareness program for High school ,+1,+2 students about Social networks and students
    3. Conducted a detailed study on the vehicle parking and transportation of Shabarimala Pilgrims in view of building a comprehensive mobile application.

35. **SWOC analysis of the Department and Future plans**

Strengths:
- Well-equipped infrastructural facilities like laboratories, seminar halls, class rooms with necessary teaching aids.
- A good central and departmental library with huge collection of books & magazines, internet facilities, collection of national & international journals.
- Faculty with good teaching & industry experience.
- Training in latest technologies via ADD-ON Courses in Finishing School like: PHP, CodeIgniter, CakePHP, JAVA, SQL, C#, HTML, Javascript, ASP.NET, JSP, SPRING, Structs 2.X, Software Testing. 10 weeks online course from Oracle Academy in Java and Oracle DBMS.
- Placement activities from the first semester onwards: group wise aptitude tests, group discussion and mock interviews (Special placement hour included in timetable). Online aptitude training via www.aptitudetraining.in, supported by IPSR solutions ltd. Kottayam
- Incubation Centre for entrepreneurial support : Ventures by Maathu Michael (MCA 2014 batch) www.layamusicals.com, Joffin Jose (MCA 2016 batch) www.visualmagic.in and www.feminworld.com
- In house virtual company with the support of the students and faculty develops various software and websites.
  - o "Parish Companion" (www.pacom.in) a centralized data management system for parishes.
  - o www.mariamthresia.org
  - o www.greenkerala.in
  - o www.keralacolleges.in
  - o www.keralaschools.in
  - o www.edukply.in
  - o www.kanjirapallydiocese.com
  - o www.dukhrana.in
  - o www.santhom.org
  - o www.vilanilam.com
  - o www.darsakan.in
- Students are getting support for web site design and hosting from department initiative via www.ajcehost.com
- Giving consultancies in software deployment and hardware purchases for Sahyadri Co-

operative Credit Society Ltd., Kanjirapally and various Schools under the Corporate Management of Diocese of Kanjirapally.

- "Walk & Talk" – Students along with mentors weekly outing to nearby places and industries.
- AMACE- Amal Jyothi MCA Association For Career Enhancement; under this umbrella department espouses participatory decision making and management of various departmental activities with students, like:
  - o Placement Activities
  - o Admission oriented activities
  - o Conference / Workshop / Seminar
  - o Talent Fest /Competitions
  - o Yearly Digital Magazine – "F5"
  - o Monthly Digital Newsletter
  - o MCA student's blog management - mcablog.ajce.in
  - o MCA Alumni Management
  - o Teachers' Day Celebrations

Weakness:
- Lack of research funding support.
- Course getting delayed due to delayed examination and result announcements by the university.
- Remoteness from IT hubs like Cochin and Trivandrum.

Opportunities:
- Providing opportunities for students to get placed in various MNC's through campus interview.
- Incubation Centre facility with technical support for their entrepreneurial ventures.
- Creating awareness to students about the latest technologies through Guest Lectures, Industrial visits.
- Providing students real time experience by making them to undergo in-plant training in various companies.
- Special coaching for Bank Tests and various competitive examinations.
- Providing necessary aids to make the students present their ideas as projects in the campus.
- Encouraging students to participate in workshops, seminars & projects in other colleges and industries.
- Encouraging students to be entrepreneurs and leaders in various fields and research activities

Challenges:
- Changes in technologies
- Continuous revision of syllabus.
- Students with low cut-off marks.
- Continuous assessment of student activities in academics.
- Mushrooming of engineering colleges.
- Companies preferring B Tech to MCA.
- Less number of Campus Drives and recruitment for BCA /BSc students.

Future Plans:
- Encourage the faculty and students to do more research and publish papers in

international journals.
- All teachers will be encouraged to pursue Ph. D
- Collaboration with foreign institutions.
- Orchestrate international/national funded projects and conferences.
- Conduct an on-going computer awareness class for a tribal school, located inside Periyar Tiger Reserve.
- Students will be encouraged to take at least one online course from *Coursera* per semester. (*Coursera* is an education platform that partners with top universities and organizations worldwide, to offer courses online for anyone to take, for free.- www.coursera.org)

11. Department of Basic Sciences

1. Name of the department   : Basic Sciences

2. Year of Establishment   : 2002

3. Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters;
    Integrated Ph.D., etc.)   : Nil

4. Names of Interdisciplinary courses and the departments/units involved: N/A

5. Annual/ semester/choice based credit system (programme-wise): Semester

6. Participation of the department in the courses offered by other departments

S.No	Subject	Program & Branch
1.	Engineering Mathematics I	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
2.	Engineering Physics	B. Tech AUE, CH CE, ME, MT, ECE, EEE, CS, IT, CH
3.	Engineering Chemistry and Environmental Science	B. Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
4.	Engineering Mathematics II A	B. Tech AUE, CE, ME, MT, ECE, EEE, CH
5.	Engineering Mathematics II B	B.Tech CS ,IT
6.	Engineering Mathematics III	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
7.	Engineering Mathematics IV A	B. Tech AUE, CE, ME, MT, ECE, EEE,CH
8.	Engineering Mathematics IV B	B.Tech CS, IT
9.	Physical and Analytical Chemistry	B.Tech CH
10.	Analytical Chemistry Lab	B.Tech CH
11.	Organic Chemistry	B.Tech CH
12.	Organic Chemistry Lab	B.Tech CH
13.	Mathematical Foundations for Computer Science	MCA
14.	Probability and Statistics	MCA
15.	Operations Research	MCA
16.	Principles of Management	MCA
17.	Analytical Foundations for Communication Engineering	M. Tech ECE
18.	Mathematical Foundations for Computer Science	DDMCA
19.	Statistics -1	DDMCA
20.	Statistics -2	DDMCA
21.	Operations Research	DDMCA
22.	Advanced Engineering Mathematics	M. Tech ME
23.	Analytical Methods for Engineering	M. Tech CE
24.	Optimization Techniques	M. Tech PEPS &ES

25.	Computational Intelligence	M. Tech CSE
26.	Research Methodology	M. Tech CSE,ECE,ME,CE, PEPS &ES

7. Courses in collaboration with other universities, industries, foreign institutions, etc. Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts:

	Sanctioned	Filled
Professors	4	4
Associate Professors	2	2
Asst. Professors	12	12

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

No.	Name	Qualification	Designation	Specialization	Years of Experience	No. of Ph.D. Students guided for the last 5 years
1.	Joy Cyriac	M. Sc	Professor	Statistics	48	Nil
2.	Soney C. George	M. Sc, Ph. D (PDF)	Professor	Chemistry (Polymer Science)	17	1 (Guided) , 6 guiding
3.	Jacob Philip	M. Sc, Ph. D (PDF)	Professor	Applied Physics and Instrumentation	30	5 (Guided), 5 guiding
4.	Lisa Mathew	M. Sc, M. Phil, Ph. D	Professor	Mathematics (Theoretical computer science)	18	Nil
5.	Abin Manoj	M. Sc. Ph. D	Assoc. Professor	Physics	13	Nil
6.	Sajith Kurian	M. Sc, Ph. D (PDF)	Assoc. Professor	Chemistry	0	Nil
7.	Lisa Rani Alex	M. Sc, M. Phil, B. Ed	Asst. Professor	Mathematics (Graph Theory)	7	Nil
8.	Linu Tess Antony	M. Sc, B. Ed	Asst. Professor	Mathematics	6	Nil
9.	Deepamol S	M. Sc, M. Phil	Asst. Prof	Mathematics(Topology)	8	Nil
10.	Thomaskutty	M. Sc	Asst.	Mathematics	4	Nil

	Stephen		Professor			
11	Jasmine Mathew	M. Sc	Asst. Professor	Mathematics (Graph Theory)	4	Nil
12	Nimmy Chacko	M. Sc	Asst. Professor	Mathematics	4	Nil
13	Sini Rose Devasia	M. Sc M. Phil, B. Ed	Asst. Professor	Mathematics (semi-group theory)	5	Nil
14	Rino Laly Jose	M. Sc B. Ed	Asst. Prof	Pure Chemistry	9	Nil
15	Rose Jacob	M. Sc, M. Phil	Asst. Professor	Physics	3	Nil
16	Nobin Thomas	M. Sc, M. Phil	Asst. Professor	Mathematics	3	Nil
17	Deepa H. Nair	M. Sc, PhD	Asst. Professor	Mathematics (Applied Analysis)	2	Nil
18	Dilip Kumar	M. Sc, B Ed, PhD	Asst. Professor	Mathematics (Special Functions)	2	Nil

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme-wise) by

temporary faculty -10%

13. Student -Teacher Ratio (programme-wise): N/A (supporting department)

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Nil

15. Qualifications of teaching faculty with D. Sc/ D. Litt. / Ph. D/ M. Phil / PG.

Degree	Number
Ph. D	6*
M. Phil	6
P.G	18

* One more has submitted his thesis

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S. No	Name of faculty	Funds Available
1.	Dr Soney C George	Rs. 33.05 Lakh

19. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

S. No	Name of faculty	Agency	Funds Available
1.	Dr Soney C George	DST	Rs. 69.4 Lakhs *

* 50 lakhs out of 69.4 lakhs sanctioned for a collaborative project

18. Research Centre /facility recognized by the University: Nil

19. Publications (last 5 years): Details

∗ a) Publication per faculty: 2.9

S. No	Faculty	No of papers	Mono graphs	Chapters in books	Books Edited	Books with ISBN/ISSN numbers with details of publishers
1.	Dr Soney C George	6	1	4	1	1, S. Chand, New Delhi
2.	Dr Deepa H Nair	1	Nil	Nil	Nil	Nil
3.	Dr. Dilip Kumar	2	Nil	Nil	1	Nil
4.	Dr. Jacob Philip	34	1	1	1	1, Intech Publishers, Croatia 1, Educational Publishers, Cochin

S. No	Faculty	Citation Index	SNIP	SJR	Impact factor	h-index
1.	Dr Soney C George	413*	7.356 $	4.839 $	14.96	10*
2.	Dr Lisa Mathew	59				3
3.	Dr Deepa H Nair	Nil				Nil
4.	Dr. Sajith Kurian	102				5
5.	Dr. Dilip Kumar	101				
6.	Dr. Jacob Philip	1844			2.5 (average)	28

*2009 onwards, $ 2011 standards

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees – One

Dr. Jacob Philip (DST committee, UGC Committee, NAAC Peer committee)

b) International Committees –One

Dr. Jacob Philip (Int. Conf. on Photoacoustic and photothermal phenomena, Tech. Committee)

c) Editorial Boards

Dr. Jacob Philip (Indian J. Pure and Appl. Phys., J. Scientific and Ind. Research, J. Instrument Soc. India)

Dr. Jacob Philip (Reviewer for a dozen international journals)

Dr. Soney C George (Reviewer for 4 international journals)

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme   N/A

   < 5% (I^2U Projects, B.Tech Projects and M.Tech projects were supervised by Dr. Soney C George)

b)   Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: N/A

23. Awards / Recognitions received by faculty and students

S. No	Faculty	Awards / Recognitions
1.	Dr Soney C George	Best Faculty Award (Professor Category)-AJCE-2013-2014
		Best Faculty Award (Professor Category)- AJCE-2011-2012
		Fellow, Royal Society of Chemistry, 2014
2.	Dr Jacob Philip	Fellow, Alexander von Humboldt Foundation (Germany)
		Fellow, Institute of Physics (UK)
		Fellow, Kerala Academy of Sciences

24. List of eminent academicians and scientists / visitors to the department

1.	Dr. Sabu Thomas	Professor of Polymer Science and Technology, School of Chemical Sciences, M.G. University
2.	Dr. T Muraleedharan Nair	Deputy Director CFSC, Manjeri
3.	Dr. K.K John	HOD, Dept of Economics,

		St. Thomas College, Palai
4.	Dr C.S. Menon	Former Dean (Science and Technology) & Director(SPAP), M.G. University, Kottayam

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

No	Title	Dates	Source of funding	Remarks
1.	Staff Development Program on Relevance of Mathematics in Engineering	17th to 22nd August 2009	AICTE	
2.	National Conference on Advances in Nanoscience and Technology	22nd and 23rd April 2010	DST	
3.	National Seminar on Applications of Graph Theory	21st -22nd November 2014	UGC	Organized in Association with St Dominic's College, Kanjirapally
4.	National Workshop on Probability Theory and its Applications	28-30 April 2014	Indian National Science Academy	

b) International

	Title	Dates	Source of funding	Remarks
1.	AICERA 2012 International Conference on Engineering Education: innovative Practices and Future Trends	19th -21st July 2012	IEEE, DRDO	

26. Student profile programme/course-wise   : N/A

27. Diversity of Students: N/A

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?   : N/A

29. Student progression   : NA

30. Details of Infrastructural facilities

 a) Library with 350 books

b)   Internet facilities for Staff & Students

c) Class rooms with ICT facility

 d) Laboratories   : N/A

31. Number of students receiving financial assistance from College, University, Government or other agencies   : N/A

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts   : N/A

33. Teaching methods adopted to improve student learning

Tutorial classes, Seminar Presentations, Assignments, and Tests

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Entrance coaching for school students

35. **SWOC analysis of the department and Future plans**

Strengths:

1. The department has a strong team of committed and experienced faculty
2. Seven faculty members have Ph. D degree, 6 have M. Phil degree and three have worked as post doctoral fellows in a foreign universities
3. The department has received project funding worth Rs. 88 lakhs from various national agencies.

Weaknesses:

1. The department has no UG or PG courses
2. Research collaborations and output need to be strengthened

Opportunities:

1. The department can offer PG courses
2. The department can start a research centre in Mathematics
3. Consultancy projects can be undertaken

Challenges:

1. Promoting higher levels of research and consultancy
2. Research collaboration within the department and with other departments/institutions

Future plans:

1. Conduct workshops and seminars periodically
2. Conduct special orientation programs for teachers and students
3. Offer PG courses
4. Establish a research Centre in Mathematics

12. Department of Humanities

1. Name of the department: Humanities

2. Year of Establishment: 2007

3. Names of Programmes/Courses offered: (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): Nil

4. Names of Interdisciplinary courses and the departments/units involved: N/A

5. Annual/ semester/choice based credit system (programme-wise): N/A

6. Participation of the department in the courses offered by other departments

Sl. No.	Name of Programme	Semester	Name of Course	Course Code
1	B. Tech AUE	S1S2	Communication Skills	ENG
2	B. Tech ME	S1S2	Communication Skills	ENG
3	B. Tech CE	S1S2	Communication Skills	ENG
4	B. Tech ECE	S1S2	Communication Skills	ENG
5	B. Tech CSE	S1S2	Communication Skills	ENG
5	B. Tech MTG	S1S2	Communication Skills	ENG
6	B. Tech CHE	S1S2	Communication Skills	ENG
7	B. Tech ME	S3	Economics and Communication Skills	EN010302
8	B. Tech CE	S3	Economics and Communication Skills	EN010302
9	B. Tech ECE	S3	Economics and Communication Skills	EN010302
10	B. Tech CSE	S3	Economics and Communication Skills	EN010302
11	B. Tech MTG	S3	Economics and Communication Skills	EN010302
12	B. Tech CHE	S3	Economics and Communication Skills	EN010302

13	B. Tech EEE	S4	Principles of Management	ENO10402
14	B. Tech CS	S4	Principles of Management	ENO10402
15	B. Tech CE	S4	Principles of Management	ENO10402
16	B. Tech CS	S5	Principles of Management	EN010502
17	B. Tech EEE	S5	Principles of Management	EN010502
18	B. Tech AUE	S5	Soft Skills	SS
19	B. Tech ME	S5	Soft Skills	SS
20	B. Tech CE	S5	Soft Skills	SS
21	B. Tech ECE	S5	Soft Skills	SS
22	B. Tech CSE	S5	Soft Skills	SS
23	B. Tech MTG	S5	Soft Skills	SS
24	B. Tech AUE	S7	Placement Training	PT
25	B. Tech ME	S7	Placement Training	PT
26	B. Tech CE	S7	Placement Training	PT
27	B. Tech ECE	S7	Placement Training	PT
28	B. Tech CSE	S7	Placement Training	PT
29	B. Tech MTG	S7	Placement Training	PT
30	B. Tech IT	S7	Financial Management	IT010701
31	MCA	S1S2	Communication Skills	MCA 108
32	MCA	S1S2	Principles of Management & Accounting	MCA 104

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:
    Nil
8. Details of courses/programmes discontinued (if any) with reasons: N/A

9. Number of Teaching & allied posts

	Sanctioned	Filled (2013)	Filled (2012)	Filled (2011)
Professors	3	3	3	3
Associate Professors	Nil	Nil	Nil	Nil
Asst. Professors	5	5	2	2
Placement Officer	1	1	1	1
Assistant Placement Officer	1	1	Nil	Nil

Physical Director	1	1	1	1		
Liaison Officer	1	1	1	1		
Counsellors	3	3	3	3		

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation P-Professor, AP-Asst. Prof.	Specialization	Years of Experience		No. of Ph. D Students guided for the last 4 years
				In AJCE	Other Inst.	
Dr VJ Sebastian Narively	MA Ph. D	Professor	MA English	8	39	
E M Gracy	MA	Professor	Economics	9	27	--
P K Kuruvilla	MA	Professor	Economics	8	25	--
Mr Thomas Paul	MBA	Public Relations Officer	Marketing	12	-	---
Ms Yelana Thomas	MA, B. Ed., Ph.D.*	Assistant Professor	English Language and Literature	6	3	-
						-
Ms Shamini James	MBA, Ph. D.*	Assistant Professor	Marketing &Finance	4	6	--
						-
Mr Jince Kappen	MPE, Ph. D	Assistant Professor	Physical Education	2	3.5	-
Fr Joseph Maniangatt	MA PD, Ed S	Counselor	Student Counseling Family Counseling and Marriage Therapy	10	10	-
Fr Mathew Mulangacheriyil	MS Clinical	Counselor	MS Clinical Counseling (USA)	3	2	-

Sr. Molly A. O.	Dipl. Counselling	Counselor	Counselling	1	5		-
Sr. Anna Maria, S. H.	M. A.	Counsellor	Formative spirituality and counselling	1	--		--
Mr. Zac Mathew.K	B Com, M.B.A	Liaison Officer	Finance and Marketing	3	6		-
Mr Jose Dominic Joseph	MTM, B. Sc., B.Ed.	Soft Skills Trainer (Assistant	Soft Skills- Attitude, Communication and Etiquette	1	27		-
Ms. S Sangeeta	M.A. B.Ed.	Assistant Professor	English Language & Literature	1	3		-
Ms Susan Chacko	MIB, MA English	Soft Skills Trainer	Soft Skills- Attitude, Communication and Etiquette	1	3		-
Mr Rony Tom	MCA	Assistant Placement	Software	1	3		

* doing Ph. D

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty: Nil

13. Student -Teacher Ratio (programme-wise)

S-T Ratio	2013-14	2012-13	2011-12	2010-11	2009-10
B. Tech	NA	NA	NA	NA	NA
M. Tech	NA	NA	NA	NA	NA

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: N/A

15. Qualifications of teaching faculty with D. Sc/ D. Litt/ Ph. D/ M. Phil / PG

Qualification	Number of faculties
PG	16
Ph. D*	2
Ph. D	2

* doing PhD (On leave)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Number of faculties	National	International

	Nil	Nil	Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Projects	Funding Agency	Grants
Nil	Nil	Nil

18. Research Centre /facility recognized by the University: Nil
19. Publications:
   ∗ a) Publication per faculty
   ∗ Number of papers published in peer reviewed journals (national/international) by faculty and students

   > ∗ Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
   > ∗ Monographs
   > ∗ Chapter in Books
   > ∗ Books Edited
   > ∗ Books with ISBN/ISSN numbers with details of publishers
   > ∗ Citation Index
   > ∗ SNIP
   > ∗ SJR
   > ∗ Impact factor
   > ∗ h-index

Name	Publications	No: of Publications listed in international databases	Monographs	Chapter in books	Books edited	Books with ISBN/ISSN No.	Citation index	SNIP	SJR	Impact Factor	h-index
Jince Kappen	Effect of Progressive Relaxation Training on Selected Psychological Variables of College Students	International Journal of Scientific Research, Vol.I, Issue VIII.				ISSN No. 2277-8179					
Jince Kappen	Effect of Moderate Hypoxia on Selected Biochemic	International Journal of Scientific				ISSN No. 2277-					

	al and Physiologi cal Variables of Middle and Long Distance Runners.	Research, Vol. II, Issue IV. April 2013, 323-325				817 9						
Jince Kappen	1) Effect of Sand Runni ng and Weigh t Traini ng on Select ed Physio logical Variab les of Colleg e Men.	Internatio nal Journal of Scientific Research, Vol. I, Issue VII. Decembe r 2012, 163-165				ISS N No. 227 7- 817 9						
	Effect of Aerobic Training on Body Mass Index on Sedentary Obese Women.	Indian Journal of Applied Research, Vol. II, Issue II. Novembe r 2012, 134,				ISS N No. 224 9- 555 X						

20. Areas of consultancy and income generated: Nil

21. Faculty as members in
    a) National committees: Nil
    b) International Committees: Nil
    c) Editorial Boards: Nil

22. Student projects
    a) Percentage of students who have done in-house projects including inter departmental/programme: N/A
    b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies N/A

23. Awards / Recognitions received by faculty and students
     Faculty Awards/Recognitions: Nil
     Student Awards/Recognitions: Nil

24. List of eminent academicians and scientists/visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized & the source of funding
 a) National   Nil
 b) International Nil
c) ISTE National workshop sponsored by IITB & MHRD: NA

26.   Student profile programme/course wise: N/A

27.   Diversity of Students: N/A

28.   How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: N/A

29.   Student progression: N/A

30.   Details of Infrastructural facilities
    a) Library
     No of volumes: Nil
     No of titles: Nil
    b)   Internet facilities for Staff & Students: Fully Wi-Fi campus with 50 Mbps
    c) Class rooms with ICT facility: Available in all classrooms
    d) Laboratories: Communication Skill Lab

31.   Number of students receiving financial assistance from college, university, government or other agencies: N/A

     Scholarships: N/A

32.   Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

Sl No	Date	Event	Academician/Speaker
1	9-Jan-13	Career Guidance Programme	Mr Abraham Kurien IPS (Retd)
2	23rd January 2014	A lecture on *Sex Education*	Sr. Marcellus, Chief Gynecologist, Little Lourdes Matha Hospital, Kidangoor

33.   Teaching methods adopted to improve student learning
    • Assignments   • Lectures

- Spoken Tutorial
- Power-point Presentations
- Quizzes
- Visit some websites to help students improve language
- Review questions and class discussion.
- Using the Internet to find the recent

information related to the course.
- Tutorials
- Homework
- Case studies.
- Exercises
- Simulations

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Sl. No.	ISR & Extension Activities
1	Placement classes were taken for BCA students at Marian College Kuttikkanam
2	College NSS Director from the department & active in NSS activities

35. **SWOC analysis of the department and Future plans**

Strengths:

- Well-equipped infrastructural facilities like laboratories, seminar halls, class rooms with necessary teaching aids.
- Faculties with good teaching experience.
- Training & placement activities.
- Add-on courses for improving Language skills like IELTS, Speak English with ease.

Weakness:
- Lack of research centre.

Opportunities:

- Providing opportunities for the students to get placed in various MNCs through campus interview.

Challenges:

- Improving Language skills of students from Malayalam medium within a short span of time

Future Plans:

- Introduce short term Personality Development Courses.
- Invite native speakers to help students develop language skills.

Post Accreditation Initiatives

This section is not applicable at present to Amal Jyothi College of Engineering (AJCE) as the college is applying for NAAC accreditation for the first time. We are in Cycle 1 only. However, the college wishes to bring the following information to NAAC.

The internal quality assurance cell of AJCE was established on 01-07-2014 as per NAAC guidelines, with a view to spearhead the quality sustenance and enhancement initiatives of the College. The IQAC of AJCE serves as a forum for creative and critical reflection on the institution's academic and administrative efficacy, and is driven by a spirit of continuous improvement and action focused on outcome. It has evolved an Internal Quality Assurance System (IQAS) in the institution bringing together inputs and feedback from its various stakeholders. The IQAS of the College comprises the mechanisms and procedures developed cooperatively and fine-tuned progressively for ensuring quality and probity in the multifaceted operations of the institution.

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the NAAC Peer Team will validate the information provided in this SSR during their visit.

Signature of the Head of the institution with seal:

Kanjirappally, Kerala
08 March 2015

Rev. Dr. Jose Kannampuzha, Principal

Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that **Amal Jyothi College of Engineering** (Name of the institution) fulfils all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 08 March 2015

Place: Kanjirappally, Kottayam, Kerala

Principal/Head of the Institution

(Name and Signature with Office seal)

Rev. Dr. Jose Kannampuzha

Amal Jyothi College of Engineering

Kanjirappally, Kottayam, Kerala 686518

Affiliated to Mahatma Gandhi University, Kottayam, and

APJ Abdul Kalam Technological University, Kerala

&

Approved by All India Council for Technical Education, New Delhi

NAAC Reference: Institution Track ID: KLCOGN22973/2015

UPDATED INFORMATION

in respect of NAAC Self-Study Report

submitted in March 2015

Submission to NAAC Peer Team Members

MARCH 2016

This document contains updated information related to Amal Jyothi College of Engineering after submitting the SSR for NAAC accreditation in 2015. Only updated information related to Yerar 2015-16 only are given

16/03/2016   **Rev. Dr. Jose Kannampuzha**
                                                                                                                           Principal
                                                                                  Amal Jyothi College of Engineering

CONTENTS

PROFILE OF THE COLLEGE

12. Details of programmes offered by the college (Give data for current academic year 2015-16)

Sl. No.	Programme Level	Name of the Programme/ Course	Duration in Semesters	Entry Qualification	Medium of instruction	Sanctioned /approved Student strength	No. of Students admitted
1	Under Graduate	B. Tech AUE	8	+2	English	60	51
		B. Tech CE	8	+2	English	120	126
		B. Tech CSE	8	+2	English	120	124
		B. Tech CHE	8	+2	English	60	63
		B. Tech ECE	8	+2	English	120	87
		B. Tech EEE	8	+2	English	60	38
		B. Tech IT	8	+2	English	60	24
		B. Tech ME	8	+2	English	120	126
		B. Tech MTG	8	+2	English	60	29
2	Post-Graduate	M. Tech CE (Str Eng & Cons Mngmt)	4	B. Tech	English	24	22
		M. Tech CE (Comp aided Str. Eng)	4	B. Tech.	English	24	13
		M. Tech CSE	4	B. Tech	English	24	9
		M. Tech Comm. Engg.	4	B. Tech	English	24	11
		M. Tech Power Electronics & Power Syst.	4	B. Tech	English	18	1
		M. Tech Energy Sys.	4	B. Tech	English	24	5
		M. Tech Machine Design	4	B. Tech	English	18	4
		M. Tech. Nanotechnology	4	B. Tech	English	24	2
		MCA (3 Streams)	4/6/10	BCA/+ 2	English	180	134

20. **Number of teaching and non-teaching positions in the Institution**

Positions	Teaching faculty						Non-teaching staff		Tech	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University /State Government Recruited	0	0	0	0	0	0	0	0	0	0
Yet to recruit	0	0	0	0	0	0	0	0	0	0
Sanctioned by the Management/society or other authorized bodies Recruited	22	4	1	2	119	99	21	8	64	18
Yet to recruit	0	0	0	0	0	0	0	0	0	0

*M-Male*F-Female

21. **Qualifications of teaching staff:**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	M	F	M	F	M	F	
Permanent teachers							
D.Sc./D. Litt							
Ph.D.	10	1		2	6	1	20
M. Phil					3	4	7
PG	12	3	1		110	94	220
Temporary teachers							

Ph.D.						
M. Phil.						
PG						
Part-time teachers						
Ph.D.						
M. Phil.						
PG						

23. **Furnish the number of students admitted to the college during last four Academic years.**

Categories	2012-13		2013-14		2014-15		2015-16	
	M	F	M	F	M	F	M	F
SC	10	6	15	8	19	13	8	7
ST	0	0	1	0	0	1	0	1
OBC	90	74	100	66	108	106	114	78
General	323	292	384	289	383	309	357	304
Others	0	0	0	0	0	0	0	0

24. Students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph. D.	Total
Students from Kerala	558	201	0	0	759
Students from other states of India	0	0	0	0	0
NRI students	110	0	0	0	110
Foreign students	0	0	0	0	0

Total	668	201	0	0	869

25. Dropout rate in UG and PG (average of the last two batches)

UG: **1.58 %**
PG: **2.58 %**

31. Number of working days during the last academic year: 232

32. Number of teaching days during the last academic year: 177

(Teaching days means days on which lectures were engaged, excluding the examination days)

CRITERION I: CURRICULAR ASPECTS

(No change from original)

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1.3   Entry Level Marks

The minimum and maximum percentages of marks/grade point averages for admission at entry level for each of the programmes offered by the college are as follows.

UG Courses: Entry level Marks (Percentage)

UG Courses	2011-12		2012-13		2013-14		2014-15		2015-16	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
AUE	60	86	59.4	95.61	59.8	90.33	50	85.1	51.05	94.0
CE	53	98	61	94.2	60.58	94.58	56	93.88	52.33	98.66
CSE	65	99.16	69.6	96.2	63.83	96.17	55.87	92.38	47	100
ECE	64	98.5	58.6	98.18	63.4	97.92	54	97	47.11	97
EEE	61	97.77	66	91.83	63.2	94.75	53.12	93.88	48	95.89
IT	57	96	70.6	88.92	65	92.5	54.25	89	55.33	89.16
ME	68	96.66	64.2	96.52	62.17	97.58	55.63	94.88	54	100
MT	NA	NA	68.2	90.83	68.4	83.83	55.5	91	45.33	96.66
CHE	NA	NA	NA	NA	72.8	93.80	62.75	95.87	57.33	100

PG Courses: Entry level Grade point averages (Ten-point scale)

PG Courses	2011-12		2012-13		2013-14		2014-15		2015-16	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Communication Engineering	6.4	8.2	6.64	8.48	6.4	8.8	6.5	8.72	6.3	7.5
Computer Science & Engineering	6.6	8.1	6.4	8.7	6.3	8.6	6.9	8.3	6.2	7.14
Energy Systems	NA	NA	NA	NA	6.7	8.3	6.6	8.5	7.42	7.7
Machine Design	6.3	7.9	6.5	7.76	6.9	8.46	7.3	8.5		
Power Electronics and Power Systems	6.5	8.5	6.1	8.8	6.5	8.6	7.0	9.0	7.62	7.62
Structural Engineering and Construction Management	NA	NA	6.8	8.4	6.29	9.04	6.4	9.21	6.94	8.6
Computer aided Structural Engineering	NA	NA	NA	NA	NA	NA	6.6	8.08	6.83	8.1
Nanotechnology	NA	NA	NA	NA	NA	NA	NA	NA	83.2	83.2

2.1.6 Programme-wise Trends in Demand Ratio

The demand ratios of various programmes offered by the institution are given below.

UG Course	2012-13			2013-14			2014-15			2015-16		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
AU	53	53	1:1	53	53	1:1	55	55	1:1	51	51	1:1
CE	275	125	2.2:1	302	124	2.5:1	302	125	2.4:1	226	126	1.8:1
CSE	243	91	2.7:1	286	111	2.6:1	277	126	2.2:1	278	124	2.2:1
ECE	448	123	3.6:1	286	106	2.7:1	192	119	1.6:1	140	87	1.6:1
EEE	94	55	1.7:1	97	49	2:1	82	49	1.7:1	46	38	1.2:1
IT	47	47	1:1	29	29	1:1	25	25	1:1	24	24	1:1
ME	598	123	4.9:1	603	124	5:1	501	126	4:1	456	126	3.6:1
MT	28	28	1:1	26	26	1:1	28	28	1:1	29	29	1:1
CHE				82	63	1.3:1	128	63	2:1	149	63	2.4:1

PG Courses	2011-12			2012-13			2013-14			2014-15			2015-16		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
Commun.	-	24		125	24	5.2:1	121	24	5:1	45	18	2.5:1	11	11	1:1

Eng (ECE)															
Com Sci & Eng (CSE)	18	18	1:1	122	18	7:1	69	24	3:1	17	12	1.4:1	9	9	1:1
Energy Sys (ECE)	NA	NA	NA	NA	NA	NA	125	24	5.2:1	40	5	8:1	5	5	1:1
Machine Des (ME)	23	12	2:1	26	14	1.9:1	23	7	3.3:1	6	5	1.2:1	4	4	1:1
Power Electronics & Power Syst (EEE)	-	18	-	130	18	7,2:1	125	18	7:1	70	9	7.8:1	1	1	1:1
Struct Eng & Constr Manag (CE)	-	-	-	51	24	2.1:1	75	24	3:1	53	23	2.3:1	22	22	1:1
CIVIL (CASE)										9	9	1:1	13	13	1:1
Nano Technology													2	2	1:1

PG Courses	2011-14			2012-15			2013-16			2014-17			2015-18		
	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio	Applied	Admitted	Demand Ratio
MCA	90	60	1.5:1	120	60	2:1	120	59	2:1	258	145	1.8:1	260	133	2:1

2.4.2 Institutional Strategies to meet the Demand for Faculty in New Areas

1. Appoint experts (both from industry as well as academics) as HODs and senior level professors in departments
2. Support the faculty and staff to undergo STTP / FDP / Conferences in the relevant newer areas.
3. Invite experts to deliver special technical lectures for the students and the faculty
4. Conduct symposia and AICERA, an International conference every year which is linked to a specific department in a year, with departments changing every year.

List of permanent faculty and staff

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Ph.D.	11	1	-	2	6	1	21
M. Phil	-	-	-	-	2	3	05
PG	11	3	-	-	112	99	225

Grand Total: 251

- List of Part-time faculty and staff: NIL

2.4.3 & 2.4.4 AJCE's Strategies for Faculty Development and Recharge

The College has a Faculty Development policy to streamline its faculty development activities. The policy aims at faculty empowerment for continuous improvement in teaching learning, research, consultancy and extension, thereby transforming the faculty members into Thought Leaders and AJCE into a Knowledge Centre.

During the last four years, the institution has taken up several initiatives to enhance the quality of teachers. The following are the initiatives taken by the College.

1. Special training and orientation programmes for newly joined faculty to enhance their capabilities and to draw better output
2. A Faculty Development Programme on "Entrepreneurship" which is conducted every year with the support of NSTEDB and DST for selected faculty.
3. Encouraged to attend the FDP organized in different areas, on duty leave.
4. Deputed to undergo specialized trainings.
5. Retreat arranged for staff and faculty every year
5. Faculty development programs are organized on the campus.

6. Ekalavya e-OUTREACH program jointly with IIT Bombay & IIT Kharagpur
7. QEEE workshops jointly with IIT Madras
8. Annual international conference organised by departments in turn
9. Performance based annual increment
10. Cash awards for top performers
11. Cash benefits to those who impart additional skills training programs
12. Distance Learning Program offered by IIRS Dehradun and ISRO
13. Certification courses offered by LabView Academy in collaboration with National instruments Bangalore and Amal Jyothi College of Engineering

Faculty Training Programmes

AJCE believes that the entire faculty should be well-equipped to transfer their knowledge to the students. When new faculty members join they often need training to face students with confidence. For this the College organizes induction programmes and mentorship training programmes for new faculty members. The details of the programmes organized in 2014 are given below.

Induction programme for new faculty members (latest program was in July 2015)

A week-long induction programme was organized for the new faculty members of the college and those who joined the college over the past one year. Nearly 30 faculty members attended the programme, which was held from July 7-11, 2014.

In order to ensure that the programme had a mix of in-house and external resources persons, M/s Winteg Consultancy, Chennai, was also roped in.

Over the course of the programme, faculty members were not only given an overview of the history, rules and regulations of the College; they were also apprised of the changing world of knowledge inculcation, and taken on a walking tour of the entire campus.

Teaching styles of each faculty member was videographed and professional advice was provided on what changes they could make to be more effective teachers.

Through this programme the College aimed to give the new faculty members the message that AJCE would settle for nothing less than the best practices in engineering education as well as in molding the youth of tomorrow.

The following were some of the important sessions of the induction programme.

1 Excellence in Teaching – Fr Jose Kannampuzha, Principal

2 Reaching Beyond Textbooks – Abraham Kurien, Director – AJCE Civil Services Academy

3 Teaching, Touching and the Perfect Tech Storm – How technology is altering the education landscape – Joe A Scaria, Director – Management Development Centre

4 AJCE Rules and Procedures – Tomy Joseph, Dean (Administration)

5 For a Teacher, Everything Counts – P. C Thomas, HOD – EEE

6 How AJCE Evaluates Teachers – VI Cherian, Dean (Academic)

7 Professionalism in Teaching Profession –James Jacob, Dean (Research)

8 Economy, Money & You: The Art of Giving – Joe A Scaria

9 Teaching in the Time of Gen Y & Gen Z – Victor Jose, Assistant Professor – EEE

10 Importance of Body Language – Mr. Mohammed Basheer, MD – Winteg Consultancy

11 There's nothing called a Free Lunch – Joe A Scaria

12 Presentation Skills – Mr. Mohammed Basheer

13 Emotional Maturity – Mr. Mohammed Basheer

14 Adding a spark into your personality-Mr. Jose Dominic Joseph

15. Dining Etiquette -Mr Jose Dominic Joseph

16. Presentation Skills -Dr Sebastian Narively

17. Teachers not Teacherrors-Dr Sebastian Narively

18. Upskilling Programme in Spoken English for Faculty -Mr Jose Dominic Joseph.

19. Mentors – The miracle workers in higher education: Dr. Soney C George, DBS

20. Innovation promotion system of AJCE: Mr. Sherin Sam Jose

Mentorship training programme for faculty members

AJCE held a training programme in mentoring for all faculty members designated as mentors. The programme was held over three days Setember 2015.

The programme itself was an offshoot of the college's conviction that for a mentoring programme to succeed, the mentors must first be trained in mentoring skills. To ensure a high quality of training for our prospective mentors, a professional company from Chennai, Winteg Consultancy, was engaged to provide the training.

Over the three days, 150 faculty members attended the various sessions of the mentoring programme. The faculty members who attended the programme were educated in the qualitative aspect and subjective part of mentoring. They were instructed how to help students in dealing with frustration and handling disappointment, besides giving them constructive criticism regarding their performance and teaching them to behave with humility and compassion.

Teachers were made aware that before sowing a seed one needs to test the ground, and that otherwise even the best hybrid seed would fail to produce a good harvest. Through the

programme they could appreciate how important it was to understand the students closely, have a good rapport with them and help them raise themselves to the next level of their expectations.

Faculty training programmes organized by AJCE in 2014-15

National Seminar on Probability Theory and its Application: Department of Basic Sciences organized a three-day National Seminar on "Probability Theory and Its Application", assisted by the National Science Academy, from 28 to 30 April, 2014. Several faculty members of AJCE participated in the seminar.

Dept. of IT, in association with Magnificata Hybrid Gadgets (MHG), ISEEC London and GCN Technology, Canada, organized a workshop on 'ANDROID APPLICATION AND DEVELOPMENT" during April 3-5, 2014. Prof. S J Rajan, HoD of Computer Science, St. Joseph's College, Trichy, led the sessions.

IBM Kerala Sector conducted a training programme on various IBM Application Developer Tools for S6 CSE on 10 March 2014.

Axel IT Training Division, Thodupuzha, conducted a 5-day training on Android app Development for S8 CSE from 27 Jan to 01Feb 2014

IPSR Solutions organized a training program on 'Cloud Computing' by Red Hat on 29 Jan. 2014.

CSE dept., in association with CSI- Cochin chapter and Mozilla Firefox community, Kerala conducted a workshop on 'Firefox OS App Days and WEB MAKER party' in which students developed 30 applications. Prof. Manoj T Joy and Ms. Sumy Joseph SBC, CSI, coordinated.

A workshop on 'Cyber Security and Information Protection' led by Mr. Joseph Ponnooly was conducted for PG students of CSE on 12 Feb 2014.

Dept of CSE organized an exhibition of 48 projects of S8 and S6 on April 30, 2014. The best projects were awarded prizes. Asst. Prof. S. Sruthi coordinated the activity.

AMACE-, Amal Jyothi MCA association for Career Enhancement, conducted a workshop on 'Google Map Maker' and 'Path Finder' for school students. Ms. Lisha Varghese (AP, MCA) was the Coordinator.

'Creative Teaching'- ISTE e- workshop: CSE Dept. ofAJCE in association with ISTE Kerala Chapter, organized a one-day ISTE e-workshop on 'Creative Teaching' on 10 Sept 2013. The programme was inaugurated by Dr. Mukta Atrey, Senior Project Manager, Ekalavya. Rev. Dr. Jose Kannampuzha, Mr. Abraham Kurien IPS (former DGP, Govt. of UP) , Prof. Dr. Sabu Thomas, Director, School of Chemical Sciences MG University and Rev. Dr. Tomy Tharayil, Director Danahalaya, Punnapra, Alappuzha handled sessions on 'Effective Teaching & Adaptive Learning', 'Communication Skills and Career Oriented Tools for Teachers', 'Teacher research lead to learning' and 'Know your students – Teacher - student relations' . Prof. Manoj T. Joy,

HOD, CSE, Mr. Mathew J Joseph, AP, ME, Aby Jacob and Neethu C Sekhar, AP, CSE were the coordinators of the workshop. More than 545 participants attended the workshop in 10 remote centers all over Kerala.

Dept. of CSE & CA organized Two day National e-Seminar on Steps 2 Research on 19th to 20th Sept. 2014.Prof. Dr. D. B. Phatak Department of Computer Science, IIT Bombay, Project Coordinator Project - T10KT, NMEICT inaugurated the Seminar.Other resource persons were Mukta Atrey (Senior Project Manager, Project T10KT), Prof. Dr. Kannan M. Moudgalya, Department of Chemical Engineering, IIT Bombay, Mr. G. Vijayaraghavan, Former CEO Techno Park, Member - State Planning Board Kerala, Dr. K. Alexander Principal, S.D. College, MG University, Dr. Achuthsankar S. Nair, Centre for Bio Informatics, Trivandrum, Dr. Sahana Murthy, CDEEP, IIT Bombay, REv.DR. Jose Kannampuzha, Principal, AJCE, Dr. Soney C George, DBS, AJCE, Dr. Jacob Philip, DBS, AJCE

Santhoshkumar G S, AP, CSE co-ordinated 2 week ISTE workshop on "Computer Programming" conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from 16 - 21st June, 2014.

Resmipriya M G, AP, CSE co-ordinated 2 week ISTE workshop on "Computer Networking" conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from June 30th to July 5th, 2014.

Prof. Manoj T Joy, HOD, CSE co-ordinated 2 week ISTE workshop on "Cyber Security" conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from 10-20th July 2014.

Syam Gopi, AP, CSE co-ordinated 2 week ISTE STTP on "Pedagogy for Effective use of ICT in Engineering Education" conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from 05th - 7th & 19th - 21st January 2015.

Shiney Thomas, AP, CSE co-ordinated 2 week ISTE STTP on "Introduction to Design of Algorithms" conducted by IIT Kharagpur, under the National Mission on Education through ICT (MHRD) from 25th to 30th May, 2015.

Centre for Continuing Education & Department of Computer Science & Engineering of Amal Jyothi College of Engineering, Kanjirappally organized a one day workshop on "Art of Publication & Craft of Research" on 7th April 2015.

Binu C Pillai co-ordinated 2 week ISTE workshop on "Analog Circuits" conducted by IIT Karagpur, under the National Mission on Education through ICT (MHRD) from June 4th , 2013 to June 14th, 2013 .

Binoshi Samuvel co-ordinated 2 week ISTE workshop on "Control Systems" conducted by IIT , under the National Mission on Education through ICT (MHRD) from December 2 , 2014 to December 12, 2014

K G Satheeshkumar and Binu Mathew coordinated a Lecture workshop on Advanced in Wireless Communication and Networking, sponsored by the Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences, Allahabad on July 23-24, 2015.

K.G.Satheeshkumar, Indu Reena Varughese and Divya R S, jointly organized a one day workshop on NPTEL with IIT Madras on 21st November 2015.

K G Satheeshkumar and Darsana P co-ordinated symposium on "Collaborative Reforms for Post Graduate Engineering Programme" on October 15.2015 at AJCE, Kanjirappally, sponsored by ISTE

Abu Beker KM and Agi Joseph George coordinated FDP on Remote Sensing, Geographical Information System And Global Navigation Satellite System, in collaboration with IIRS and ISRO as part of Edusat Distance Learning Program, from 4/8/2014 – 14/10/2014.

Bini Koshy Varughese and Syam Gopi co-ordinated 2 week ISTE workshop on "Fluid Mechanics" conducted by IIT Kharagpur, under the National Mission on Education through ICT (MHRD) from 20-30, May 2014

Bevin Varghese Cherian and Syam Gopi co-ordinated Two Week ISTE STTP on Environmental Studies conducted by IIT Bombay , under the National Mission on Education through ICT (MHRD) from 2-12,June,2015

Merin Manoj and Syam Gopi co-ordinated Two Week ISTE STTP on Technical Communication conducted by IIT Bombay, under the National Mission on Education through ICT (MHRD) from October 8-Dec 5, 2015

Dr. Soney C George coordinated two week AICTE Sponsored FDP on Recent Advances in Nanoscience and Nanotechnology, from April 20 - May 1 2015, Organized by Amal Jyothi

Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept. of Chemical Engineering.

Anoop SS, Asst. Professor conducted an invited talk on "NANOTECHNOLOGY- MYTH or REALITY" by Dr.Avinash Balakrishnan, Head & Manager (R & D), Techno- Commercial Innovation Centre, English India Clay Ltd, Thiruvananthapuram on Oct 20, 2015

Anoop SS co-ordinated a online lecture by Mr. Gadahar Reddy, Founder of Noppo Technologies, Bangalore on 'Nanotubes, Synthesis and Applications"Jan 22, 2016.

Dr. Soney C George coordinated KSCSTE sponsored National Science day celebrations in 2015 as Amal Jyothi Science fest (One week Programme) from February 22- 27, 2015, organised Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept. of Chemical Engineering. Chief Guest of the programme was -Dr. Ho Sung .Kim, University of Newcastle, Australia.

Dr. Soney C George Coordinated the KSCSTE sponsored inauguration of Science Popularisation programme on " Introduction of Polymer Chemistry to the undergraduate students of Mahatma Gandhi University" . Chief Guest- Dr. K.N.Ninan, Former Outstanding Scientist, VSSC. This programme will meant for the B.Sc Chemistry Students of Arts and Science Colleges of Mahatma Gandhi University from October 2015 to September 2016

Dr. Soney C George coordinated ACeNT Lecture Series as part of Science Popularisation Programme on 11.02.2016. Prof. Dr. Joanna Ewa Izdebska of the Warsaw University of Technology, Poland and Prof. Adelaja Osibote of Cape Penisula University of Technology,South Africa   delivered the lectures. This programme was organized by Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Sciences and Dept. of Chemical Engineering.

Prof Jiss Abraham co-ordinated a One Week STTP (PEACE IV) on "Infrastructure Stability and geotechnical aspects" organized by Dept. of Civil Engineering from 9-13 June 2014 .

Prof T K Georgekutty co-ordinated a One Week STTP (PEACE V) on "Highway Sector management" organized by Dept. of Civil Engineering from 8-12 December 2014 .

Prof Jessymol George co-ordinated a One Week STTP (PEACE VI) on "Sustainable Infrastructure Development" organized by Dept. of Civil Engineering from 13-17 July 2015

Prof Dhanya Krishnan co-ordinated a One Week STTP (PEACE VII) on "AutoCad for Civil Engineers" organized by Dept. of Civil Engineering from 23-27 December 2015

Prof Belarmin Xavier co-ordinated a One day workshop on "Concrete Mix Design" organized by Dept. of Civil Engineering on September 19, 2015.

Mr. Anish Benny co-ordinated 2 week ISTE workshop on "Signals & System" conducted by IIT Kharagpur, under the National Mission on Education through ICT (MHRD) from January 2nd , 2014 to January 12th, 2014

Ms. Sonia Sunny in association with ISTE conducted a talk On "DSP" by Dr. M. V. Rajesh, Principal, ISSAT, Muvattupuzha, Kerala on 25 Feb 2015

Ms.Sonia Sunny in association with ELEKTRON conducted a Seminar on "Efficient harnessing of renewable energy sources and issues" by Er C.P George and Co-Engineers, KSEB Engineers' Association on 24 Sept 2014

Mr. Ajithkumar J P organized a one day training programme on "Apple Tech Series" in association with IEDC on December 9, 2015.

Mr. Ajithkumar J P organized seminar on 'Road Safety" in association with Kerala Motor Vehicle Department, Government of Kerala on Jan 14th, 2016.

Programmes organized by IEDC from 1-01-2015 to 29-02 - 16

Sl #	Type	No of programmes
1	General (Entrepreneurship Development)	12
2	Science Excursion (Innovation promotion for School students)	17
3	1K Youth Programme (Entrepreneurship Development programme for first years)	4
4	Industrial Visit	2
5	Innovation hub programmes (1hour sessions for IEDC members)	3
6	Project contests (Mastermind 15 & 16, TECHFEST of KSCSTE-16 & I2U)	4
7	Conference (KETCON)	1
8	External (Attended us resource person)	35
9	Faculty Development Programme	4
10	ISBA Managers conclave	1
	Total	**83**

Programmes organized by IEDC 2013-2014

Programmes under National Implementation and Monitoring Agency for training (NIMAT), DST

1. Entrepreneurship Awareness camps – 10

2. Technology based Entrepreneurship Development Programmes – 2

3. Faculty Development Programme on Entrepreneurship -1

Faculty participation in training programs/workshops elsewhere and contributions

1. Mr Geevarghese Titus and Binu Mathew were Resource person for a three day CSI Sponsored workshop in "*Introduction to Matblab in Medical Image Processing*" at Amal Jyothi College of Engineering, Kanjirapally, 05 to 07 Oct 2015.

2. K G Sastheeshkuamar, Geevarghese Titus and Sunish Kumar OS were resource persons for TEQIP Phase II workshop, Organized by College of Engineering, Kidagnoor.

3. Ms Shiney Thomas, AP CSE, attended STTP on "Digital Image Processing" sponsored by Directorate of Technical Education organized by Dept. of CSE,Rajiv Gandhi Institute of Technology,Kottayam during 5th to 10th January 2015

4. Ms Shiney Thomas, AP CSE, attended One week ISTE STTP for Workshop Coordinators on Introduction to Design of Algorithms conducted by IIT Kharagpur from 16th March to 20th March 2015,sponsored by NME-ICT(MHRD).

5. Mr Santhoshkumar G.S ,AP CSE, attended IIT Bombay - NMEICT Project - Feedback Study from ISTE – Kerala Remote Centre Co-ordinators Meeting at Mohandas College of Engineering and Technology, Thiruvananthapuarm on 25/08/14.

6. Mr Jerin Thomas,AP CSE, attended STTP on Image Processing at COE, Kidangoor in Jan 2014

7. Mr Deepu Benson,AP CSE, attended 2 day workshop on National Programme on Technology Enhanced Learning at Kannur & Chinmaya Institute of Technology,Kannur from 20-21/10/14.

8. Ms Shany Jophin ,AP CSE, attended Two Day workshop on Big Data Processing in M A college of Engineering,Kothmangalam from 15-16 Jan 2015

9. Ms Sharon Sunny, AP CSE, attended 1 week workshop on Data Science and Engineering at RIT

10. Ms Sruthi S, ,AP CSE,attended National Conference on Indian Languages from 26/2/2016 to 27/2/2016 at CUSAT.

11. Ms Shany Jophin ,AP CSE, attended workshop on computer networking from 23/6/2015 to 27/6/2015 at ToCH,Ernakulam.

12. Ms Anishamol Abraham,AP CSE, attended CASE Tools workshop on 19th and 20th November 2013 at RSET, Ernakulam sponsored by Dept. of CSE,RSET.

13. Ms Tintu Alphonsa Thomas,AP CSE, attended Python workshop on July 2015 at RSET

14. Ms Neethu C Shekar,AP CSE, attended Python workshop on July 2015 at RSET

15. Ms Neethu C Shekar,AP CSE, attended workshop on computer networking from 23/6/2015 to 27/6/2015 at ToCH,Ekm.

16. Ms. Ashji S. Raj (AP, CSE) and Ms. Shany Jophin (AP, CSE) lead a session on "ICT enabled teaching" for teachers of Catholicate college, pathanamthitta as a part of two day orientation program organized by the college on 29th May 2015.

17. Mrs. Jayasree PK , AP, CH, attended workshop on"Advanced MS Excel for Engineers and Professionals" Organized by Dept. of Chemical Engineering, Govt. Engineering College Thrissur in association with Continuing Education Centre, from 12th to 17th May 2014.

18. Mrs. Jayasree P K , AP, CH,Participated and Presented a paper on the topic "Biosorption of Cr(VI) ions from wastewater" in the TEQIP II Sponsored International Conference on Advances in Chemical Engineering and Technology, ICACE, TKMCE'14 Organized by Dept. of Chemical Engineering, TKMCE, Kollam during Oct 16-18, 2014

19. Mrs. Jayasree P K , AP, CH,attended Two week ISTE Workshop on " Fluid Mechanics" Conducted by IIT Kharagpur under MHRD through ICT , from May 20 - 30, 2014 at Amal Jyothi College of Engineering, Kanjirappally Kerala.

20. Mrs. Jayasree P K , AP,attended FPD on " Recent Advances in Nanoscience and Nanotechnology" organized by Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala During April 20- May 1, 2015

21. Mrs. Jayasree P K , AP, attended in NPTEL Workshop Organized by National Programme on Technology Enhanced Learning (IIT Madras) Conducted on Nov 21, 2015 at Amal Jyothi College of Engineering.

22. Ms. Surya Sathyan , AP, CH, attended workshop on"Advanced MS Excel for Engineers and Professionals" Organized by Dept. of Chemical Engineering, Govt. Engineering College Thrissur in association with Continuing Education Centre, from 12th to 17th May 2014.

23. Ms. Surya Sathyan , AP, CH,attended Two week ISTE Workshop on " Fluid Mechanics" Conducted by IIT Kharagpur under MHRD through ICT , from May 20 - 30, 2014.

24. Ms. Surya Sathyan , AP, CH, attended DTE Sponsored STTP on " Chemical Engineering Design Aspects " held at Dept. of Chemical Engineering Govt. Engineering College Kozhikode, During Nov 17 - 22, 2014

25. Ms. Surya Sathyan , AP,CH,attended FPD on " Recent Advances in Nanoscience and Nanotechnology" organized by Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala During April 20- May 1, 2015

26. Ms. Surya Sathyan , AP,CH, attended in NPTEL Workshop Organized by National Programme on Technology Enhanced Learning (IIT Madras) Conducted on Nov 21, 2015 at Amal Jyothi College of Engineering.

27. Ms. Surya Sathyan , AP, CH,attended in STTP on" Research Issues and Emerging Trends in Control and Automation Engineering" Under TEQIP II conducted by Dept. of Electrical and Electronics Engineering, College of Engineering Karunagappally, from Jan 13 - 17, 2016.

28. Mr. Rana Pratapan A D , AP,CH attended FPD on " Recent Advances in Nanoscience and Nanotechnology" organized by Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala During April 20- May 1, 2015

29. Mr. Rana Pratapan A D , AP,CH attended FPD on "Renewable Energy: Policies and Practices" sponsored by TEQIP II at TKMCE from Nov 30 - Dec 5, 2015.

30. Mr. Rana Pratapan A D , AP,CH attended National level one day workshop on " Design and Engineering" conducted by Dept. of Mechanical Engineering, FISAT, on Jan 12, 2016.

31. Mr. Anoop S S, AP, CH attended in NPTEL Workshop Organized by National Programme on Technology Enhanced Learning (IIT Madras) Conducted on Nov 21, 2015 at Amal Jyothi College of Engineering.

32. Mr. Anoop S S, AP, CH attended STTP on "Nanotechnology" sponsored by TEQIP II organised by Dept. of Mechanical Engineering GEC Idukki, from Dec14 - 18, 2015.
33. Ms. Nikhi Maria Raju, AP, CHE, attended in NPTEL Workshop Organized by National Programme on Technology Enhanced Learning (IIT Madras) Conducted on Nov 21, 2015 at Amal Jyothi College of Engineering.
34. Ms. Nikhi Maria Raju, AP, CHE, attended TEQIP II sponsored workshop on "Computational Modelling of Flow Processes" organised by dept. of Chemical Engineering, GEC Kozhikode from Nov 15 -28, 2015.
35. Dr.Jose V Parambil, AP, CH, attended workshop on "Sustainable Engineering" sponsored by KSCSTE, organized by Dept. of Mechanical Engineering, Adi Shankara Institute of Engineering and Technology, Kalady, during July 15-21, 2015.
36. Dr.Jose V Parambil, AP, CH, attended workshop on "Entrepreneurship Mentor Development Workshop" conducted by APJ Abdul Kalam Technological University, Kerala State, during Oct 19 - 25 2015.
37. Mrs. Indira V, AP, CH attended in NPTEL Workshop Organized by National Programme on Technology Enhanced Learning (IIT Madras) Conducted on Nov 21, 2015 at Amal Jyothi College of Engineering.
38. Mrs. Indira V, AP, CHE attended FPD on "Renewable Energy: Policies and Practices" sponsored by TEQIP II at TKMCE from Nov 30 - Dec 5, 2015.
39. Ms. Reethu K Sebastian, Lab Assistant, CH attended workshop on "Safety Requirements for Engineering Institutions" under TEQIP II, Organised by division of Safety and Fire Engineering, CUSAT from Jan 21 - 23, 2015
40. Ms. Reethu K Sebastian, Lab Assistant,CH attended FPD on " Recent Advances in NanoScience and Nanotechnology" organized by Amal Jyothi Center for Nano Science and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal JYothi College of Engineering, Kanjirappally, Kerala During April 20- May 1, 2015
41. Ms Yelana Thomas, AP, HUM attended the SET conference conducted at VIT in Nov 2014 and May 2015.
42. Ms. Gloriya Mathew, AP, MCA led a one day training class for the Housewives in Meloram on 13th November 2014.
43. Ms. Lisha Varghese (AP, CSE) led a one-day seminar for the students of St. Gregorios College of Nursing, Parumala. The seminar dealt with the importance of computers in the field of nursing and basics of MS office.
44. Dr. K.G. Samuel attended and chaired one session in the International Conference on Creep, Fatigue and Creep-Fatigue interaction (CF-7) at IGCAR, Kalpakkam during Jan 19-22, 2016
45. Dr. Soney C George delivereda talk on career guidance during a career guidance seminar to the students of St. Joseph Higher Secondary School Peruvanthanum, January 8, 2014
46. ·Dr. Soney c george delivered a talk on career guidance during a seminar on career guidance to the students of St. Philomina' s Higher Secondary School Upputhara on Dec 2014
47. Dr. Soney· C Georgeacted as resource person for KTU orientation programme- 2015 to the newly admitted B.Tech students along with parents of Mar Baselios Christian College of Engineering and Technology on 29th July 2015

48. Dr. Soney C GeorgeInvited talk on Careers in Chemistry to the Students of M.Sc Chemistry, S. B.College Changnacherry on March 29, 2015
49. Dr. Soney C George delivered an invited talk on promoting Science education and research to the School Teachers of Kanjirappally September 4, 2014
50. Dr. Soney C George delivered an invited talk on RECENT TRENDS IN NANO COMPOSITES during one day seminar on Polymers and polymer composites held at AJCE on 15.07.2014
51. Dr. Soney C George delivered a talk on how to make research proposal in the programme - Steps to research, a two day workshop on research held through A –view, September 19-20, 2014
52. Dr. Soney C George delivered an Invited talk on Polymeric Nanocomposites and did the Inaguration of add on course on Polymer Nanocomposites, March 4, 2015, Bishop Moore College, Mavelikkara
53. Dr. Soney C Georgedelivered aninvited Talk on University-Industry partnership, International Conference on Industry – Academia Collaboration, March 28, 2015, IIUCNN
54. Dr. Soney C George delivered a talk on Curious Nano, FDP on Nanotechnology, April 20, 2015, Amal Jyothi Center for Nanoscience and Technology
55. Dr. Soney C George acted a resource person for the Sathrapatham quiz programme during the Science Fest at the ALL Kerala level , organised by Kanjirappally, Palai and Changanacherry Dioceses
56. Dr. Soney C George delivered Talks at Coimbatore Institute of Technology on January 6 , 2016 about Polymer composites and Polymer nanocomposites during the FDP programme on Composites.
57. Geevarghese Titus and Binu Mathew were Resource person for a three day CSI Sponsored workshop in "*Introduction to Matblab in Medical Image Processing"* at Amal Jyothi College of Engineering , Kanjirapally ,05 to 07 Oct 2015.
58. K G Satheeshkumar, Geevarghese Titus and Sunish Kumar OS were resource persons for TEQIP Phase II workshop, Organized by College of Engineering, Kidagnoor December 2013
59. K G Satheeshkumar, was a resource persons for TEQIP Phase II workshop, Organized by College of Engineering, Adoor 26-28 June 2013
60. K G Satheeshkumar delivered Awareness program on higher education in a Little Flower CBSE school on 21.1.15
61. K G Satheeshkumar Interacted with the students of CCM higher secondary school Karikkattor with respect to Summer school and career guidance seminar on 31.3.15
62. K G Satheeshkumar delivered A session on NBA process and various aspects to create awareness among teachers and help them prepare for NBA at Sree Narayana Guru Institute of Science & Technology (SNGIST) Thekkethazham on 20.4.15
63. Anu Abraham Mathew, Binu C Pillai, Abu Beker K M, K G Satheeshkumar, Aneesh Thankachan organized Electronics Awareness Programme, with hands on training at St George HSS Muthalakodam.
64. Indu Reena Vaughese, Binu Mathew, Binu C Pillai organized Summer School in Electronics at Amal Jyothi College of Engineering for Electronics aspirants from various schools.
65. Mr. Agi Joseph George (ECE), attended 2-Days workshop on EMBEDDED SYSTEM DESIGN USING FPGA at School of Electronics Engineering, VIT – March 2015.

66. Mr. Binu C Pillai, (ECE), attended 2-Days workshop on EMBEDDED SYSTEM DESIGN USING FPGA at School of Electronics Engineering, VIT – March 2015.
67. Mr. Binu C Pillai, (ECE), attended 5-Days training on 'LabVIEW' at Anand institute Training Center T.Nagar, Chennai – June 2014
68. Mr. Binu C Pillai, (ECE), attended 1-Day DESIGN Workshop conducted by ASAP, Kerala – Nov 2015.
69. Mr. Binu C Pillai, (ECE), attended 1-Day NPTEL workshop by NPTEL, IITM – Nov 2015.
70. Mr Ajai Mathew (ECE) attended three week Fiber Optics -123 certification course Lightbrigade on Feb-2016 at Nest campus.
71. Mr Anu Abraham Mathew(ECE), attended Science Academics Lecture Series of Advances in Wireless Communications and Networking at AJCE, July 23-24, 2015
72. Mr Binoshi Samuvel(ECE), attended workshop on "Advances in Wireless Communication and Networking" sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences, Allahabad on July 23rd and 24th , 2015 at AJCE, Kanjirappally.
73. Mr Binoshi Samuvel (ECE), attended Seminar on "Alternative Engineering Career Path" on January 14, 2016 at AJCE, Kanjirappally.
74. Mr Binoshi Samuvel(ECE), attended NPTEL workshop-National Programme on Technology Enhanced Learning(IIT Madras)
75. Mr Binoshi Samuvel(ECE), attended IIRS – ISRO EDUSAT Distance Learning Program--04 Aug – 14 Nov –sponsored by ISRO
76. Mr Binoshi Samuvel (ECE), attended Coordinator- Workshop on "Control Systems" conducted by IIT, Kharagpur sponsored by MHRD 2014 .
77. Mr Binoshi Samuvel(ECE), attended National Workshop on probability and its application, Organized by department of basic science, Amal Jyothi College of Engineering, sponsored by Indian national science academy. 28 April 2014 to 3o April 2014.
78. Mr Binu Mathew (ECE), attended National Workshop on Application of Wireless Sensor Networks and Robotics In Agriculture and Rural Development, 17-18,March 2015, Kerala State Planning Board
79. Mr Binu Mathew (ECE), attended FDP on Recent Advances in Nano science and Nanotechnology, April 20-May 1 ,2015, Amal Jyothi College of Engineering
80. Mr Binu Mathew (ECE), attended One day Workshop on National Programme on Technology Enhanced Learning, 21st November 2015, Amal Jyothi College of Engineering
81. Mr Binu Mathew (ECE), attended FDP on Recent Advances in Nanoscience and Nanotechnology, April 20-May 1 ,2015, Amal Jyothi College of Engineering
82. Mr Binu Mathew (ECE), attended National Workshop on Probability Theory and its Applications, 28-30 April 2014, Amal Jyothi College of Engineering
83. Ms Careena P (ECE), attended Steps 2 Research (e-Seminar) AJCE, Kanjirappally, ISTE Kerala Section and CSI Cochin Chapter (September 2014)

84. Ms Careena P (ECE), attended Remote Sensing, Geographical Information System and Global Navigation Satellite System, AJCE, Kanjirappally, Indian Institute of Remote Sensing (IIRS) Indian Space Research Organization(ISRO)joint initiative, sponsored by EDUSAT distance learing program(Aug-Oct 2014)

85. Ms Careena P (ECE), attended one day Seminar on Ultra Low Power Wireless Wearable Sensors For Patient Monitoring, AJCE, Kanjirappally, Bio Electronics Laboratory, National University of Singapore (Oct 2014)

86. Ms Careena P (ECE), attended One Day Workshop on National Programme on Technology Enhanced Learning (NPTEL), AJCE, IIT Madras (Nov 2015)

87. Ms Careena P (ECE), attended Two week ISTE STTP on Technical Communication, AJCE, IIT Bombay(MHRD) (Oct 2015)

88. Ms Darsana P (ECE), attended symposium on "Collaborative Reforms for Post Graduate Engineering Programme" on October 15.2015 at AJCE, Kanjirappally

89. Ms Darsana P (ECE), attended Workshop on "Advances in Wireless Communication and Networking" sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences, Allahabad on July 23rd and 24th , 2015 at AJCE,Kanjirappally

90. Ms Darsana P (ECE), attended Seminar on "Alternative Engineering Career Path" on January 14, 2016 at AJCE, Kanjirappally

91. Ms Darsana P (ECE), attended Workshop on " Control Systems" conducted by IIT,Kharagpur sponsored by MHRD from 2-12 December 2014 at AJCE,Kanjirappally

92. Ms Darsana P (ECE), attended One day Workshop on "Mentoring" at AJCE, Kanjirappally on 12th August 2014

93. Ms Indu Reena Varughese (ECE), attended ISTE Workshop on Signals & Systems, AJCE Kanjirapally January 2014

94. Ms Indu Reena Varughese (ECE), attended Two week workshop on control systems November 2014

95. Ms Indu Reena Varughese (ECE), attended Remote Sensing, Geographical Information System And Global Navigation Satellite System Areas of Interest, Indian Institute of Remote Sensing (IIRS)-Indian Space Research Organization (ISRO) joint initiative, sponsored by EDUSAT Distance learning program , AJCE Kanjirapally – August-October 2014

96. Ms Indu Reena Varughese (ECE), attended Photonics Workshop by Jampot Photonics, AJCE Kanjirapally February 2015

97. Ms Indu Reena Varughese (ECE), attended Google Drive Class, AJCE Kanjirapally March 2015

98. Ms Indu Reena Varughese (ECE), attended LATEX- Typesetting tools & Technical paper writing, AJCE Kanjirapally October 2015

99. Ms Indu Reena Varughese (ECE), attended Lecture Workshop on Wireless Communication, AJCE Kanjirapally July 2015

100. Mr Jaison CS (ECE), attended Workshop on "Advances in Wireless Communication and Networking" sponsored by Indian Academy of Science, Bangalore, Indian National Science Academy, New Delhi and The National Academy of Sciences, Allahabad on July 23rd and 24th , 2015 at AJCE, Kanjirappally

101. Mr Jaison CS (ECE), attended one day Seminar on Ultra Low Power Wireless Wearable Sensors For Patient Monitoring, AJCE, Kanjirappally, Bio Electronics Laboratory, National University of Singapore (Oct 2014)

102. Mr Jaison CS (ECE), attended One Day Workshop on National Programme on Technology Enhanced Learning (NPTEL), AJCE, IIT Madras (Nov 2015)

103. Ms Jomy Susan Ipe (ECE), attended ISTE Workshop on "Signals and Systems" under MHRD NMEICT , Amal Jyothi College of Engineering, Kanjirappally by IIT Kharagpur during January 2-12,2014

104. Ms Jomy Susan Ipe (ECE), attended Remote Sensing, Geographical Information System and Global Navigation Satellite System, Amal Jyothi College Of Engineering, Indian Institute of Remote Sensing (IIRS)-Indian Space Research Organization (ISRO) (Aug –Oct 2014)

105. Mr Jose J Edatha (ECE), attended TECH Labs Sponsored Workshop- 2 Days- 27-05-2014-28-05-2014, "Communication Engineering using LabVIEW & USRP"

106. Mr Jose J Edatha (ECE), attended TCS Sponsored Faculty Development Programme on , " Diverse Learning Methods"on 28-04-2015 at TCS Kochi.

107. Mr K G Satheeshkumar (ECE), attended workshop on "Enhancing Quality of Technical and Higher Education in Kerala by integrating NPTEL content and open education resources into courses of degree from 20.10.14 to 21.10.14.at Chinmaya Institute of Technology Kannur

108. Mr K G Satheeshkumar (ECE), attended one day Seminar on Ultra Low Power Wireless Wearable Sensors For Patient Monitoring, AJCE, Kanjirappally, Bio Electronics Laboratory, National University of Singapore (Oct 2014)

109. Mr Midhun Joy (ECE), attended Training on USRP & Labview familiarization from May 27 to May 28 at Aadi Sankara college, Kalady

110. Ms Muth Sebastian (ECE), attended Remote Sensing, Geographical Information System and Global Navigation Satellite System, Amal Jyothi College Of Engineering, Indian Institute of Remote Sensing (IIRS)-Indian Space Research Organization (ISRO) (Aug –Oct 2014)

111. Ms Muth Sebastian (ECE), attended one day Seminar on Ultra Low Power Wireless Wearable Sensors For Patient Monitoring, AJCE, Kanjirappally, Bio Electronics Laboratory, National University of Singapore (Oct 2014)

112. Ms Praseeda B Nair (ECE), attended Remote Sensing, Geographical Information System and Global Navigation Satellite System, Amal Jyothi College Of Engineering, Indian Institute of Remote Sensing (IIRS)-Indian Space Research Organization (ISRO) (Aug –Oct 2014)

113. Ms Praseeda B Nair (ECE), attended National Workshop on Probability Theory and its applications, 28th to 30th April 2014, AJCE, Kanjirapally

114. Ms Praseeda B Nair (ECE), attended One Day Workshop on National Programme on Technology Enhanced Learning (NPTEL), AJCE, IIT Madras (Nov 2015)

115. Ms Ranjitha Rajan (ECE), attended National workshop on wireless sensor networks and robotics in Agricultural and Rural development on 17th and 18th March 2015 at Mascot Hotel Trivandrum

116. Ms Ranjitha Rajan (ECE), attended Remote sensing, geographical information system and global navigation satellite system Indian Institute of Remote Sensing (IIRS)-Indian Space Research Organization (ISRO) joint initiative, sponsored by EDUSAT Distance learning program.(4/8/2014 – 14/10/2014)

117. Ms Ranjitha Rajan (ECE), attended Seminar on Ultra-low power wireless wearable sensors for patient monitoring Bio electronics Laboratory, National University of Singapore conducted at AmalJyothi on 24/10/2014

118. Ms Ranjitha Rajan (ECE), attended One day workshop on National Programme on Technology enhanced learning NPTEL, at AJCE sponsored by IIT Madras on 21-11-2015

119. Ms Ranjitha Rajan (ECE), attended Seminar on "INTERNET OF CARS" on 18th August 2015 by Dr. V.T. Johnson of VeePhi Innovation Labs in Bangalore at AJCE sponsored by ISTE Kerala Chapter

120. Ms Ranjitha Rajan (ECE), attended Workshop on Advances in Wireless Communication and Networking conducted at AJCE ,Sponsored Indian science academy 23-07-2015 to 24-07-2015

121. Ms Reeju Elisa Baby (ECE), attended One day workshop on National Programme on Technology enhanced learning NPTEL, at AJCE sponsored by IIT Madras on 21-11-2015

122. Ms Reeju Elisa Baby (ECE), attended National Workshop on Probability Theory and its applications, 28th to 30th April 2014, AJCE, Kanjirapally

123. Ms Reeju Elisa Baby (ECE), attended One Day Workshop on National Programme on Technology Enhanced Learning (NPTEL), AJCE, IIT Madras (Nov 2015)

124. Ms Ria Maria George (ECE), attended Workshop on " Control Systems" conducted by IIT,Kharagpur sponsored by MHRD from 2-12 December 2014 at AJCE,Kanjirappally

125. Ms Tessy Annie Varghese (ECE), attended One Day Workshop on National Programme on Technology Enhanced Learning (NPTEL), AJCE, IIT Madras (Nov 2015)

126. Ms Tessy Annie Varghese (ECE), attended Workshop on Advances in Wireless Communication and Networking conducted at AJCE ,Sponsored Indian science academy 23-07-2015 to 24-07-2015

127. Ms Tessy Annie Varghese (ECE), attended Steps 2 Research (e-Seminar) AJCE, Kanjirappally, ISTE Kerala Section and CSI Cochin Chapter (September 2014)

128. Ms Tessy Annie Varghese (ECE), attended Remote Sensing, Geographical Information System and Global Navigation Satellite System, AJCE, Kanjirappally, Indian Institute of Remote Sensing (IIRS) Indian Space Research Organization(ISRO)joint initiative, sponsored by EDUSAT distance learing program(Aug-Oct 2014)

129. Ms Tessy Annie Varghese (ECE), attended one day Seminar on Ultra Low Power Wireless Wearable Sensors For Patient Monitoring, AJCE, Kanjirappally, Bio Electronics Laboratory, National University of Singapore (Oct 2014)

130. Ms Therese Yamuna Mahesh (ECE), attended Seminar on 'Alternative engineering career path'conducted by Department of Electronics and Communication Engineering, AJCE, on 14th January 2016.

131. Ms Therese Yamuna Mahesh (ECE), attended One-Day Workshop on 'NPTEL National Programme on Technology Enhanced Learning' conducted by Department of Electronics and Communication Engineering, AJCE, on 21st November 2015

132. Ms Therese Yamuna Mahesh (ECE), attended One Day 'Training programme for Presiding Officers' conducted by the Election Commission for the conduct of polls on 26-10-2015

133. Ms Therese Yamuna Mahesh (ECE), attended One day 'Symposium on Collaborative Reforms for Post Graduate Engineering Program' conducted by Department of ECE jointly with ISTE local chapter, on 15th October 2015

134. Ms Therese Yamuna Mahesh (ECE), attended Seminar on 'Internet of Cars'conducted by Department of Electronics and Communication Engineering, AJCE association with the ISTE chapter, Kerala session on 18th August 2015

135. Ms Therese Yamuna Mahesh (ECE), attended Symposium on 'Collaborative Reforms for Post Graduate Engineering Programs' hosted by the Department of Electronics and Communication Engineering held at Amal Jyothi College of Engineering on 15-10-2015

136. Ms Therese Yamuna Mahesh (ECE), attended National Level Workshop on "Network Simulation" on 20th and 21st, August 2015 conducted by the Department of Computer Science and Engineering in association with CSI-Cochin Chapter.

137. Ms Therese Yamuna Mahesh (ECE), attended Two-week ISTE workshop on Computer Programming conducted by Indian Institute of Technology, Bombay (One week of equivalent work completed online from 20th May to 15th June and physical participation at Amal Jyothi Remote Center from 16th – 21st June)

138. Ms Therese Yamuna Mahesh (ECE), attended One week MHRD-TEQIP II sponsored Faculty Development program me on Pattern Recognition and Machine Learning, conducted by the Department of Computer Science and Engineering, National Institute of Technology Calicut during 23rd to 28th June, 2014.

139. Ms Therese Yamuna Mahesh (ECE), attended National Workshop on Probability Theory and its Applications held at Amal Jyothi College of Engineering, Kanjirapally from 28th to 30th April 2014.

140. Mr. Anoop C. V (AUE) attended a two weeks workshop on Thermodynamics (ekalavvya) conducted by IIT bombay on december 2010

141. Mr. Tisson George Michael (AUE) attended international conference AICERA 2015 held at Amal Jyothi College of Engineering and presented a poster on "Mechanized food processing unit".

142. Mr. Anoop C. V (AUE) attended a two weeks workshop on Heat transfer (ekalavvya) conducted by IIT bombay on June 2011

143. Mr. Anoop C. V (AUE) attended a two weeks workshop on computational Fluid Dynamics (ekalavvya) conducted by IIT bombay on december 2011

144. Mr Sree Ram H (AUE) attended the Faculty Development Programme on Entrepreneurship held at Amal Jyothi College of Engineering from 5 to 17 May 2014.

145. Mr Sree Ram H (AUE) attended the 2 week ISTE workshop on Fluid Mechanics held from 20 to 30 MAY 2014.

146. Mr. Sree Ram H (AUE) attended the two day workshop on recent advances in machining at Kalasalingam University on 20, 21 March 2015.

147. Mr. Vishnu Prasad (AUE) attended the SAE faculty advisors' Forum held at Kalasalingam Universityon 30,31 Jan 2015

148. Dr. Jacob Philip (DBS) gave two lectures on Instrumental Methods of Analysis for Refresher Course participants at TKMM College Nabgiarkulangara on 10 October 2015

149. Dr. Jacob Philip (DBS) gave an invted lecture on "A brief history of light" at BPC College, Piravom on 14 January 2016

150. Dr. Jacob Philip gave a talk on "Electron Microscopy" to participants at the National Seminar on Materials Science at Sr. Joseph's College, Calicut on Februeary 12, 2016

151. Prof. Sherin Sam Jose has handled (Attended as Resource Person) sessions, on the topic "Innovation" in 35 different Engineering colleges during the year 2013-14, 2014-15 & 2015-16.

152. Dr. Jippu Jacob, Professor, Dept. of Mechanical Engineering, attended a 2-day Training Workshop on 'Intellectual Property Rights and Patent Drafting', held during January 3-4, 2014, at the College of Engineering, Trivandrum, and jointly organized by the Patent Information Centre, Kerala State Council for Science, Technology and Environment (KSCSTE), Govt .of Kerala, Trivandrum.

153. Bobin K Mathew attended 2 Weeks Workshop on "Control Systems" by IIT Kharagpur – Held under National Mission on Education through ICT (MHRD) on 2nd to 12th December 2014

Training programs attended by faculty in 2015

Name	Branch	Name of Course/FDP/STTP	Venue/Date
Mr. Shiju George	IT	Artificial Intelligence	TCS Infopark, 16th feb 2015
Dr. Jaimon Yohannan	DBS	Seminar and workshop on high performance computing	CET, Thiruvananthapuram, 16-1-2016
Mr. Ajith G.S	MCA	Seminar and workshop on high performance computing	CET, Thiruvananthapuram, 16-1-2016
Mr.Jobin T J	MCA	Seminar and workshop on high performance computing	CET, Thiruvananthapuram, 16-1-2016
Mr.Juby Mathew	MCA	Seminar and workshop on high performance computing	CET, Thiruvananthapuram, 16-1-2016

Mr.Juby Mathew	MCA	Workshop on Cloud computing	Marian College Kuttikanam February,16,2016
Ms.Nimmy Francis	MCA	Cloud computing	Marian College Kuttikanam February,16,2016
Mr. Jinson Devis	MCA	Workshop on Advances in Wireless Communication and Networking	23rd, 24th, July 2015
Mr. Jinson Devis	MCA	Workshop on Python	26, 27 May 2015
Abi Varghese	ME	National Workshop on Design and Engineering	5 & 6 December KTU , Thiruvananthapuram
Mathew J Joseph	ME	ASAP : Document preparation workshop	KWA training centre, Thiruvananthapuram 9 & 10 Feburary
Ashwin Chandy Alex, Abu Mani, George Sebastian, Vipin Vijayan, Saju Sebastian	ME	Additive Manufacturing Technology	Common Facility Service Center- Dept of Industry and Commerce, Govt of Kerala.13/01/2016
Vipin Vijayan,George sebastian,Amal sajikumar, Richu zacharia,	ME	Theoretical and Applied Computational Fluid Flow and Heat Transfer	8/12-2015 - 12/12-2015, RIT, PAMPADY
George sebastian,vipin vijayan,mathew j joseph,tenny thomas,sherin thampi	ME	Technical communication	30/11/2015-5/12-2015 AJCE ISTE
Mrs. Jayasree P K	CH	Recent Advances in Nanoscience and Nanotechnology	AICTE sponsored Amal Jyothi Center for Nano Science and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala organised During April 20- May 1, 2015
		NPTEL Workshop	National Programme on Technology Enhanced

			Learning (IIT Madras) at AJCE on Nov 21, 2015
Ms.Surya Sathyan	CH	Recent Advances in Nanoscience and Nanotechnology	AICTE sponsored Amal Jyothi Center for Nano Science and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala organised During April 20-May 1, 2015
		NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
		Research Issues and Emerging Trends in Control and Automation Engineering	STTP Sponsored by TEQIP II conducted by Dept. of Electrical and Electronics Engineering, College of Engineering Karunagappally, from Jan 13 - 17, 2016.
Mr.Rana Pratapan A D	CH	Recent Advances in Nanoscience and Nanotechnology	AICTE sponsored Amal Jyothi Center for Nano Science and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala organised During April 20-May 1, 2015

		Renewable Energy: Policies and Practices	TEQIP II sponsored organised at TKMCE from Nov 30 - Dec 5, 2015.
		Design and Engineering	conducted by Dept. of Mechanical Engineering, FISAT, on Jan 12, 2016.
Mr. Anoop S S	CH	NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
		Nanotechnology	TEQIP II sponsored, organised by Dept. of Mechanical Engineering GEC Idukki, from Dec 14 - 18, 2015.
Nikhi Maria Raju	CH	NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
		Computational Modelling of Flow Processes	TEQIP II sponsored workshop, organised by dept. of Chemcial Engineering, GEC Kozhikode from Nov 15 - 28, 2015.
Dr.Jose V Parambil	CH	Sustainable Engineering	Sponsored by KSCSTE, organized by Dept. of Mechanical Engineering, Adi Shankara Institute of Engineering and Technology, Kalady,during July 15-21, 2015.
		Entrepreneurship Mentor Development Workshop	Conducted by APJ Abdul Kalam Technological

			University, Kerala State, during Oct 19 - 25 2015.
Indira V		NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
		Renewable Energy: Policies and Practices	TEQIP II sponsored organised at TKMCE from Nov 30 - Dec 5, 2015.
Reethu K Sebastian	CH	Safety Requirements for Engineering Institutions	TEQIP II sponsored , Organised by division of Safety and Fire Engineering, CUSAT from Jan 21 - 23, 2015
		Recent Advances in Nanoscience and Nanotechnology	AICTE sponsored Amal Jyothi Center for Nano Science and Technology in association with Dept. of Basic Science and Dept of Chemical Engineering, Amal Jyothi College of Engineering, Kanjirappally, Kerala organised During April 20- May 1, 2015
Anand K	DBS	NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
Dr. Soney C George	DBS	Facilitating Innovation and Patent Filing	Organised by IIUCNN in association with IUCIPRS and MHRD chair on IPR, CUSAT on 29.02.2016

Manjusha VA, Midhu Das B & Aju S NAir	EEE	Control of Power Converters and Drives	DTE Sponsored STTP at Rajiv Gandhi Institute of Technology Govt. Engineering College, Kottayam on 4th to 9th January 2016
Sreekala P, Neenu Rose Antony	EEE	Introduction To Labview Real Time And FPGA Programming	TEQIP-II sponsored Short term training programme from "25-01-2016 to 30-01-2016
Mr. Arun S, Mr. Anish Benny, Ms Manjusha V A, Ms Sonia Sunny, Ms Sreeja C, Ms Dona Sebastian	EEE	NPTEL Workshop	National Programme on Technology Enhanced Learning (IIT Madras) at AJCE on Nov 21, 2015
Mr. Sreenath B & Ms. Midhu Das B	EEE	"Power Electronics for Grid Connected Renewable Energy Systems"	14th to 16th May 2015 NIT, Calicut

Institutional support for faculty refresher programmes

Amal Jyothi has been supporting faculty members to attend refresher courses and training programs by providing duty leave and financial support
Mr. Juby Mathew,AP MCA attended Six-day Saksham Training Program organized by KTU & Microsoft at Rajagiri School of Engineering & Technology, Kakkanad during 14- 19 September 2015

Mr.Juby Mathew, Mr.Ajith G.S, Mr.T.J Jobin, Mrs.Shelly Shiju George, Ms.Sona Maria Sebastian, Ms.Teenu V Therese Workshop on High Performance Computing at CET Campus Trivandrum on 16 Jan 2016.

2.4.5 Awards and Recognition Received by Faculty Members

The awards and recognitions received by faculty members during the period of this report are outlined below.

1. Mr. Rony Scaria, CAD Instructor, Dept. of Automobile Eng won the first place in an international online CAD contest conducted by M/s PTC, Texas, USA in April 2013.

2. Dr Jippu Jacob, Professor and Head, Dept. of Mechanical Engineering, conferred with the title 'Eminent Engineer' on Feb 22, 2014, by the Kerala State Centre of The Institution of Engineers (India).

3. Dr. Jippu Jacob, Professor, Dept. of Mechanical Engineering, has been serving as a Member of the Technical Committee for Rural Technology Programmes (TCRTP) of the Kerala State Council for Science, Technology and Environment (KSCSTE), Govt. of Kerala, Thiruvananthapuram, since 2010.

4. Dr. Jippu Jacob, Professor, Dept. of Mechanical Engineering, elected as 'Fellow' of The Institution of Engineers (India) on 31.5.2014.

5. Dr. Jippu Jacob, Professor, Dept of. Mechanical Engineering, served as a 'Reviewer' of two technical papers at the 15th National Conference on Technological Trends - 2014 (NCTT 2014) conducted during August 22-23, 2014, at the College of Engineering, Trivandrum.

6. Dr. Soney C George, Professor, Department of Basic Sciences has been elected Fellow of the Royal Society of Chemistry, 2014

7. Ms. Annie Maria Issac, AP of Civil Engg, was selected for a two-month summer fellowship program organised by Indian Society of Science at IIT, Bombay (2014)

8. Joms Antony, approved as external contributor for IIT Bombay Spoken tutorials in Java Intermediate track and Digital Divide track: 2014

9. Joms Antony, received the Technology for Education grant as part of T4E 6th IEEE Conference 2014

10. Joms Antony, 3rd prize in National Teachers Contest conducted as part of 6th IEEE Conference on Technology for Education 2014

11. Manoj T Joy, HOD CSE, co-authored "Performance Comparison of Document clustering with ontology knowledge representation" which received the Best Paper Award in International Conference on Advances in Science & Technology (ICAST 2014) on 15th & 16th February, Bangkok.

12. Syam Gopi, AP CSE, Coordinator of Remote Centre (AJCE) of IIT Bombay received the Five Star Rating for the Centre, the first among 325 Centres across India.

13. Sruthi S,AP, CSE, received letter of appreciation for excellence in coordination at AJCE centre of QEEE,IIT Madras,for the semester June-Dec 2015.

14. Yelana Thomas, AP, HUM got the BEST PRESENTER award on the topic *The Power Of Humour in Communication* for the SET conference conducted in May 2015 at VIT Vellore.

15. Mathew George got the Best paper award for IEEE International Conference on Circuit, Power and Computing Technologies, at Tamilnadu 2014

16. Ms. Midhu Das B received Best paper Award in KETCON 2016 for the paper titled "High Gain DC-DC Converter Incorporating Switched Capacitors for High Voltage Applications"
17. Mr.Anish Benny was Resource person for a TEQIP funded program on software ORCAD/PSPICE for BTech students at GEC, Painav (24th to 26th August 2013)
18. Ms. Sonia Sunny received 3rd Rank in M Tech - Industrial Drives & Control (MG University) 2014
19. Mr. Bobin K Mathew handled a session on the topic " Addressing latest trends in storage devices for Renewable Energy" in Adi Shankara college of Engineering Kalady from 10th to 15th December 2015

2.6.2 Students' performance and Progression Monitoring

The monitoring of student performance and progression begins by documenting the entry-level marks/grade of all new admissions in the office. The Head of the department along with the class teacher and course faculty monitors student progression through semester-wise formative and summative evaluations, students diary, mentors report, best class evaluation and semester wise class reports. The overall performance of the students is communicated to the parents during class wise PTA meetings for weak students, through mobile phone or through mails from the corresponding Class teachers. The results of internal examinations are communicated to parents periodically and if the performance falls below a particular level they are called in.

Program-wise and aggregate pass percentages during the period of this report are given in the Table below.

Table: Program-wise pass percentage of students during the period of the report

Course	2010-11	2011-12	2012-13	2013-14	2014-15
B. Tech. Auto	N/A	N/A	11.76	8.06	21.62
B. Tech. Civil	74.6	75.8	82.5	82	68.54
B. Tech. Mech.	41.93	51.61	57.29	82.75	56.41
B. Tech.EEE	58.47	68.34	78.60	40	52.54
B. Tech. ECE	86.92	83.73	73.02	75	67.77
B. Tech. Chem.	N/A	N/A	N/A	N/A	N/A
B. Tech. CSE	87.50	88.71	66.67	58.89	78.16
B. Tech. IT	84.13	71.19	47.83	33.9	58.49
B. Tech. Mett.	N/A	N/A	N/A	N/A	N/A
M. Tech. Mech.	64	73	100	100	100
M. Tech. Civil	N/A	N/A	N/A	86.23	75.26
M. Tech. ECE	94.4	100	95.83	100	91
M. Tech. EEE	94.44	70.58	94.44	93	94
M. Tech. CSE	NA	NA	100	100	100
B. Tech. Aggregate	72.26	73.23	59.67	54.1	60.75
M. Tech. Aggregate	84.3	81.2	96.2	N/A	N/A

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1.5. Faculty Involvement in Research Activities

Guiding Student Research: The faculty is actively involved in guiding student research projects at different levels, viz, Ph.D, M.Tech, M.Sc and B.Tech. During the last five years, the faculty members have guided 928 student projects. Details are given in the following Table 1.

Table 1: Guiding Student Research

Sl. No	Guiding Student Research	No. of Research Projects					
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1	Guiding Student Research (Ph. D)	2 (ongoing)	3 (ongoing)	4 (ongoing)	6 (ongoing)	7 (ongoing)	13(ongoing)BS
2	Guiding Student Research (M.Tech)	40	63	50	63	117	121 (ongoing)
3	Guiding Student Research (M. Sc)	4	5	10	8	4	6 (ongoing)
4	Guiding MCA projects				60	60	103
5	Guiding Student Research (B.Tech)	62	61	67	96	136	142 (ongoing)

Collaborative research:

Faculty members have undertaken collaborative research work by establishing collaboration with two outside bodies- School of Chemical Sciences and International and Inter University Center for Nanoscience and Technology, M.G. University.

Individual Research of the faculty:

Several research projects have been undertaken by the faculty including Major and Minor researches funded by DST and other agencies during the last 4 years. The details are given in Table 2.

Table 2: Research Projects:

Sl. No.	Nature of Projects	Funded/sponsored by	No. of Research projects
1	Major projects	DST/KSCSTE/**BRNS/RRII/ABS**	6
2	Minor Projects	IE	3
3	Minor Projects	IEDC	25
4	Minor Projects	KSCSTE	4
5	Minor Projects	Kerala state Commissionerate for persons with disabilities	5
6	Minor projects (College funding)	I^2U	57
7	Minor Projects	Centre for Disability Studies, Trivandrum	2
8	Major project	Ministry of social justice and empowerment	1

3.1.6. Capacity building for Research

A host of workshops/ training programs/seminars were conducted at the college and department level with a focus on capacity building and imbibing research culture on the campus. One hundred and twelve such workshops/training programs were conducted in the College during the last four years. The details are furnished in Table 3.

Table 3: List of training programmes

Sl. No	Programmes conducted	Numbers	2015-2016
1	Seminars	15	
2	Workshops	20	
3	Training programmes	5	
4	Invited talks/ motivational classes	39	8 (BS)
5	Entrepreneurship Awareness camps/ programmes/FDP (IEDC)	25	

6	All Kerala project contests	4	
7	Annual Project contests (I2U)	4	
8	Total	112	

3.1 Resource Mobilization for Research

3.2.1 Financial Allocation for Research

The college has given due share in its budget for carrying out research activities. The amount is spent for books, journals, research promotion measures, organization of workshops etc. The details are given in Table 4.

Table 4: Expenditure on Research

Sl No	Item	Amount (Rupees)				
		2011-2012	2012-2013	2013-2014	2014-2015	2015-2016 as on 29-02-2016
1	Research	548253	847453	831941	731178	664427
2	Project Funding			100000	175600	10000
3	Print Journals	230304	315724	335649	311860	286049
4	e-Journals	1410248	1589707	1700860	3169596	3656089

Details of ongoing and completed projects and grants received during the last five years are given in Table 5.
  ➢ Number of projects (ongoing) : 5
  ➢ Number of projects (completed): 38

Table 5: List of major and minor projects

Sl No	Major/ Minor	Title of the project	Duration of the project	Funding agency	Amount Sanctioned Rs.	Amount Released Rs.
1	Major	Rubber Tapping Knife	2010-2014	RRII	670000	210000
2	Minor	Cocobot	2010	DST	100000	100000
3	Minor	Intelligent Automated Fan	2010	DST	100000	100000
4	Minor	Pepper Separator	2010	DST	100000	100000
5	Minor	Low cost air-conditioning system	2010	DST	100000	100000

6	Minor	Mercury pendulum : A wave power plant	2010	DST	100,000	100000
7	Minor	Pedal powered inverter	2010	DST	100,000	100000
8	Minor	Pre-paid Energy Meter	2010	DST	100000	100000
9	Minor	Internet Radio Streaming Server	2010	DST	100000	100000
10	Minor	Bore well rescue robot	2010	DST	100000	100000
11	Minor	Anti-Sleep Driver Alert Sensor (ASDAS)	2011	DST	100000	100000
12	Minor	Hybrid Driver Seat	2011	DST	100000	100000
13	Minor	Web Doctor	2011	DST	100000	100000
14	Minor	E- Diagnoser	2011	DST	100000	100000
15	Minor	Bomb Disarming Robot	2011	DST	100000	100000
16	Minor	Hybrid driver seat for physically challenged	2011	IE	30000	30000
17	Minor	Economic Fuel Consuming Vessel	2011	DST	100000	100000
18	Minor	Guardicon	2012	DST	100000	100000
19	Minor	Soilmithra	2012	DST	100000	100000
20	Minor	Vehicle Data Recorder	2012	DST	100000	100000
21	Minor	Complete LPG Leak Protection System	2012	DST	100000	100000
22	Minor	Enhancement of lifestyle of a physically challenged person - Easy Elevator	2012	State Commissionerate for Persons with Disabilities, GOK	75000	75000
23	Minor	Creep Testing Machine	2012-13	ABS Instruments, Chennai	200000	200000
24	Major	Development of Novel poly(vinyl alcohol) Nanocomposite Membranes for the Pervaporation Separation of Aqueous Organic Liquid Mixtures	2012-2015	KSCSTE	1365000	1265000
25	Minor	Green Hearth	2013-2014	DST	100000	100000

26	Minor	Low cost water treatment using Vetiver System	2013-2014	DST	100000	100000
27	Minor	SBR Graphene Nano-composite	2013-2014	DST	100000	460000
28	Minor	Driver Assistance	2013-2014	DST	100000	100000
29	Minor	Table-top Power Operated Coconut Husking Machine	2013-2014	DST	100000	100000
30	Minor	Virtual-I	2013-14	Centre for Disability Studies, Trivandrum	50000	-
31	Minor	B.A.T (Blind Assistance Technology)	2013-14	Centre for Disability Studies, Trivandrum	50000	-
32	Minor	Smart walking Stick	2013-14	Centre for Disability Studies, Trivandrum	40000	-
33	Minor	Development, characterization and pervaporation performance of chitosan blended PVA/bentonite clay nanocomposite	2013-2014	KSCSTE	15000	-
34	Minor	Effect of nanosilica on the compressive properties of the Natural rubber latex modified concrete	2013-2014	KSCSTE	15000	-
35	Major	Development of high performance	2013-2016	DST	1940000	18282830

		Chloroprene Rubber/graphene nanocomposites				
36	Minor	Patient Transfer device	2014-15	Kerala state Commissionerate for persons with disabilities	20000	-
37	Major	Development of ECAP/ECAE Process in the Warm Working Temperature Range for the Study of Microstructural Stability and Mechanical Properties of Austenitic Stainless Steel	2014-15	BRNS, DAE	4500000	-
38	Minor	Low cost vehicle for physically challenged	2014	State Commissionerate for Persons with Disabilities, GOK	20000	-
39	Minor	Study On The Compressive Strength Of Natural Rubber Latex And Nano Graphite Modified Concrete	2013-2014	KSCSTE	15000	
40	Minor	Water Quality Studies on Manimala River During Sabarimala Season	2013-2014	KSCSTE	15000	15000
41	Minor	Low cost Vehicle for persons with disabilities	2013-2014	Kerala state Commissi	20000	20000

				onerate for persons with disabilities		
42	Minor	Stair Case Climber cum Hand Trolley	2014-15	Kerala state Commissi onerate for persons with disabilities	20000	20000
43	Major	Development of a system for Child rescue from bore well	2014-15	DST	15,00,000	7,50,000
44	Major	Robotic Mobilizer for Paraplegic Patients	2015-16	Ministry Of Social justice and Empower ment , New Delhi	11,90,000	
45	Minor	Mechanized Food Processing Unit	2014-2015	KSCSTE	1,20,000	
46	Minor	Intelligent Helmet	2014-2015	IEI	20,000	20,000
47	Minor	Wearable Bind Assist	2014-2015	IEI	10,000	10,000
48	Minor	Air Cushion	2014-2015	IEI	20,000	20,000
	Total funds	Sanctioned/ received so far			14,320,000	6,084,500

3.3 Research Facilities

3.3.1. Research facilities available to the students and research scholars

Table 6 shows the institutional facilities available for research at AJCE:

3.3.2 Institutional Strategies for Planning, Upgrading and Creating Research Infrastructure

The College recognizes the importance of furthering research in new and emerging areas where timely interventions are possible. Research and Infrastructure Committees of the College have

developed policies to take care of planning, up-gradation and creating infrastructure facilities for research.

Individual departments identify emerging areas of research and develop a direction for their research activities in line with current trends. Each department is networked with institutes and, industries that spearhead in qualitative studies, inviting eminent scholars from such centers to AJCE campus for conducting workshops and seminars for scholars and teachers. Such interactions have brought new insights on emerging areas of research and necessary infrastructure required for the same.

Table 6: Research facilities

Infrastructural facility	Library and Software resources	Human resources	Training provided
• Unlimited internet connectivity • Well equipped computer center • Well equipped library • Discussion room • Reprographic Center • Well equipped research labs • Guest house	• E- journals and E-books • Good collection of journals and periodicals • Facility to lend books • Network resource center	• Research Guidance • • Eight Ph.D guides • Two Research Assistants (Nanotechnology) • 17 Ph. Ds and M. Techs to guide student projects	• Training on how to carry out a research work • Training on Research methodology and quality research • Training on LateX • Training on writing proposals

3.3.4 Research facilities made use of outside the campus

Many faculty members have made use of research facilities available elsewhere for their research. A few such cases are listed in Table 7.

Table 7: Research facilities made use of outside the campus

University/ Institution	Students/ Research Scholars	Facility provided
VIT	K G Satheesh Kumar	Part time Ph. D
VIT	Geevarghese Titus	Part time Ph. D
VIT	Darsana P	Part time Ph. D
VIT	Jayakrishna V	Part time Ph. D
VIT	Jerin Thomas	Part time Ph. D

VIT	Sherin Sam Jose	Part time Ph. D
VIT	J P AjithKumar	Part time Ph. D
VIT	K J Mathew	Part time Ph. D
VIT	Midhuna Jyothi	Part time Ph. D
VIT	Rosamma Sebastian	Part time Ph. D
VIT	K.M. Abubeker	Part time Ph. D
VIT	Shiju George	Part time Ph. D
VIT	Richu Thomas	Part time Ph. D
VIT	Yelana Thomas	Part time Ph.D
CUSAT	Krishnalal G	Part time Ph. D
CUSAT	P.K. Jayasree	Part time Ph. D
Satyabhama University	Manoj T Joy	Part time Ph. D
Bharath University(BIHER)	Therese Yamuna Mahesh	Part time Ph. D
St John Memorial University, Canada	Sunishkumar OS	Full time PhD
CSIR NIIST	M. Tech students	Materials Science Lab
ISRO	M. Tech students	Umbilical Systems Lab
M.G. University	Jasmine Mathew	Part time Ph. D
IIUCNN	Thomasukutty Jose Maya Mayaooram	Testing facilities
RRII	Anoop Arun	Testing facilities
CFSC	Nibu	Preparation of nanocomposite samples
STIC, Kochi	Shalini	Characterization
CUSAT	Maya	Raman Spectrum
STIC, Kochi	research scholars	Sample characterization
VIT	Sandhya Ramakrishnan	Part time Ph.D
VIT	Shijin P V	Part time Ph.D
M.G. University	Rubin Thottupurathu Jose	Part time Ph. D
M.G. University	Juby Mathew	Part time Ph. D
VIT	Abu Mani	Part time Ph. D
Kalasalingam University	Mathew J Joseph	Part time Ph. D
Kalasalingam University	Roshan Kuruvila	Part time Ph. D
CUSAT	Jayasree P K	Part time Ph.D
VIT	Yelana Thomas	Part time Ph.D
VIT	Belarmin Xavier	Part Time Ph.D
VIT	Bobin K Mathew	Part Time Ph.D
Bharathiar University	Thomasukutty Jose	Part Time Ph.D

| IIUCNN, MGU | Rakesh Reghunath | Part Time Ph.D |

Table 8: Lab Facilities Available for Researchers

Facilities		
Department	**Lab & Software**	**Library**
AU	1. Automobile Engine and dynamometer Lab 2. CAD Lab (AutoCAD, CATIA) 3. Vehicle system and components laboratory 4. Fuels and lubricants laboratory 5. Auto electrical and electronics laboratory 6. CNC trining lab 7. Vehicle maintenance and reconditioning laboratory	Textbooks- 501 Periodicals/Magazine : 2
CE	Survey Laboratory Materials testing lab Geotechnical engineering lab Concrete Laboratory Environmental Engineering lab CAD Lab (AutoCAD, STAAD, Prima Vera P6) Transportation Engineering Lab	No. of Text books: 1100, Monographs: 17
CSE	● Advanced Systems Lab, ● Project Lab ● Programming Lab ● Hardware & Networking Lab ● M Tech Lab	Text books- No of volumes:1226 No of titles: 520
CHE	1. Analytical Chemistry laboratory, 2. Physical and Organic Chemistry lab 3. Particle Technology lab 4. Chemical Technology Lab. 5. Heat Transfer Operations Lab 6. Environmental Engineering Lab.	No of Textbooks-185, Journals-6

ECE	Electronics Circuits lab IC lab Digital Lab Advanced Communication lab Project lab Systems lab PG lab Basic Electronic workshop NI LabView Academy Lab ANFOT Optical Lab	Textbooks-No: of Titles: 1388 No.: of Journals and Magazines:163 No: of Seminar Reports:740
EEE	Electrical Workshop Electrical Measurement Lab Electronic Circuits Lab Electrical Machines I Lab Electrical Machines II Lab Control and Simulation Lab Power System Simulation Lab Microprocessor & Microcontroller Lab Power Electronics Lab Energy Systems Lab Non conventional Energy Systems Lab	Textbooks -1686 periodicals-7 Question Banks-36 Competitive Exams(GATE)-21 Project Reports-50 Seminar Reports-290 Mini project Reports-20
MTG	Metallography Lab Optical Microscope with image analyzer Heat Treatment Lab Mechanical Testing Lab Welding Lab Foundry Lab	Text books: 110
IT	Database Lab Project Lab Multimedia Lab, Internet Lab Programming Lab	No. of books:1009 books

ME	Fluid Mechanics Lab Hydraulic Machines Lab Machine Tools Lab Heat Engines Lab Mechanical Engineering Lab Heat Transfer Lab Mechanical Measurements Lab	Total No. of Books=1014 Reference Books=55 Periodicals/Journals=30 Seminar Reports -134
BS/ACeNT	Nanotechnology Research lab	Total no of books-463
MCA	Advanced Systems Lab Project Lab Programming Lab Hardware & Networking Lab Android Lab	No. of volumes:937 No. of titles: 432

3.4 Research Publications and Awards

3.4.1 Research Achievements of Staff and Students

The Research achievements of staff and students in terms of publications and patents applied for, are listed in relevant sections of this document.

3.4.2. Publications and Paper Presentations

The College has published 12 text books, 6 chapters in reference books, 8 Monographs, 4 Conference Proceedings, 163 Articles in Peer- Reviewed Journals and 355 articles in Conference proceedings during the period of this report.

Articles Published in Peer reviewed journals (national and international) and those listed in international databases are given in Table 9 below:

Table 9: List of Publications (Period 2012-2015)

Sl no	Faculty / Student name	No of papers published National /International journals	No of papers published/ presented in conferences	Total	Citation index	Impact factor	h-index	SNIP/SJR	No of papers listed in international databases

		Peer reviewed	Others					
1	Mr. P C Thomas	2	6	8				
2	Prof. V .I Cherian	0	7	7				
3	Mr. Arun S	5	10	15				
4	Mr. Robins Anto	0	14	14				
5	Mr. Victor Jose	0	8	8				
6	Mrs. Sreekala P	0	6	6				
7	Mrs. Vidya M Nair	0	3	3				
8	Mrs. Sreeja C	0	4	4				
9	Ms. Reshmi V	0	8	8				
10	Mrs. Sarin Baby	0	6	6				
11	Mr. Anish Benny	0	18	18				
12	Mr. Bobin K Mathew	0	6	6				
13	Ms. Neenu Rose Antony	0	2	2				
14	Mr. Shinosh Mathew	0	1	1				
15	Mr. Joffie Jacob	0	3	3				
16	Mrs. Manjusha V A	0	5	5				
17	Anumodu D M	0	3	3				
18	Mrs. Rani Chacko	0	5	5				
19	Ms. Dona Sebastian	0	7	7				
20	Sreekumar T	0	3	3				
21	Midhu Das B	0	2	2				
22	Daru Anna Thomas	0	1	1				
23	Dr. Sivasubramanian	0	2	2				
24	Aju S nair	0	2	2				
25	Nihi M J	0	0	0				
26	Elizabeth Rajan	0	3	3				
27	Prof. K.J Thomas	0	1	1				
28	Sreenath	0	4	4				
29	Dinto Mathew	0	4	4				
30	Dr. Mini Mathew	4	1	5				
31	Mrs. Dhanya Krishnan	1	2	3				
32	Mr. Belarmin Xavier C.S.	1	0	1				
33	Ms. Jyothis George	1	3	4				
34	Mrs. Margret Sherin Joseph	0	2	2				

35	Ms. Minu S	0	1	1				
36	Mr. Bevin Varghese Cherian	0	1	1				
37	Ms. Linu Theresa Jose	1	2	3				
38	Mr. Nirmal George	3	1	4				
39	Mr. Naveen Joseph	1	2	3				
40	Ms. Jeena B Edayadiyil	0	1	1				
41	Soumya Anand	0	1	1				
42	George Mohan	0	2	2				
43	Deepak John Peter	2	2	4				
44	Jose Joseph	0	1	1				
45	Minnu M M	1	1	2				
46	Geroge M Varghese	1	0	1				
47	Mrs. Jayasree P K	0	1	1				
48	K.G. Samuel	2	0	2				
	M. Rijesh	1	0	1				
49	K G Satheeshkumar	3	2	5				
50	Therese Yamuna Mahesh	10	8	18	9		2		9
51	Geevarghese Titus	**2**	**11**	**13**	5		2		8
52	Darsana P	4	4	8					1
53	Jose J Edathala	3	6	9					3
54	Indu Reena Varughese	3	3	4					1
55	Divya R S	0	2	2				
56	Jaison C S	2	3	5					4
57	Binoshi Samuvel	2	5	7					2
58	Rosamma Sebastian	2	1	2				
59	Muth Sebastian	1	1	2					1

No	Name								
60	Abubeker K M	6	3	9					4
61	Shinto Sebastian	4	4	8					4
62	Ranjitha Rajan	2	0	2					
63	Careena P	1	3	4					
64	Reeju Elisa Baby	0	0	0					
65	.Binu Mathew	4	5	9					3
66	Ria George	2	3	5					1
67	Sunish Kumar O.S	0	5	5					5
68	Mathew George	1	4	5					1
69	Agi Joseph	2	0	2					
70	Ajai Mathew	2	5	7					2
71	Anu Abraham	3	3	6					
72	Binu C Pillai	**4**	**2**	**6**					3
73	Praseeda B Nair	2	0	2					1
74	Jomy Susan Ipe	0	0	0					
75	Merene Joseph	0	1	1					1
76	Prof. Manoj T Joy	3	10	13					1
77	Dr.Fr. George A K	2		2					
78	Shiney Thomas	6	10	16	1		1		3
79	Resmipriya M G	2	3	5					
80	Santhoshkumar G S	5	5	10					1
81	Niya Joseph	2	6	8					
82	Syam Gopi	5	5	10					
83	Elisabeth Thomas	1	1	2					
84	Arun K S(Study Leave)	1	0	1					
85	Ashji S Raj	1	1	2					

86	Jerin Thomas	3	1	4					
87	Anishamol Abraham	1	3	4					
88	Tintu Alphonsa Thomas	6	1	7					
89	Sumy Joseph	4	9	13					1
90	Jayakrishna V	7	8	13					2
91	Neenu R	1	0	1					
92	Ansamol Varghese	0	1	1					
93	Krishnalal.G	5	3	8					2
94	Neethu C Sekhar	5	0	5					
95	Anjana V	0	1	1					
96	Minu George	0	2	2					
97	Sruthi S	1	1	2					
98	Deepu Benson	2	0	2					
99	Teenu Therese Paul	3	1	4					
100	Fabeela Ali Rawther	4	1	5					
101	SuNil K S	1	1	2					
102	Bini M Issac	2	1	3					
103	Lisha Varghese	4	0	4					
104	Fr. Rubin Thottupuram	2	0	2					
105	Juby Mathew	6	2	8					
106	Gloriya Mathew	2	1	3					
107	Mr.AKSukumaran	0	2	2					
108	Mr. Arjun KR	1	1	2					
109	Mr.Toms Philip	0	5	5					
110	Mr.Tenny Thomas	0	2	2					
111	Mr.Mathew Joseph	0	1	1					
112	Mr.Roshan Kuruvilla	1	1	2					
113	Mr.Ashok Chitharanjan	0	2	2					
114	Mr.Mathew J Joseph	0	1	1					

115	Mr.Rojas Thomas	0	4	4					
116	Mr.Tony Varghese	0	1	1					
117	Mr. R Rakesh	0	2	2					
118	Mr.Abu Mani	0	1	1					
119	Mr. K. Francis	0	1	1					
120	Mr. Manu Moses Jacob	0	1	1					
121	Meby mathew	0	1	1					
122	Binu Thomas	1	3	4					
123	Ms. Sandhya Ramakrishnan	0	3	3					
124	Mr. Thomas Varughese	0	1	1					
125	Mr. Shiju George	3	4	7					
126	Mr. Jobin T. J	0	1	1					
127	Ms. Midhuna Jyothi R	1	1	2					
128	Ms. Saumya Sadanandan	1	0	1					
129	Ms. Reshma P	2	0	2					
131	Mr. Joms Antony	1	4	5					
132	Ms. Alfin Abraham	2	0	2					
133	Ms. Jincy Lukose	0	1	1					
134	Mr. P. V. Shijin	2	0	2					
135	Dr Soney C George	18	25	42					
136	Mr.Ajithkumar J P	0	1	1					
137	Dr. Jacob Philip	8	0	8					
138	Dr Dilip Kumar	0	2	2					
139	Dr. Jince Kappen	4	0	4					
140	Subin P George	1							
141	Yelana Thomas	0	3	3					
142	Sonia Sunny	0	1	1					
	Total	**221**		629					

The books/monographs published by the faculty during the period of the report are listed in Table 10.

Table 10: Details of books/ monographs etc

Faculty / Student name	No of Monographs	Chapter in books	Publisher names	IS BN /	Books edited	Publisher names	ISBN / ISSN	Year

				ISS N				
Anish Benny		Chapter 51			Adaptive and Neural pH Neutralizatio n for Strong Acid-Strong Base System	Pentex Publishers	DOI: 10.40 18/97 8-1- 4666- 7456- 1	2015
Anish Benny					Introduction to Elecronics Engineering.	Pentex Publishers		2015
Anish Benny					Basics of Electronics Engineering	Pentex Publishers		2015
Anish Benny					Textbook of Analog Communicati on (Kerala University) Edition 2	Pentex Publishers		2014
Anish Benny					Basic s of Elecronics Engineering and Information Tech	Pentex Publishers		2014
Anish Benny					Textbook of Basic Electronics Engineering	Pentex Publishers		2013
Anish Benny					Textbook of Basic Communicati on and Information Technology Edition 2	Pentex Publishers		2012
K G Satheeshku mar	1							2014
Jose J Edathala	1							
Sunish kumar OS					1			
Divya R S	1							
Abubeker K M	1							
Dr Soney C George	1	(1)Ethylene Propylene Diene Rubber/Carbo n Black Composites	John Wiley & Sons, 2007		A Text Book of Engineering Chemistry	S Chand, New Delhi		2011

		Chapter 5 (p129-149) in Polyolefin Composites [Eds: Nwabunma and Kyu],	John Wiley & Sons		and Environmental Science (2011) (pub) S.Chand & Co Ltd New Delhi			
		ii) Ethylene Propylene Diene Rubber/ Natural Rubber Blends Polyolefin blends, 2007						
		iii) .Manufacturing techniques of Mutiphase Polymeric Systems Chapter 5, (123-157) in Handbook of Multiphase Polymeric systems, Volume 1, John Wiley & Sons, 2011)	(John Wiley & Sons, 2011)		ii) A Textbook of Engineering Chemistry (Dr. Sajith Kurian and Mrs. Rino lay Jose as the co-authors)	S. Chand, New Delhi		2015
		iv) Micro and Nano TiO2 Reinforced Natural Rubber Composites. Chapter 10 (p290-305) in Natural Rubber Materails Vol 2: Composites and Nanocomposites, Published by Royal Society of Chemsitry, 2014	Published by Royal Society of Chemsitry, 2014					
		v) Polymer Nanocomposite Membranes for Waste Water Purification Runcy Wilson ,Saliney Thomas, Soney C George and Sabu Thomas						

		(Concise Encylopaedia of Nanotechnology, CRC Press 2015)	Published by CRC press, 2015					
Dr. Abin Manoj					A textbook of Engineering Physics	S. Chand, New Delhi		
Dr. Lisa Mathew					Adapted the book Introduction to Automata Theory, Languages and Computation, 3rd edition (by John E Hopcroft, Rajeev Motwani and Jeffery D Ullman) for use by Indian Universities			
Prof. Tomy Joseph	1							
Dr. Jacob Philip	2	Chapter in Ferroelectrics: Physical effects	M/s Intech Publishers, Croatia		Textbook of Engineering Physics	M/s Educational Publishers, Cochin		2011
Jacob Philip and Abin Manoj	1	Engineering Physics (Textbook for KTU)	Educational Publishers	81-87198-24-9				2015
Subin P George		Design & Engineering	Pentex Publishers , Kollam					2016

3.4.4 Research Awards and Recognitions

Research Awards Received by the Faculty

- Prof. Manoj T. Joy, Best Paper Award for "Performance Comparison of Document clustering with ontology knowledge representation" in International Conference on Advances in Science & Technology (ICAST 2014) on 15th & 16th February, Bangkok.
- Dr.Jippu Jacob, Professor, Department of Mechanical Engineering, conferred with the title 'Eminent Engineer' on Feb 22, 2014 by the Kerala State Centre, The Institution of Engineers (India).
- Dr.Soney C George, Professor of Chemistry, Department of Basic Sciences received the title of Fellow of Royal Society of Chemistry by RSC, London.
- Mr.Juby Mathew,AP MCA, Best Paper Award for the paper entitled "*A New Hybrid Scalable Parallel Clustering Approach for Large Data Using FCM and FA*" - in International Conference on Advanced IT, Engineering and Management [SAC AIM 2014]-14-15 October 2014-St. Aloysius College [Autonomous], Mangalore, India

Best faculty awards

AJCE is giving awards to faculty members based on their overall performance in teaching, research and extension activities. Since 2012-13, every year one faculty in the cadre of Professor/ Associate Professor and eight faculties in the cadre of Assistant Professor are selected for the faculty awards (Table 11). Besides, 4 of the laboratory staff are also given performance awards.

Table 11: List of faculty awards

Year	Category	Name	Department
2010-2011			
	Prof. & HOD	Ms. Sandhya Ramakrishnan	IT
	Asst. Professor	Mr. Geevarghese Titus	ECE
	Asst. Professor	Ms. Abin Manoj	DBS
	Asst. Professor	Mr. Arun K.S.	CSE
	Asst. Professor	Ms. Kavitha Jacob	DBS
	Asst. Professor	Mr. Arun S.	EEE
2011-2012			
	Professor	Dr. Soney C. George	DBS
	Asst. Professor	Ms. Shiney Thomas	CSE
	Asst. Professor	Mr. Akas G. Kamal	ECE
	Asst. Professor	Mr. Ajai Mathew	ECE
	Asst. Professor	Mr. Robins Anto	EEE

	Asst. Professor	Fr. Rubin Thottupuram	MCA
	Lab Instructor	Mr. Rony Scaria	AUE
	Lab Instructor	Ms. Rajitha Rajan	EEE
	Lab Instructor	Mr. K.V. Raveendrakumar	IT
	Lab Instructor	Ms. Sheena P. Abraham	CE
2012-2013			
	Professor	Prof. K.G. Satheeshkumar	ECE
	Professor	Prof. Manoj T Joy	CSE
	Asst. Professor	Mr. Geevarghese Titus	ECE
	Asst. Professor	Mr. Shiju George	IT
	Asst. Professor	Mr. S. Arun	EEE
	Asst. Professor	Mr. Binu Mathew	ECE
	Asst. Professor	Mr. Richu Thomas	ME
	Asst. Professor	Ms. Reshma P	IT
	Asst. Professor	Mr. Mathew Joseph	ME
	Asst. Professor	Mr. Ajith G.S.	CSE
	Asst. Professor	Ms. Shamini James	Hum
	Asst. Professor	Ms. Margret Sherin James	CE
	Lab Instructor	Mr. Rajesh M.G.	ECE
	Lab Instructor	Mr. K. Balachandran	ME
	Lab Instructor	Mr. K.M. Manoj	EEE
	Lab Instructor	Mr. P.G. Ranjithkumar	IT
2013-2014			
	Professor	Soney C.George	DBS
	Associate Professor	Sherin Sam Jose	AUE
	Asst. Professor	Arjun K.R.	ME
	Asst. Professor	Thomas Varghese	IT
	Asst. Professor	Binu C.Pillai	ECE

	Asst. Professor	Krishnalal G	CSE
	Asst. Professor	Mathew K.J.	AUE
	Asst. Professor	Merene Joseph	ECE
	Asst. Professor	Shinosh Mathew	EEE
	Asst. Professor	Annie Maria Issac	CE
	Lab Instructor	Haris Xavier	IT
	Lab Instructor	Sheena P.Abraham	CE
	Lab Instructor	Sreejith C.S.	ECE
	CAD Trainer	Rony Scaria	AUE
	Asst. Professor	Shamini James	HUM
2014-15			
	Asst. Professor	Jayakrishna V	CSE
	Asst. Professor	Binu C.Pillai	ECE
	Asst. Professor	Mathew K.J.	AUE
	Asst. Professor	Belarmin Xavier	CE
	Asst. Professor	Jayasree PK	CH
	Asst.Professor	Joms Antony	IT
	Lab Instructor	K. P. Jyothikumari	IT
	Lab Instructor	Manoj Joseph	CSE
	Asst. Professor	Geevarghese Titus	ECE
	Professor	K.G. Satheeshkumar	ECE
	Lab Instructor	M G Rajesh	ECE
	Professor	Dr. P C Thomas	EEE
	Lab Instructor	Mr. Ramesh P. D	EEE

Research Awards Received by Students

Students of Amal Jyothi bagged several national awards in technical project context. Seven top spots have been won by our students in six years in the Innovation Hub contests held at Kolkata, organized by the National Council of Science Museums and The Telegraph News-paper. The First prize gets a cash prize of Rs. 20,000 and a citation. Students also bagged prizes in the national level Tech Top competition held each year at Thiruvanthapuram. The details are given in Tables 12 & 13 respectively, where the First prize is Rupees One lakh. It is an evidence for the spirit of innovation among our students and the faculty and the generous support provided by the College Management, as well as the

Department of Science and Technology, Gov. of India, through the innovation and entrepreneurship development centre (IEDC)

Table 12: List of awards (Innovation Hub Contest)

YEAR	PROJECT TITLE	TEAM LEADER	PRIZE WON
Dec 2014	Automatic Lemonade Machine	Jes Thomas Mathew	Second
Dec 2014	Virtual-I	Dennis John	First
Jan 2013	Xerobot- A Multi-purpose Automation Robot	Geet Rose Jose	Second
Dec 2012	E- diagnoser	Libin Varghese	First
Jan 2011	Cocobot	Jijo Paul	Second
Jan 2010	Robot for Bore well Rescue	John Pattery	Second

Table 13: List of awards (Tech Top Contest, Srishty, Shaastra)

YEAR	PROJECT TITLE	TEAM LEADER	PRIZE WON
July 2011	Pepper Separator	M S Steve	First Prize, Rs. 1 lakh, Tech Top
July 2011	Helioped	Arun Chand	Consolation Prize, Tech Top
Aug 2013	Advanced cardamom drier	Justin Vincent	Second Prize, Rs. 50,000, Tech Top
Sept 2014	Virtual- I	Dennis John	Consolation Prize, Tech Top
June 2014	Latex Carry Backpack	Ajin Omanakuttan	First Prize, Rs. 1 lakh, Tech Top
June 2014	Advanced Hair Colouring Tech	Justin	Consolation Prize, Tech Top
Feb 2015	Plastic to fuel	Chandu Das	First Prize, Rs. 1 lakh, SRISHTY
Jan 2016	Conversion of Waste Plastic to transport grade fuel	Dann Jose	First Prize, Rs. 1 lakh, Research Expo, Shaastra, IIT Madras
Jan 2016	Conversion of Waste Plastic to transport grade fuel	Dann Jose	Best Innovation Award, Rs.2500/- &A P J Abul Kalam Ever Rolling Trophy .Fermio, SH College, Thevara
Jan 2016	Conversion of Waste Plastic to transport grade fuel	Dann Jose	SNGCE, Kadayirippu. Fugen Expo Best Project award Rs. 35,000/
June 2015	Waste water treatment using rambuttan rind	MANISHA ANIL	AISAT, Procomp 1st prize
December 2015	Mobile Manager	Augustine George	Best Project award Rs. 5,000/,

			C S I- Sponsored State Level Project Competition Insight '15 held at Saingits College of Engineering, Pathamuttom.

3.5.4 Consultancy Services Provided

The broad areas of consultancy services offered by the College are listed in Table 14.

Table 14: Consultancy Services Provided (CE Dept)

Discipline	Specific area	Consultation offered to	Amount Rs.
Survey/ Total Station Classes	Building Setting Out Generation of Contour Map for an Area Topographical Survey	1. M.N.B NAIR CONSTRUCTION, B P C L COCHIN 2. J.B / K.W.A PROJECT, CHERTHALA 3. K.P.M.C TRUST, NALLATHANNY 4. KERALA ROAD SURVEY, KANAMALA 5. ALL THE SURVEYWORKS OF KANJIRAPALLY DIOCESE	421900
		Department is offering certified courses on total station *(during the months of May to July)* for students in and outside the campus at affordable fees.	
Calibration Repair and Maintenance of Lab Equipments	We undertake calibration, repair and maintenance of All *Survey EquipmentsAnd Civil Engineering Lab Equipments*	Mr. V.T. Thomas, of the Strength of Materials Laboratory, is in charge of these services.	477200
Building Consultancy and Other Works	Any Civil Engineering works starting from planning to estimation, through design, drafting	For various Government and Non-Government bodies on request.	22500

Material Testing	Conduct of *Various Tests On Civil Engineering Materials*	Kerala PWD, Govt.Poly Technic Pala, Court Complex Pala, Uzhavoor Hospital, Anathanam Builders, Eastern Properties and Developers, Maricon Tiles, St. Mary's Rubbers, Travancore Granites, Silpa Constructions, HPC, Build Arch Engineers and Consultants	84800

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 Institution- Community Engagements

AJCE visualizes itself as a transformational leader in higher education. The awareness that the institution exists within the community and that for its existence and growth a reciprocal relationship is essential is the rationale for the keen interest taken by AJCE in community related extension activities. Experience of past interventions has helped in evolving a policy for the extension activities of the College which are periodically revised. Hence the College has taken strategic initiatives to realize the vision and policy namely AJCES (Amal Jyothi Educational and Charitable Society) and also N.S.S to extend the social and ISR activities.

Amal Jyothi Educational & Charitable Society (AJCES)

Amal Jyothi extends its hand to the weaker sections of our own family and surrounding society by supporting them through Amal Jyothi Educational & Charitable Society (AJCES). AJCES has as its vision, the creation of a self-reliant society based on human values and social justice. Its mission is the empowerment and upgradation of the poor and the marginalized through a process of mutual support and encouragement. Our staff and students contribute regularly for generating funds. Our support may be for medical treatments, education or housing.

Objectives
1. To work for increasing the living standards in the socially backward areas.
2. To provide primary education to the children.
3. To provide good and high quality education at low cost
4. Meritorious students, who belong to weaker section of the society, will be provided guidance as how they can achieve their cherished goals step by step.
5. To promote education, training and research among weaker sections.
6. To eradicate child labour and school dropouts.
7. To initiate employment generation programmes.
8. To promote saving and credit programmes.

9. To promote collectivism and voluntarism among target group.
10. To avail appropriate development schemes (housing, sanitation, drinking water programmes etc.) to needy.
11. To facilitate the participation of women and the marginalized in the development process.
12. To promote brotherhood, communal harmony, national integration and peace.
13. To provide relief to the victims of any natural or manmade tragedy.
14. To promote use of green technology, organic farming and herbal plantation.
15. To promote environmental awareness, cleanliness etc.

The details of support provided by AJCES towards social service are displayed in Table 15

Table 15: AJCES Contribution towards SS

Item	2011-2012	2012-2013	2013-2014	2014-2015
Education	Rs.748,714/-	Rs.10,87801/-	Rs.6,33,200/-	Rs.7,40,189/-
Medical	Rs.138,600/-	Rs.3,46,000/-	Rs.2,92,500/-	Rs.202000/-
Marriage Help	Rs.5000	Rs.10000/-	Rs.90600/-	0
Construction of Houses	Rs.25000	Rs.128000/-	Rs.55000/-	Rs.65,000/-

3.6.4 Extension and Outreach: Planning, Implementation and Review

.
The major Extension Activities for the last four years are summarized in Table 16 below.

A detailed study on Solid Waste management was carried out by CE, Dept. for Kanjirapally Panchayat.

Table 16: Major extension Activities

Department	Major Extension activities	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
ECE	Social Service visits to nearby organizations (as a part of 15-day Social Service of B. Tech)	126 students went to different orphanages, hospitals to do the social	126 students went to different orphanages, hospitals to do the social	110 students went to different orphanages, hospitals to do the social service activity	100 students went to different orphanages, hospitals to do the social service activity	15 students went to different orphanages, hospitals to do the social

		service activity	service activity			service activity
	Industrial Visits to relevant industries	126 students	126 students	110 students	80 students	100 students
EEE	Industrial Visits to relevant industries/Power Plants by students	1 visit	1 visit	10 Visits	6 visits	2 Visits
	Training programmes/STTPs/FDPs organized	2	0	1	0	0
	Continuing Lecture Series (Presentations by staff in the dept)	1	3	0	2	4
	Social Service visits to nearby organizations (as a part of 15-day Social Service of B. Tech)	-	60 students went to different orphanage and old age homes, to do the social service activity	60 students went to different orphanage and old age homes, to do the social service activity	97 students went to different orphanage and old age homes, to do the social service activity	96 students went to different orphanage and old age homes, to do the social service activity
CSE	Outreach Activities	Classes for +2 /non-engineering students under Project "STEP(Societal Technology Educational Programme)" of the		Technical Talk(Computers) for +2 Students in SMV HSS, Poonjar on 24/8/2013	Career Guidance programme for +2 students in 1) St. Antony's HSS,Poonjar on 21/11/2014 2) Govt. HSS, Edakkunam on 25/11/2014. Organized CSI Golden-Tech	Organised Nidy Scholarship Exam for school students on 5th December 2015. Helda session on

CSE		Community Development Extension Cell functioning in the Dept.			Bridge Programme for providing computer literacy to uneducated women in society.	"ICT enabled teaching" for teachers of Catholicate college, Pathanamthitta as a part of two day orientation program on 29th May 2015
	Social Service visits to nearby organizations (as a part of 15- day Social Service of B. Tech)	Students went to different orphanages, old age homes, school, Panchayats, hospital to do social service activity	90 Students went to different orphanages, old age homes, schools, Panchayats, hospitals to do social service activity	87 Students went to different orphanages, old age homes, school, Panchayats, hospital to do social service activity	Students went to different orphanages, old age homes, school, Panchayats, hospital to do social service activity	Students went to different orphanages, old age homes, school, Panchayats, hospital to do social service activity
CH	Social Service visits to different organizations (as a part of 15-day Social Service of B. Tech)				49 students went to different orphanages, hospitals ,schools to do the social service activity	59 students went to different orphanages, hospitals, schools to do the social service activity

	Industrial training in different industries (Two Weeks)					61 students went for training various industries in the month of June - July 2015
	Industrial visit				1)The Kerala Minerals and Metals Ltd, Chavara, Kollam on July 5 2014 2) MRF Limited , Ponda, Goa on 15 Jan 2015	1)The Kerala Minerals and Metals Ltd, Chavara, Kollam on Sept 11 2015 2) Hindustan Newsprint Ltd. Nov 14 2015 3) Esteem INdustries Pvt. Ltd and VIC Industries on Jan 13 2016 4) MRF Limited , Ponda, Goa on 14 Jan 2016
MCA						
CE	Social Service visits to nearby organizations (as a part of 15- day Social Service of B. Tech)	Students went to different orphanages , old age homes, school, Panchayats , hospital to do social				

		service activity				

3.7.4. National and International Conferences Organized by the College

The details of the National/International conferences organized by the College during the period of this report are given in Table 17 below

Table 17 National and International Conferences Organized by the College (2010-15)

Sl no	Name of the Conference or seminar	Period	Key resource persons
1	Annual International Conference on Emerging Research Areas (AICERA-11),	2011	Dr. M. K. Radhakrishnan,Director - NanoRel, Singapore Dr. Vinod Chandra S.S.,Director,Computer Centre,University of Kerala Mr. Jitender Rawal,Senior Project Manager – Cognizant Technology Solutions Topic:Cloud Computing - Mr. Dileepan Moorkanat, L & D Manager, Hewlett Packard Topic:Cache Memory Design for Embedded Systems - Dr. T. S. B Sudarshan,Amrita Vishwa Vidya Peetham University Topic:General-Purpose Computation on Graphics Processing Unit -Mr. Chaitanya Adapa,VPG/IAG, Intel India Topic:Turnit-in - Mr. Sanjib Panigrahi,Group Infotech Mr. Man Mohan Kapur,Managing Director, SAPREV - South East Asia

2	AICERA-12, International Conference on Engineering Education: Innovative Practices and Future Trends	2012	Prof. Kuncheria Issac, Member Secretary, AICTE, Dr. Rob Reilly President IEEE Ed Socisty, MA USA. Prof. Dr S. Hossein Mousavinezhad,Professor and Chair , Department of Electrical Engineering, Idaho State University, Pocatello, Prof. Dr. Swaminathan Balachandran University of Wisconsin-Platteville Platteville, Wisconsin 53818, Prof. Micheal E Auer, Austria, Dr.Achu S Nair, Prof & Head, Dept. of Bio- informatics, Kerala University
3	AICERA-13, IEEE International Conference on Micro electronics, Communication and Renewable Energy(ICMiCR)	2013	Shri T. P Sreenivasan, Vice Chairman and Executive Head, Kerala State Higher Education Council, Dr. Sameer Bataineh, Dean of IT, UAE university, Prof Chris Rodgers, Seneca College, Ontario, Canada, Prof. P. Sabrinatha, Secretary IEEE Kerala, Dr. A.V George, Vice Chancellor M.G University
4	Annual International Conference on Emerging Research Areas (AICERA), International Conference on Magnetics, Machines and Drives (ICMMD), IEEE Conference ID : 33623	24-26 July 2014	Prof. Udaya Kumar, IISc, Bangalore; Dr. K. N. Srinivas, Abdur Rahman Univ. Chennai; Prof. S. R. Kolla, University of Bowling Green, USA; Dr. J. Karthikeyan, SSM Institute of Engg, Dindigul; Dr. Balakrishnan P.A., Bharathiar Institute, Salem; Dr. Renji V. Chacko, CDAC, Trivandrum, Dr. Sanjay Sharma, Nvis, Indore; Venkatesu Samala, Icon, Bangalore etc.
5	International Conference on Quantum Mechanics and Quantum Consciousness, (ICQMQC- 2015)	02-08, Jan, 2015	Prof. Mathew Chandrankunnel, Prof. Agashe, Prof. K.L. Sebastian, IISc etc.
6	NACORE 2016 (National Conference on Research in Emerging Areas)	28-30, January 2016	Dr. Vinod P Bhattathirippad, Cyber Forensic Consultant,Prof. R M Vasu, IISC Banglore,Dr. Debashish Roy, IISC Banglore,Mr. Sreekanth R Iyer, Chief Cloud Security Architect IBM Cloud,Francis Alexander, Information Security Researcher

3.7.5 Formal MOUsand agreements

The details of MoUs signed by the College with outside institution/industry are given below.

The details of MoUs signed by the College with outside institution/industry are given below.

Sl No	Institution/organization	Name of the organization	Nature of interaction
1	Organization	ABS instruments, Chennai	Design, development and marketing of 1. Creep testing machine, Furnace and controller. 2.Potential drop system for crack growth measurement
2	Organization	VE Commercial Vehicles Ltd., Pithampur, MP	Establishment and operation of a skill development centre for heavy-duty automobiles- Amal Jyothi - Eicher Automobile Technology Centre.
3	Institution	The Institution of Engineering & Technology (India), Kolkata	Conducting Summer and Winter Exams of the institution
4	Institution	iTEP Education India LLP, Vadodara, Gujarat	International test of English proficiency
5	Institution	DEAKIN University of Australia	Academic collaboration
6	Institution	Indian educational Enterprises (P) Ltd., Cochin	Autodesk software downloading and to conduct Autodesk online exams at AJCE
7	Institution	University of Ontario Institute of Technology (UOIT), Oshawa, Ontario, Canada	Academic collaboration
8	Institution	Dr.M.G.R. Educational and Research Institute, Chennai	Academic collaboration
9	Organization	Nest	Establishment and operation of a skill development centre
10	Organization	AIPCT	Establishment and operation of a skill development centre

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.2 Library as a Learning Resource

4.2.2 Provide details of the following:

- **Total number of volumes in the library: 48853** (in Central library and 8821 in Department Libraries)
- **Total number of print journals: 168**
- **Total number of e-journals: 702**
- **Total number of e-books: 641**
- **Total area of the library: 2973 m²**
- **Total seating capacity : 600**
- **Working hours** (on working days, on holidays, before examination days, during examination days, during vacation) :

  On working days: 8.00 AM to 8.00 PM

  On Holidays: 9.00 AM to 3.00 PM

  On Examination days: 8.00 AM to 8.00 PM

  During Vacation: 8.00 AM to 5.00 PM

Library Holdings	2011-2012		2012-2013		2013-2014		2014-2015	
	No.	Total Cost Rs. Lakhs	No.	Total Cost	No.	Total Cost Rs. In Lakhs	No.	Total Cost
Text books and Reference books	3714	15.31	2006	8.67	1754	13.10	1595	10.72
Journals and Periodicals	129	2.38	158	3.23	144	3.15	138	3.12
E-resources	ASTM – DL, ASCE,	14.10	ASTM – DL, ASCE, ASME, Elsevier,	15.90	IEL, ASME and ASCE	15.07	Springer Electrical and Electronics and Computer Science Engineering	33.64

	AS ME, Else vier, J-Gate , IEL, Mc Gra w- Hill, Spri nger		J-Gate, IEL, Mc Graw-Hill, Springer					, Springer Mechanical, ASCE, Mc Graw-Hil(2014, 2015)l, Science Direct(2014 , 2015), Nanotechno logy, ASTM-DL, J-gate and IEL	

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- OPAC : Available
- Electronic Resource Management package for e-journals:
- Federated searching tools to search articles in multiple databases:
- Library Website : http://www.ajce.in/library/
- In-house/remote access to e-publications : Available
- Library automation : Completed in OPAC, Circulation and Technical Processing,
- Total number of computers for public access : 13 systems in Central Library
- Total numbers of printers for public access : 1
- Internet band width/ speed : 60 Mbps
- Institutional Repository : Available
- Content management system for e-learning : IEEE/IEL Electronic Library, ASCE, NPTEL Video Lectures
- Participation in Resource sharing networks/consortia (like Inflibnet): DELNET
- Walk-in recording software : To be installed
- Theft detection cameras : Yes
- Book-bank: Nil
- Exhibit zone
- Remote access e-resources: available
- Reprography, printing and download: available

4.2.5 Provide details on the following items:

- Average number of daily walk-ins: 170
- Average number of books issued/returned :148
- Ratio of library books to students enrolled: 1:12
- Average number of books added during last three years : 2506
- Average number of login to OPAC: 170

- Average number of login to e-resources : 500
- Average number of e-resources downloaded/printed : 1500
- Number of information literacy trainings organized : 12
- Details of ―weeding out‖ of books and other materials : 97

4.2.6 Give details of the specialized services provided by the library

- Manuscripts : Not available
- Reference : Yes
- Current Local, state and national newspapers and periodicals in vernacular and English: Available
- Guided Pathways to information through selected web links
- Reprography (computing, printing and photocopying facilities) : Available
- ILL (Inter Library Loan Service) : DELNET Membership
- Information deployment and notification : Available
- Download : Available
- Printing : Available
- Reading list/ Bibliography compilation : Available
- In-house/remote access to e-resources : Available
- User Orientation and awareness : Regularly done
- Assistance in searching Databases : Available
- INFLIBNET/IUC facilities : To be commissioned

4.3. I T Infrastructure

4.3.1. Computing Facilities at Amal Jyothi College of Engineering

Total No of Computers

1	M. Tech CSE Lab	40
2	CSE Laptop Lab	80
3	CS Project Lab	40
4	CS Advanced Systems Lab	82
5	CS Network Lab	66
6	IT DBMS Lab	34
7	IT Project Lab	34
8	IT Internet & Multimedia Lab	39
9	IT Programming Lab	60

10	CCF Lab1	75
11	CCF Lab2	79
12	CCF Lab3	60
13	CCF AES Lab	10
14	CCF Staff Room	4
15	MCA Labs	162
16	ECE Systems Lab And Lab View Academy	70
17	ECE and EEE Labs	150
18	ME Labs including CAD labs	55
16	Other laboratories	110
17	Language lab	75
18	Other locations (Faculty rooms, offices, laboratories etc)	88
Total		1351

4.3.4 Budgetary Allocation for Procurement, Up-gradation, Deployment and Maintenance of ICT Infrastructure

Year	Procurement Rs.	Up-gradation cost in Rs. `	Deployment (Including salary, operational Cost etc.) Rs.	Maintenance cost in Rs. `
2010-11	1,05,11,871	94,89,760	8,19,561	2,02,550
2011-12	42,48,337	37,96,211	4,38,726	13,400
2012-13	78,11,407	72,75,977	3,59,000	1,76,430
2013-14	98,21,428	91,95,858	5,20,420	1,05,150

2014-15	74,30,428	69,57,109	3,93,813	79,506

4.4.1 Maintenance and Upkeep of Infrastructure

The maintenance of buildings, furniture and facilities on the campus is at a prompt and impeccable pace. The records of the requests for repair and maintenance are maintained systematically in chronological order, in registers in College and Hostel offices. The maintenance works are completed within 24 hours of registration of the complaint. The College maintains a group of staff with technical expertise to take care of infrastructural, electrical, finishing and maintenance works.

Apart from maintenance of existing buildings, the college authorities are keen on improving the infrastructural facilities every year as per the requirement as well to improve the academic and research facilities on the campus. The amounts allocated for the maintenance and upkeep of the infrastructure are given in the Table below:

Head	Year	Amount allocated in Rupees	Amount utilized in Rupees
Building	2009-10	1,000,000.00	3065953
	2010-11	2,300,000.00	4826336
	2011-12	4,210,000.00	3457126
	2012-13	4,000,000.00	8861236
	2013-14	5,000,000.00	8841707
	2014-15	60,000,00.00	7435705
Furniture	2009-10		Nil
	2010-11	5,000.00	Nil
	2011-12	3,000.00	6450
	2012-13	25,000.00	33145
	2013-14	5,000.00	Nil

	2014-15	10000.00	15339
Equipment	2009-10		47437
	2010-11	5,000.00	7103
	2011-12	17,000.00	53676
	2012-13	25,000.00	33204
	2013-14	10,000.00	21150
	2014-15	50,000.00	64570
Computers	2009-10		27721
	2010-11	15,000.00	23988
	2011-12	80,000.00	197915
	2012-13	63,000.00	104631
	2013-14	85,000.00	383208
	2014-15	100000.00	258316
Vehicles	2009-10		147811
	2010-11	250,000.00	418196
	2011-12	150,000.00	556969
	2012-13	500,000.00	922577
	2013-14	450,000.00	1254642
	2014-15	550,000.00	1288032
Landscaping/ Gardener	2009-10		398078
	2010-11	425,000.00	541554
	2011-12	250,000.00	764060

	2012-13	400,000.00	809049
	2013-14	450,000.00	1135714
	2014-15	1,000,000.00	1416871

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1.2 Scholarships and freeships provided by the institution [2010-14]

The type, number and amount of institutional scholarships/freeships given to the students during the last four years are as below.

(All amounts in Lakhs of Rs.)

Name /Nature of scholarship		2011-2012		2012-2013		2013-2014		2014-15		2015-16 as on 29-02-16	
		No.s	Amt	No.s	Amt	No.s	Amt	Nos	Amt	No.s	Amt
TFW	GOVT.	81	54.51	98	67.26	113	84.75	123	92.25	130	97.50
TFW	MGMT	2	0.75	4	2.00	7	4.625	56	20.98	39	19.96
AJECS	AJECS	39	6.15	43	11.30	14	4.26	11	0.38		
MOMA-MCM	GOVT.	19	5.65	125	34.60	136	39.925	189	56.70		Under process
CSS	GOVT.	13	3.25	11	3.30	8	2.90	8	2.40		Under process
PG-GATE	GOVT.-AICTE	11	10.56	30	28.8	45	43.2	36	34.56	11	2.64 upto Oct15
FISHER MEN SCHOL ARSHIP	GOVT							1	1.16		

Name	Category										
AJCE MERIT	MGMT	32	0.48	49	0.49	22	0.22	38	0.45	113	0.84
AJCE MERIT CUM MEANS	MGMT										
CEE-LOW INCOME	MGMT			43	7.97	57	7.56	99	31.30	98	22.60
VATTAKKUNNEL	EF	4	0.075	4	0.075	4	0.075	4	0.08	4	0.08
LINSA ANNIE	EF	2	0.1	2	0.1	2	0.1	2	0.10	2	0.10
LUKES JOY	EF	2	0.1	2	0.1	2	0.1	2	0.10	2	0.10
BALU S PILLAI	EF			1	0.05	1	0.05	1	0.05		
LIZ SIMON	EF										
SILVER ORDINATION	EF							1	0.04	1	0.04
SARAMMA IPE MEMORIAL	EF							1	0.02	1	0.01
RODRIGUES MEMORIAL	EF							1	0.01		
VENGAL IPE MEMORIAL	EF							1	0.02	1	0.02

PROF. VIJAYAN'S	EF							1	0.02	1	0.02

TFW: (Tuition fee waiver); MOMA: (Ministry of Minority Affairs); CSS: (Central Sector Scholarships)

MGMT: Management; MCM: Merit-cum-Means; EF: Endowment Fund

AJECS: Amal Jyothi Educational and Charitable Society

5.1.3 Percentage of students in receipt of Financial Assistance (includes Tuition fee waiver, Management concession and BPL concession)

Year	Percentage of Students
2015-16	10.5
2014 - 2015	9.5
2013 - 2014	5.3
2012 - 2013	4.2
2011 - 2012	4.6

5.1.5 Instilling of Entrepreneurial Skills among the Students and its Impact

Projects that won top place in the all-India Innovation Hub project contest, organized jointly by National Council of Science Museums and 'The Telegraph' at Kolkata

Project	Year	Prize
Robot for Bore-well Rescue	2010	Second Prize
Cocobot – Coconut Plucking Robot	2011	Second Prize
E- diagnoser	2012	First Prize
Xerobot - A Multi-purpose Automation Robot	2013	Second Prize
Virtual-I	2014	First Prize
Automatic Lemonade Machine	2014	Second Prize

Projects that won positions in the all-India Tech Top project contest, Trivandrum

Project	Year	Prize
Pepper Separator	2011	First Prize
Helioped	2011	Special Prize

Details of Amalite-Entrepreneurs

Some of the alumni of AJCE who have initiated their own companies are listed below.

Name	Dept	Batch	Entrepreneurship Initiatives
Sofia Anup	ECE	2006	Wedding Platter
Nitin Prabhakar	ECE	2007	Emvigo Technologies
Avinash Prabhakar	ECE	2008	Emvigo Technologies
Syril Joseph	ECE	2008	Zorus Technologies
Hashim Jamal	ECE	2009	Dhuniya Al Jamali Group
Rogen Joseph	ECE	2009	Engineers World
Mittu Andrews Tigi	ECE	2010	Zhooyi Communications
Bansan Thomas George	ECE	2010	Synergen Consultants
Thomas Kiran	ECE	2011	Marigold Group
Dennis John, Ajith Mathew, Sreedev K, Geet Rose Jose, Abhilash Anandan	ECE	2014	Rasanova Technologies
Mithun Mathew	EEE	2010	Developer of Fullforms.com
Sajin Babu	EEE	2010	Electrical CAD
Jijo Paul	EEE	2012	RESANOVA
Sajin Jose	EEE	2010	CAD INFOTECH

Mithun Mathew	EEE	2010	Velbros International
Hashif Nallakath	EEE	2010	LED Distribution
Sruthi Merin	IT	2006 - 2010	Kanchi Signature Collections- online store
Archana R Nair	IT	2007 - 2011	Mayoora Jewels- Handmade Terracotta Jewellery
Alok Thomas , Jijo Mathew, Jinu James, Jackson Thomas Anto P Joseph, Shibin Mathew	IT	2010 - 2014	Xinprodes Innovations
Abraham K Joseph	IT	2010 - 2014	Train Labs
Bridgit Sruthi Jacob K	IT	2008 - 2012	Braincube Solution
Bency Babu Philip	IT	2008 - 2012	Marian Event Miracles
Aby Thomas	IT	2006 - 2010	Livemob Technologies
Anju E Mathew	IT	2004 - 2008	Rain Drops
Arun George, Roshan E.E, Tigil Thomas	CE	2008-2012	Construction Company
Sarath S	CSE	2007-2011	Filanza Security Services and Solutions Ltd.
Ajith Mathew	CSE	2007-2011	EduCrib
Paul Emil Johnson,Karthik M	CSE	2007-2011	Awesome Daddies
Jobit Joseph	CE	2006-2010	Construction Company
Shon Jacob	CE	2010-2014	Construction materials business

5.1.7 Assistance Provided Preparatory to Competitive Exams

The departments organize coaching classes for various competitive examinations like GATE. The Placement Cell organizes seminars on Higher Studies and conduct aptitude training. Foundation Course for Civil Services is offered interested students by Amal Jyothi Institute for Civil Services. Many books and periodicals are available in the library.

Action has been initiated to form a Question Bank for the benefit of the students

Programme	2014-15	No of Students Qualified for Competitive Examinations			
		2013-2014	2012-2013	2011-2012	2010-2011
GATE	3(CSE)	23	27	32	6
MAT	1(CSE)	0	2	0	4
Central Services		0	0	0	1
State Services		0	1	0	1

5.1.9 Career Guidance and Placement of the Students of the College

The College has a Placement Cell with 3 full time staff members to provide career guidance and placement training to the students. The Placement Cell organizes on-campus and off-campus recruitments and pre-placement training programmes in Aptitude test, Group Discussions, Interviews and presentation skills, in collaboration with the Department of Humanities and the core departments. Mock interviews and GDs are conducted on a regular basis so as to equip final and pre-final students to face the challenges of the recruitment scenario. Close on the heels of placement drives, the Placement Cell makes an evaluation of the performance of the students. This objective appraisal enables the College to identify strengths and weakness of the candidates and select the strategies for improvement. Besides, there are intensive supportive measures for low performing candidates.

Placement performance of AJCE during the period of this report is tabulated below.

Year	Name of the Company/Industry	Number of Students placed	Total Number of Students	Percentage of Placement based on

			Placed	Eligible students
2011	TCS	60	155 (221 offers)	91.71%
	ACCENTURE	52		
	IBS	16		
	PATNI COMPUTERS	49		
	SYNTEL	25		
	HCL TECHNOLOGIES	21		
	SPECTRUM	22		
	SUBEX	1		
	OSMS	10		
2012	TCS	100	156	57.35%
	UST Global	33		
	IBS	4		
	South Indian Bank	5		
	HCL Infosystems	2		
	Gulfar	1		
	SYNTEL	2		
	Indian Navy	1		
	Saskan	2		
	Oracle FS	2		
	Telios Technologies	4		
2013	TCS	22	78	29.91%
	IBS	15		
	HCL INFOSYSTEMS LTD	10		
	MRF	1		
	UST Global	6		
	INDIAN NAVY	2		

	SUBEX	0		
	OMNEX	4		
	GULFAR	3		
	DALMIA CEMENT	2		
	ARICENT	4		
	SATVEN (M.Tech.)	2		
	ZYXWARE	3		
	Tech Mahindra	4		
2014	OMNEX	38		
	TCS	30		
	MPHASIS	2		
	INDIAN NAVY	11 (Shortlisted)		
	Accenture	29		
	UST Global	14		
	EVEREST	4		
	IBS	4+2+1		
	Spectrum	5	170	63.05%
	Poornam Infovision	1		
	MRF	2		
	CTS	2		
	Verizon	1		
	RM	2		
	BizTime IT Solutions	9		
	ZYXWARE	3		
	Srishti Innovative	20		
	Infocom Softwares	1		

2015	TATA CONSULTANCY SERVICES (TCS)	46	291	82.86%
	MPHASIS	5		
	SUNTEC	5		
	IBS Software Services	5		
	UST Global	22 +1		
	RAZORTHINK	1		
	CONCIERGE TECHNOLOGIES	12		
	ZAFIN	3		
	MRF	1		
	AAPT	1		
	HCL Infosystems	4		
	OMNEX	27		
	POPULAR / KUTTOOKKARAN	65		
	SMART	4		
	MEDAS	2		
	ADMIN AHEAD	15		
	POORNAM Infovision	2		
	PROMOTAS	3+ 1		
	DIGITAL CORE TECHNOLOGIES	1		
	EMPOWERLABS	3		
	SUTHERLAND	42		
	KPMG	1		

	AAP ZOC		2			
	WIPRO(MCA)		16			
	ENVESTNEST		1			

		Branch-wise Placements				
Year	Branch	No of Students placed through Placement Cell	No of Eligible students	Percentage of Placement based on Eligible students	Strength	Percentage of Placement
2011	CSE	38	38	100.0	62	61.3
	I T	26	26	100.0	61	42.6
	ECE	65	69	94.2	104	62.5
	EEE	14	18	77.8	43	32.6
	ME	12	18	66.7	41	29.3
		155	**169**	**91.71**	**311**	**49.83**
2012	CSE	38	42	88	63	41.3
	IT	25	35	71.42	51	41.2
	ECE	65	83	78.3	117	42.7
	EEE	18	32	56.25	52	25.0
	ME	5	22	22.7	61	8.2
	CE	2	46	05.0	62	0.32
	MCA	4	12		11	36.4
	Total	**156**	**272**	**71.02**	**355**	**42.8**
2013	CSE	14	62	22.6	79	17.7
	IT	5	22	22.7	31	16.1
	ECE	27	83	32.54	112	24.1
	EEE	8	43	18.6	56	12.5
	ME	11	34	32.35	51	13.7
	Civil	5	42	11.90	64	12.8
	MCA	8	44	18.18	57	14.0
	Total	**78**	**244**	**29.9**	**386**	**18.9**
2014	CSE	42	42	100	90	46.66

	IT	6	6	100	53	11.32
	ECE	64	66	96.96	120	53.33
	EEE	8	18	44.44	53	15.09
	ME	33	43	76.7	90	36.7
	MCA	7	30	23.33	56	12.5
	CE	2	66	4.01	95	03.03
	Auto	9	9	100.0	59	15.3
	Total	**170**	**203**	**83.74**	**616**	**27.59**
2015	CSE	57	74	77.02	93	61.29
	IT	22	23	95.65	54	40.74
	ECE	84	84	100	121	69.45
	EEE	15	23	65.21	60	25.0
	ME	60	74	81.08	125	48.01
	MCA	19	36	52.77	52	36.53
	Auto	34	38	89.4	45	75.5
	Total	**291**	352	82.86	550	52.90

5.2 Student Progression
5.2.1 Student Progression Trend Analysis (2012-2015)

Table below provides the percentage of students progressing to higher education or employment (for the last four batches).

	Programme	2014-15	2013-14	2012-13	2011-12
UG to PG	AUE			7.14	NA
	CE		27.7	30	42
	CSE	5	11	23	24
	ECE		5.6	11.81	35.77
	IT			10.8	16.94
	EEE	5	13	16	36
	ME		6.60	23	25
PG to M.Phil.	AUE	NA	NA	NA	NA
	CE	0	0	0	0
	CSE	0	0	0	0
	ECE	0	0	0	0
	IT	0	0	0	0
	EEE	0	0	0	0
	MET	NA	NA	NA	NA

Category	Branch	2015	2014	2013	2012
PG to Ph.D.	AUE		NA	NA	NA
	CE		0	0	0
	CSE	0	0	0	0
	ECE		0	0	0
	IT		0	0	0
	EEE	0	0	6	11
	ME			0	0
Employed : Campus selection	AUE		14.51	0	NA
	CE				2
	CSE	66	54	23	39
	ECE	58	22.4	11	14.3
	IT		1.89	8.70	35.59
	EEE	25	10	13	19
	ME		NA	NA	NA
Employed : Other than campus recruitment	AUE			29.41	NA
	CE		15	19.35	40
	CSE	10	19	--	--
	ECE		4.8	33.1	24.3
	IT		3.77	45.65	27.12
	EEE	0	0	9	12
	ME				

5.2.2 Programme-wise Pass Percentage Rate (2012-2015)

Details of the programme-wise pass percentage and completion rate for the last four years is as shown below:

Programme	Branch	Pass % 2015	Completion rate 2015	Pass % 2014	Completion rate 2014	Pass % 2013	Completion rate 2013	Pass % 2012	Completion rate 2012
B. Tech	AUE			11.76	23.529	NA	NA	NA	NA
B. Tech	CE			82.2	100	82.5	1000	75.8	100
M. Tech	SECM			91.3	100				
B. Tech	CSE	78.16	92.55	56.66	95.74	64.51	100.00	88.7	98.41
MCA				54.56	100	69.98	100	NA	NA
M. Tech	CSE	100	100	100	100	100	100	NA	NA

B. Tech	ECE			84.25		84.55		74.42	
M. Tech	Comm. Engg.					94		100	
B. Tech	EEE	54	96.72	25	95.23	75	98.41	72	100
M. Tech	PEPS	94	100	93	100	94	100	71	83.3
B. Tech	IT			47.83	97.87	71.19	98.33	84.13	98.44
B. Tech	ME			57.29	97.77	50	97.45	42	96.7
M. Tech	Machine Design			70	70	72.20	81.81	40	60

5.3.1 Sports, Games, Cultural and Other Activities available to Students

AJCE ensures participation of students in a wide range of co-curricular and extra-curricular activities to facilitate their holistic development. Under the Physical Education Department, facilities for Basketball, Cricket, Volleyball, Football, Table Tennis, Ball Badminton etc are provided to students. The Department has made provisions for Athletics, Judo, Power Lifting and Weight Lifting. Training is also given in Yoga periodically.An inter-College basketball tournament, ARENA is held annually.

AJCE has given due importance to cultural activities along with academic subjects for the all-round development of students. The Arts Festival is conducted by the Students' Council once in a year. It is a one day year wise competition. The students who are attaining first and second places in the arts festival will be sent to University level competitions. The color of arts includes 33 events, some of them are Musical events, Dance events, Fine Arts, Stage events, Quiz Competition, Recitation, Elocution, Mock press, Adzap, Debate, JAM, Kathaprasangam etc.

Under the auspices of different Departments, fests and competitions such as Azure are organized every year. Students are also encouraged to participate in on campus and off campus Youth Festivals. Several cultural events such as Onam, Christmas and Arts Day and important days like Tourism Day, Women's Day, etc. are celebrated. Opportunities for Short Film Making, Drama, Script Writing, Web Designing, Photography, Literary activities (Malayalam, English), Quiz and Debate programmes, folk dance, classical and western dance, etc. are also provided to students. Besides this, there are several clubs, Department Associations and activities such as NCC, NSS, CSM and Jesus Youth which are active and make the campus vibrant.

A brief outline of the **program calendar** is given below:

Events	Items	2015-16	2014-15	2013-14	2012-13	2011-12
Sports	Discus Throw, Javelin,			March		March

	Shot put, Athletics			2014		2012
	Run Kerala Run		20-01-2015			
Games	Arena	15-18 Feb 2016		March 2014	February –March 2013	January 2012
	Interdepartmental/Year Games – Chess, Basketball, Cricket, Football, Volleyball			Along the year		
	Intercollegiate Volleyball Tournament Pace			April 2014		
	Inter Branch Football Tournament			Even Semester		
	County Cricket Tournament					
	SMASH – Shuttle Badminton Tournament	15 – 19 / 10/2015				
Cultural	Azure – National Techno Cultural Fest	12 & 13 Feb 2016	25,26,27 September 2014	August 2013		January 2012
	Arts Day		28-02-2015	March 2014	Oct 12 (Inau) & March 12	January 2012
	Onam Celebration	22/8/2016	5September 2014	September 2013	August 2012	September 2011
	Christmas Celebrations		19 December 2014	December 2013	December 2012	December 2011
	Freshers' Day				October 2012	October 2011
	Talent Eve	06/ 10/	22/ 08/	Bi weekly	-	-

		20 16	20 14			
	Luke's Memorial Photography Competition					
Technical	Azure	12 Feb 2016	25,26,27 September 2014	August 2013		
	Departmental Association Events	Dependin g on dept plans	Dependin g on dept plans	Dependin g on dept plans	April 2013	Dependin g on dept plans

5.3.2 Student Achievements in Co-curricular, Extracurricular and cultural Activities (2011-2015)

The details of major student achievements in co- curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. for the previous four years are as below:

Arts/Technical

2015 - November

Achievements at National/Inter University Level 2015

Ajay Sunny K	CHEM	S5	Tathva - Paper Presentation	NIT, Calicut	Second
Dann Jose	CHEM	S5	Tathva - Paper Presentation	NIT, Calicut	Second
Agash Sudhakaran & Team	AUE	S3	Student Convention	VIT, Vellore	Third
Ashish Tom Abraham & Team	AUE	S3	Techtop	MBT Trivandrum	consolation
Parameswaran S & Team	ECE	S3	Techtop	MBT Trivandrum	First
Richu J Babu & Team	ME	S7	AICERA - Poster Presentation	AJCE	Participation
Alphy Jaison & Team	MET	S5	National Weld Meet	IIW, Kochi	Participation
Amal S Madhurayil	CHEM	S5	Schemcon - Paper Presentation	MIT, Pune	Participation
Basil Jose	CHEM	S5	Schemcon - Paper Presentation	MIT, Pune	Participation
Abey Sajan & Team	MET	S7	Summer Internship PGM	SAIL, Rourkela	Participation

Achievements at State Level 2015

Bobin Shaji & Team	CSE	S5	Esperanza - Quest for codes	AISAT	First
Ben George	CSE	S5	Esperanza - Best Manager	AISAT	First
Arun R Nair	CHEM	S5	Aswamedha - Paper Presentation	ASIET	First
Jacob Francis Kallarackal	CE	S5	Magnuz - Technosapiens	Kits	First
Jeevan T Mathew	CE	S5	Magnuz - Technosapiens	Kits	First
Ajo Varghese & Team	CE	S5	Takshak - Mithya	MACE	First
Allan Joe Sabu & Team	CHEM	S5	Cynosure 15 - Project Exhibition	SJCET, Pala	First
Panose Thomas	ECE	S5	Ascend 2K15 - C Debugging	St Gits	First
Nijo Cyriac	CSE	S7	Dyuthi - Pirates of C	St Gits	First
Sohesh T S	CSE	S7	Dyuthi - Pirates of C	St Gits	First
Shalom Philip Thomas	ME	S5	Eternia - Technohunt	St Gits	First
George Koshy	ME	S7	Mechnius - Brain Storm	St Gits	First
George Saji	AUE	S5	Infuce - Paper Presentation	UC, Muttom	First
Adarsh David Lal	CHEM	S5	Infuce - Paper Presentation	UC, Muttom	First

2015-May

Achievements at National/Inter University Level

Siby Balu & Team	S4	Me	Best Project	Infocom Kolkatta	Second
Akhil Ravi & Team	S4	Me	Conco Dance	Echose Iim Kozhikode	First
Dennis John & Team	S8	Ece	Project Presentation	Infocom,Kolkata	First
Prithvi R A & Team	S4	Aue	Industrial Problem Challenge	Kallasalingam Univ	Second
Basil Jose	S4	Che	Oral Presentation	Nit Warangal	Second
Dann Jose & Team	S4	Che	Project Expo	Srishti Saint Gits	Best Innovation Award

Sachin Jose & Team	S4	Me	Project Presentation	Srishti Saint Gits	Best Innovation Award
Alex Paul Joseph & Team	S4	Me	Project Expo	Srishti Saint Gits	Best Project Award
Jibin Chacko Thomas & Team	S4	Me	Project Exhibition	Srishti Saint Gits	Final Round

Achievements at State Level

Mukundan R	S8	Me	Autoquiz	Adharwa Coe Punnapra	First
Nithin Peter	S8	Ece	Circuit Debugging	Advay Toch	First
George Saji	S4	Aue	Aqua Missile	Asthra Sjce Pala	First
Jince George	S6	Cse	Mexhunt	Asthra Sjce Pala	First
Philip T Nedumburam & Team	S8	Ece	Project Presentation	Asthra Sjce Pala	First
Leeya Don Koithara	S6	Ce	Mr And Ms Asthra	Asthra, Sjc, Pala	First
Tom Siby & Team	S4	Ece	Electro Bloopers	Asthra, Sjc, Pala	First
Joyal Varghese Joy	S6	Cse	Capture The Flag	Dyuthi Gec Thrissur	First
Amal Krishna	S6	Cse	Webbully	Dyuthi Gec Thrissur	First
Alex P Thomas	S6	Cse	Backtrack	Dyuthi Gec Thrissur	First
Brolin V Kuruvila	S6	Me	Best Engineer	Nakshatra, Saint Gits	First
Joseph Micheal Xavier	S6	Cse	Pc Hardware Design	Nakshatra, Saint Gits	First
Clint T C	S8	Me	My Gang	Swasthika Mbc	First
Akhil P Kumar	S8	Ece	My Gang	Swasthika Mbc	First

2014 – December

Achievements at National/Inter University Level

Clint T C	ME	S7	Nippon Kerala Centre, Kochi	New Business Planning and Management	Certificate of Participation
Abin Raju N & Team	MET	S5	Amalgam; IIT Madras	Metal Fluroscence Workshop	Certificate of Participation
Geet Rose Jose & Team	ECE	S7	Techtop 2014	National Innovation Competition	First Consolation Prize Techtop
Nivea Thomas	CE	S7	IET, PES University, Banglore	IET India Scholarship Regional Round South	Winner

Achievements at State Level

Sreejith Harikumar	Ece	S7	Horizon; St Gits	Project Competition	First
Dann Jose	Chem	S3	Takshak; Mace	Mechmerize	First
Sidhu M Raju & Team	Ece	S7	Horizon; St Gits	Project Competition	First
Allen M Mathew & Team	Cse	S5	Abhiyanthriki; Rajagiri	Enigma	First
Jerrin K Job & Team	Me-B	S7	Mechnius 2014; St Gits	Yanthra	First
Jobit Joy Abraham & Team	Me	S7	Mechnius 2014; St Gits	Lathe Master	First
Johncy Thomas	It	S7	Navigator - Marian Kuttikanam	C Coding	First
Justin C Jose & Team	Me	S7	Mechnius 2014; St Gits	Brain Storm	First
Philip T Nedumpuram & Team	Ece	S7	Horizon; St Gits	Project Competition	Second
Allan Jose Sabu	Chem	S3	Navigator - Marian Kuttikanam	Product Launch	Second
Abina Ajith & Team	Cse	S5	Radieux; St Gits College	C Debugging	Second
Charles Sebastian & Team	Cse	S5	Abhiyanthriki; Rajagiri	A3k Legal	Second

Sports

2015

Achievements at National/Inter University Level 2015

Sarath V Joy (S8 ME) led M.G University Table Tennis team in the South Zone Interuniversity Table Tennis Championship held at SRM University, Chennai.

Aswin Tom (S6 CSE) and Rahul Binu Mathew (S4 ME) were selected to the MG University Table Tennis team that participated in the South Zone Interuniversity Table Tennis Championship held at SRM University, Chennai.

Vishnu Surendran (S4 ME), represented MG University in the south Zone interuniversity Chess Championship held at VIT University, Vellore.

Achievements at State Level 2015

Amal Jyothi Volleyball team secured the First position in "CET Trophy 15", All Kerala Intercollegiate Volleyball tournament organized by College of Engineering, Trivandrum.

Amal Jyothi Chess team secured the First position in "CHATHURANG 2K15", All Kerala Intercollegiate Chess tournament organized by RIT, Pampady.

Amal Jyothi Table Tennis team secured the Second position in the All-Kerala Intercollegiate Invitational Table Tennis Championship 2014-15organized by St.Alberts College, Ernakulam.

Amal Jyothi Volleyball team secured the First position in "MBC Trophy 15", All Kerala Intercollegiate Volleyball tournament organized by Mar Baselius college of Engineering, Peermedu.

Amal Jyothi Volleyball team secured the First position in "FOTIOS 2k15", All Kerala Intercollegiate Volleyball tournament organized by Caarmal college of Engineering, Perinadu, Ranni.

Amal Jyothi Chess team secured the First position in "SPARTA 15", All Kerala Intercollegiate Chess tournament organized by Newnam College, Thodupuzha.

Amal Jyothi Basketball team secured the Third position in the "DUNK 360º", All Kerala Intercollegiate Basketballball tournament organized by Model Engineering college Thrikkakara, Ernakulam.

Amal Jyothi Volleyball team secured the First position in the "PACE 15 Volleyball Trophy", All Kerala Intercollegiate Volleyball tournament organized by St.Josephs College of Engineering, Pala.

Amal Jyothi Men Badminton team secured the Second position in the "PACE 15 Badminton Trophy", All Kerala Intercollegiate Badminton tournament organized by St.Josephs College of Engineering, Pala.

Amal Jyothi Women Badminton team secured the Second position in the "PACE 15 Badminton Trophy", All Kerala Intercollegiate Badminton tournament organized by St.Josephs College of Engineering, Pala.

Amal Jyothi Girls Basketball team secured First position in the "RAGAM 2015", All Kerala Intercollegiate Basketballball tournament organized by NIT, Calicut.

Amal Jyothi Girls Basketball team secured First position in the "TKM Trophy", All Kerala Intercollegiate Basketballball tournament organized by TKM College, Kollam.

Achievements at University Level 2015

Teams	Position
Table Tennis	Winners
Chess	Fourth

Achievements at Zonal Level 2015

Teams	Position
Table Tennis	Winners
Chess	Winners
Basketball	Fourth
Football	Participation
Badminton	Participation
Volleyball	Participation
Cricket	Participation

2014

Achievements at National/Inter University Level 2014

Sarath V Joy (S5 ME), Aswin Tom (S3 CSE) and Rahul Binu Mathew (S1 S2 ME) selected to the MG University Table Tennis team.

Vishnu Surendran (S1S2 ME), represented MG University in the south Zone inter University Chess Championship held at SRM University Chennai.

Achievements at State Level 2014

1.Amal Jyothi bagged the Overall Championship in the 'PACE 14' All Kerala Inter Collegiate Sports fest organized by St.Josephs college of Engineering, Pala.

2.Amal Jyothi Volleyball team secured the First position in the 'PACE 14' All Kerala Inter Collegiate Sports fest organized by St.Josephs college of Engineering, Pala.

3.Amal Jyothi Cricket team secured the First position in the 'PACE 14' All Kerala Inter Collegiate Sports fest organized by St.Josephs college of Engineering, Pala.

4.Amal Jyothi Volleyball team secured the First position in the "MBC Trophy 14", All Kerala Inter Collegiate Volleyball tournament organized by Mar Baselious college of Engineering, Peerimedu.

5.Amal Jyothi Volleyball team secured the First position in the "SMASH 14", All Kerala Inter Collegiate Volleyball tournament organized by IHRD college of Engineering, Kalluppara.

6.Amal Jyothi Volleyball team secured the First position in the 'ASPIRE 2014' All Kerala Inter Collegiate Volleyball tournament organized by Amal Jyothi college of Engineering

8.Amal Jyothi Table Tennis team secured the Second position in the All Kerala Inter Collegiate Invitational Table Tennis Championship organized by St.Alberts College, Ernakulam.

Achievements at University Level 2014

Teams	Position
Table Tennis	Winners
Chess	Runners Up

Achievements at Zonal Level 2014

Table Tennis	Winners
Chess	Winners
Basketball	South Zone Third
Football	Participation
Badminton	Participation

5.3.4 Student Publication initiatives and institutional support mechanisms

The College encourages students to participate and publish research Papers in both the National and International Conferences. Students are encouraged to contribute material for the College

magazine.

A faculty member is given charge of guiding and supporting students for publishing the College magazine. College magazine, published annually, gives opportunities to students to express their literary skills. In addition to this, each department association brings out its own department magazine which comprises topics relevant to the latest developments in those subjects

List of Publications by students during the period of the Report

CSE Student Publication List for the past years(2015):

1. Fathima Nizar,G.S. Santhoshkumar,A Survey on ABE Based Secure Data Retrieval Schemes for DTN Networks,International Journal of Engineering Trends and Technology,ISSN: 2231-5381,Volume 20 Number 1 – Feb 2015
2. Schemes for Command and Control Messages,International Journal of Computer Science and Information Technologies ,ISSN :0975-9646,Volume 6,Issue 1- January 2015
3. Sanjuna Sabu,Jerin Thomas,A Survey on Segmentation Techniques used for Brain Tumor Detection,International Journal of Modern Trends in Engineering and Research ,e-ISSN: 2349-9745 p-ISSN: 2393-8161,Volume 2,Issue 1- January 2015
4. Reshma Raj, Anishamol Abraham,A Survey on Communciation for Smartphone,International Journal of Modern Trends in Engineering and Research ,e-ISSN: 2349-9745 p-ISSN: 2393-8161,Volume 2,Issue 1- January 2015
5. Irin Ani John, Tintu Alphonsa Thomas,A survey on Big Data mining Challenges,International Journal of Modern Trends in Engineering and Research ,e-ISSN: 2349-9745 p-ISSN: 2393-8161,Volume 2,Issue 1- January 2015
6. Oleena Thomas, Sumy Joseph,Literature Analysis on Reputation Models for Feedback in E-commerce,International Journal of Advanced Research in Computer and Communication Engineering, ISSN (Online) : 2278-1021 ISSN (Print) : 2319-5940,Vol. 4, Issue 1, January 2015, DOI:10.17148/IJARCCE.2015.4167

ECE Papers 2015-16

1. Sanjana C Saju, Agi Joseph George "Using Delta-Sigma Modulators in Adaptive Modulated Visible Light OFDM Systems", International Journal of Innovative Research in Computer and Communication Engineering, Volume 3, Issue 11, November 2015.
2. Numa Joy, Anu Abraham Amthew "Beamforming for Sensing Based Spectrum Sharing in Cognitive Radio Network " International Journal of Engineering Research & Technology April 2015
3. Anu Reeby John, Jose J Edathala   "Automatic Detection of mitral Valve Disorders using ANN " International Journal of Engineering Research & Technology, Conference Proceeding of NCETET 2015, April 2015
4. Syari Raju, Mathew George "Optimization of Cooperative Spectrum Sensing and Network Lifetime Maximization of Cognitive Radio Sensor Networks by MODLEACH" International Journal of Innovative Research in Computer and Communication Engineering, September 2015
5. Divya Mohanan, K G Satheeshkumar "A wideband printed LPDA for Surveillance Application"

International Journal of Innovative Research in Computer and Communication Engineering, September 2015

6. Dona Mary George, Renjitha Rajan "Design and Analysis of Different Bow Tie Configurations for Submarines" International Journal of Innovative Research in Computer and Communication Engineering, September 2015

7. Norma Jacob, Midhun Joy "A Novel UWB Reconfigurable Circular Monopole Antenna For Cognitive Radio Application" International Journal of Innovative Research in Computer and Communication Engineering, August 2015

8. Alina John, Darsana P "An Improved Energy Efficient Protocol for Clcok Synchronization in WSN" International Journal of Innovative Research in Computer and Communication Engineering, September 2015

9. Sanjana Mathew, Shinto Sebastian "Comparison of JPEG Compression Technique with Shape Adaptive DCT Technique(SA-DCT)" International Journal of Advance Research in Computer Science and Management Studies, April 2015

10. Rehana Rajan, K G Satheeshkumar "Hybrid SVM for Automatic Detection of Tuberculosis" International Journal of Advance Research in Computer Science and Management Studies, November 2015

11. Anu Reeby John, Jose J Edathala "Diagnosis of Cardiac Dsisorders using 2-D Echocardiographic Images and Tongue Features" International Journal of Advance Research in Computer Science and Management Studies, June 2015

12. Teney Varghese, Jaison CS "Multispectral Imaging Microscopy for Bladder Cancer Cells" International Journal of Advance Research in Computer Science and Management Studies, June 2015

13. Ann Maria Mathew, Indu Reena Varughese "Dual Bowtie Patch Antenna with a Defective Ground Structure for narrow band Application" International Journal of Advance Research in Computer Science and Management Studies, August 2015

14. Kamalu B Nair, Binoshi Samuvel "Classification of mammogram Images with GLCM and Trace Transforms Functionals" International Journal of Advance Research in Computer Science and Management Studies, June 2015

15. Anitta Chacko, K M AbuBeker "Compressive Sensing and PEG Cpmpression: A Comparitive Approach" International Journal of Advanced Information Science And Technology, June 2015

16. Deepa Joseph, Ajai Mathew "Content Based Image Retrieval of Corel Images Along with Face Recognition" International Journal of Computer Science and Mobile Computing November 2015

17. Megha Ann Jacob, Ria Maria "Compact Dual band MIMO Antenna Design" International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering November 2015

18. Alina Sunny, K Karunakaran Nair "Comparison of FSO Communication System with and without Pointing Errors" International Journal of Advanced Research in Computer and Communication Engineering April 2015

19. Anju Mariam Abraham, Binu Mathew "Analysis of LTE Physical Layer," International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, September 2015.

20. Rinku Sebastian, Therese Yamuna Mahesh, "A Study on Male Voice Mutation", in International Journal of Advance Research in Computer Science and Management Studies, vol. 3, Issue 2, Feb. 2015 pg. 272-278.

EEE

2015-2016

1.Anjuman Habeeb, Sonia Sunny and Aju S Nair "Zero Energy Building: A Review Based Case Study at Educational Building" National Conference , KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

2. Solar Cooker for Performance Improvements and Off-Sunshine Cooking" National Conference , KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

3.Jeffy Marin Jose, V I Cherian and Dona Sebastian "Hybrid Power Solution for Remote Telecom Towers" National Conference, KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

4.Keerthi R Lekshmi and Victor Jose "Energy Performance Assessment of an Industrial Boiler with Artificial Neural Networks" National Conference, KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

5.Georgy Jose and Sreenath B "An Experimental Study on the Performance of Solar Water Distillation System" National Conference, KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

6.Reshmasree M R and Midhu Das B "High Gain DC-DC Converter Incorporating Switched Capacitors For High Voltage Applications" National Conference, KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

7.Jaison P Paul and Arun S "Fast SVM Based 3 Phase Cascaded Five Level Inverter" National Conference , KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

8.   Jibin Jose and Sreenath B "Single Stage Multi - Input DC–DC/AC Boost Converter" National Conference, KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

9.   Joel Joy and Sreeja C "New Grid Tied PV System using Modified Aalborg Inverter" National Conference , KETCON-2016 Technology for Sustainability, Amal Jyothi College of Engineering, Kanjirappally, 8th and 9th January 2016

10. Ann George John and Victor Jose "Simulation on dual axis solar converter", International Conference on Applications of Engineering, Science and Technology, April 2015, pp 63-66

11. Chippy Venugopal and Shinosh Mathew "A Single Source Five Level Inverter With Reduced Number Of Switches", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering(IJAREEIE), Vol.4, Issue 5, May 2015, IJAREEIE

12. Amrutha Rose Thomas and Shinosh Mathew "Solar Powered Single Phase Induction Motor Using Single Source Five Level Inverter", Annual International Conference on Emerging

Research Areas: Magnetics, Machines and Drives , AICERA - 2014, iCMMD, IEEE Conference, Amal Jyothi College of Engineering, Kanjirappally, 24th to 26th July 2014

13. Janet Teresa K Cyriac and Sreekala P. "An Induction Heating Topology with Asymmmetrical Switching Scheme" Journal, IJRET, IJRET

15. Jibin Jose, Sreenath B and Midhu Das B. "Multi Input Dc-Dc/Ac Boost Converter", 6th International Conference on Electrical Electronics Communication Robotics and Instrumentation Engineering (ICEECIE2015), International Journal of Advanced Computing and Electronics Technology, Technical research organization India

16. Ashlin Gloria Reginald and K J Thomas "Harmonic Analysis using Different Passive Filters", International Conference on Emerging Trends in Technology and Applied Sciences (ICETTAS 2015

17. P.C Thomas, Dr. Balakrishnan Influx of random variables in the Unit Commitment problem, Wseas Transactions On Power Systems,E-ISSN: 2224-350X,Volume 9, 2014,Pp-196-207, World Academy of Science, Engineering and Technology, Athens.

CE (2015)

1. Dipin Venugopal, Nirmal George, Job Thomas,Bending Moment Coefficients for RC Roof Slabs using FEA,International Journal of Engineering Research & Technology (IJERT),2015
2. Sinu C G, Dr. Mini Mathew Buckling Analysis of Open Isogrid- Vented Interstage of GSLV International Journal of Engineering Research & Technology (IJERT),2015
3. Mini Mathew, Anju Mathew, Jyothis G, Anjalathu V N, Christina S Alexander, Effectiveness of Banana Peel and Moringa oleifera Seed Powders for the Treatment of Wastewater from an Institutional Kitchen, International Journal of Advance Engineering and Research Development
4. Nithin S, Nirmal George, Estimation of Aeroelastic Ground Wind Loads for Launch Vehicles, International Journal of Engineering Research & Technology (IJERT)
5. Rohith C. Rahulan,Jose Joseph, NAFEMS Benchmarking of Finite Element Structural Analysis Software, International Journal of Engineering Research & Technology (IJERT)
6. Nish Pious, Roshina Babu, Jyothis George Pushover Analysis for Seismic Performance of Reinforced Concrete Buildings with Different Positions of Shear Wall   International Journal of Engineering Research & Technology (IJERT)
7. 7 Lakshmi. P, Deepak John Peter, Reduction of Response of High Rise Building to Seismic Excitations Using Tuned Mass Damper, International Journal of Engineering Research & Technology (IJERT)
8. 8.Chithra Thomas, Deepak John Peter, Job Thomas, Reliability Analysis of Shear Strength of Beams Reinforced with FRP, International Journal of Engineering Research & Technology (IJERT)
9. Abhilash T. Daniel, George M. Varghese, Performance of Braced RC Frames Using Linear static Analysis on Diffrerent Aspect   International Journal of Science and Engineering
10. Akash Anirudh, Deepthi I Gopinath, Analysis of infilled RC Frame with and without Soft Storey   International Journal of Science and Engineering.
11. Akash Anirudh, Deepthi I Gopinath, Analysis of infilled RC Frame with and without Soft Storey, International Journal of Science and Engineering,2015
12. Ann Maria Jose, Binu M Issac, Dhanya Krishnan, Investigation About the Effect of Laterite as Fine Aggregate on the Strength of Geopolymer Concrete,International Journal of Advanced

Technology in Engineering and Science,2015

13. Aswathy Kurian, Mr. Binu M Issac, Mrs. Soumya Anand, An Experimental Study on Geopolymer Concrete with the Partial Replacement of Coarse Aggregate with Laterite, International Journal of Advanced Technology in Engineering and Science,2015

14. Aswathy Ananthan, Binu M Issac, Priya Philip,Seismic Behaviour and Strength of Tubed Steel Reinforced Short Column,International Journal of Advanced Technology in Engineering and Science,2015

15. Givin Pullimpallil Varkey, Anjana P,FEA of Twin Tunnel Intake during Excavation, International Journal of Science and Engineering,2015

16. Jansu Ann Jose, Belarmin Xavier C.S, Analysis of Time and Cost Overrun in Building Construction,International Journal of Advance Research in Science and Engineering,2015

17. Jerusha Susan Joy, Dr. Mini Mathew ,Experimental Study on Geopolymer Concrete with Partial Replacement of Fine Aggregate with Foundry Sand,International Journal of Advanced Technology in Engineering and Science,2015

18. Sheetal Chinnu James, Dr. Mini Mathew, Anitta Jose,Experimental Study on Fiber Reinforced Concrete Using Lathe Scrap Fiber,International Journal of Advanced Technology in Engineering and Science,2015

19. Suraj T V, Dhanya Krishnan,Validation of Accelerated Curing Tank,International Journal of Science, Technology and Management,2015

20. Vinny Ann Titus, Dr Mini Mathew, Soumya Anand ,Study on the Properties of Natural Rubber Latex and Nano Graphite Modified Concrete, International Journal of Advance Research in Science and Engineering   ,2015

21. Aswathy Ananthan, Soumya Anand,Seismic Behaviour and Strength of Tubed Steel Reinforced Short Column,International Journal of Engineering Research & Technology (IJERT),201

22. Bini Susan Titus, Bevin V Cherian,Progressive Collapse assessment by Linear Static and Non Linear Static Analysis of a Regular Structure,International Journal of Engineering Research & Technology (IJERT),2015

23. Chinju Joseph, Nirmal George,Effect of soil Structure Interaction on Frames with Different Base Conditions,International Journal of Engineering Research & Technology (IJERT),2015

24. Devu Richin Thomas, George Mohan,Stiffener Configurations in Moment Connections Between Steel I Beams and Composite Columns,International Journal of Engineering Research & Technology (IJERT),2015

25. Eben C Thomas, George M Varghese,Seismic Response of Soft Storey Buildings with Viscoelastic Dampers,International Journal of Engineering Research & Technology (IJERT),2015

26. Febin Sam Philip, C S Belaramin Xavier,Combined Tomographic Survey of Dams, Evaluation of Strength and Remedial Measures – A Study on Kuttiyadi Irrigation Project,International Journal of Engineering Research & Technology (IJERT),2015

27. Jiji Thomas, Nirmal George, Dynamic Analysis of Reinforced Concrete Building with Floating Column,International Journal of Engineering Research & Technology (IJERT),2015

28. Lincy Elsa Varughese, Jency Sara Kurien,Behaviour of Steel Plate Shear Wall with Ring Cut- Outs,International Journal of Engineering Research & Technology (IJERT),2015

29. Nayana R, Neenu K Mathew, Asha Joseph,Dynamic Response of Ground Supported Rectangular Water tank,International Journal of Engineering Research & Technology (IJERT),2015

30 Sinjo James Varghese, Jeena B Edayadiyil,Dynamic Response of Radial, Fan and Harp Type of Cable Stayed Bridges Due to Moving Load and Earth Quake Load,International Journal of Engineering Research & Technology (IJERT),2015

31 Subeesh Nath S, Jeena B Edayadiyil,Parametric Study of Structural Behaviour of Self Anchored Suspension Bridge,International Journal of Engineering Research & Technology (IJERT),2015

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

(No additions)

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

(No additions)

Updated Department Profiles

1. Department of Automobile Engineering

6. Participation of the department in the courses offered by other departments

Branch	Subject	Course
Mechanical Engineering	CAD/CAM Laboratory (ME010 507)	Fifth Semester ME A &B Batches

ADD-ON Courses

• Drafting	AutoCAD
• Design	CATIA
	Pro-E
	Solidworks
• Analysis	ANSYS
• CNC	Part programming
	Operation & maintenance
• ACECAT	1 year training program on heavy vehicle maintenance in association with Volvo – Eicher commercial vehicles Ltd
• Driving school	Light Motor Vehicle driving training programme

7. Coursesin collaboration with other Universities, industries, foreign Institutions, etc.

    1 year training program on heavy vehicle maintenance in association with Volvo – Eicher commercial vehicles Ltd

8. Details of courses/programmes

Discontinued (ifany)withreasons   Nil

9. Numberof Teachingposts   (Calculation based on total students from Second Year)

	Sanctioned	Filled
Professors	1	2
AssociateProfessors	3	1
Asst.Professors	8	10

10.   Facultyprofilewithname, qualification designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.)

Name	Qualification	Designation	Specialization	Years of Experience
Prof. Tomy Joseph	B.Sc (Engg.)	Professor & Dean, Administration	Mechanical Engineering	Academic- 15 years Industry – 17 years
Prof.K Vijayan	B.E (Auto), M.E	Professor & Head	Production Engineering	Academic - 44years
Prof.Sherin Sam Jose	M.E	Associate Professor	Computer Integrated Manufacturing	Academic - 18years
Mr.J.P. Ajithkumar	M.E	Assistant Professor	Manufacturing Engineering	Academic - 10years
Mr.H. Sreeram	B.Tech (Auto),M.Tech	Assistant Professor	CAD/CAM	Academic – 7 years Industry- 8 years 9 months
Mr.K.J. Mathew	B.Tech (Mech-Auto),M.Tech	Assistant Professor	Manufacturing Engineering	Academic - 5years 3 months

Mr.C.V.Anoop	B.Tech (Mech-Auto) MS	Assistant Professor	Automobile Engineering	Academic - 5.5years
Mr.Jinesh Vinayachandran	B.Tech (Auto),M.E	Assistant Professor	Industrial Engineering	Academic – 3 year 6 months
Mr. Jinson Paul	B.Tech (Auto),M.E	Assistant Professor	Thermal Engineering	Academic -1 year 6 months
Mr. Jerin Geogy George	B. Tech (EC),M.tech	Assistant Professor	Automotive Electronics	Academic – 1 year 6 months
Mr. Tisson George Michael	B.Tech (Auto),M.tech	Assistant Professor	Machine Design	Academic- 7 months
Mr.Abin Mathew	B.Tech (Auto) (study leave)	Assistant Professor	Automobile Engineering	Academic - 2 years 7 months
Mr. Vishnu Prasad	B.Tech (Auto),M.Tech (study leave)	Assistant Professor	CAD/CAM	Academic- 1 year 6 months

13. Student-TeacherRatio (programme- wise) **1:12**
14. Number of academicsupportstaff (technical) and administrative staff;
    Sanctioned andfilled

	Sanctioned	Filled
CAD Trainer	1	1
CNC Trainer	1	1
Senior Workshop Instructor	1	1
Lab Assistant	3	7

15. QualificationsofteachingfacultywithD. Sc/D.Litt/Ph.D/M. Phil/PG.: PG- 8
16. Numberoffacultywithongoing
    Projects from
    a) National   : 1 (Science Promotional Programme by KSCSTE)
                                         1 (Technology Business Incubator by DST)
    b) Internationalfunding agencies
    And grants received
                   Nil

17. Departmentalprojectsfundedby DST
    FIST; UGC, DBT, ICSSR, etc.and
    Total grantsreceived

Name of the Faculty	Funding Agency	Grants Received (Rs)
Sherin Sam Jose	DST-National	1,00,000/-
Ajith Kumar J P	DST-National	1,00,000/-
Sree Ram H.	DST-National	1,00,000/-
Sree Ram H.	SCPWD,Govt of Kerala	75,000/-
Sree Ram H.	CDS,Govt of Kerala	20,000/-
Total grants received		3,95,000/-

20. Areas of consultancy and income Generated   :

Area of Consultancy	Income Generated (Rs)
CAPART	15,000/-
Amal Jyothi Driving Academy	7,00,000/-
CAD Training	7,00,000/-
Amal Jyothi Auto Care Centre	2175/-
CNC Training	57000/-
Total	14,74,175/-

2. Department of Civil Engineering

6. ADD-ON Courses

Drafting Software	Auto CAD
Drafting Software	RIVET
Analysis & Design Software	STAAD
Analysis Software	ANSYS
Management Software	PRIMA VERA

9. Number of teaching Posts

Post	Sanctioned	Filled
Professors	3	3
Associate professors	4	2
Assistant professors	28	30

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.

/Ph.D./M.Phil.etc.,)

	Name	Qualification	Designation	Specialization	No. of Years of Experience
1	Sr. Claramma Rosary	M. Tech	Professor & Head	Environmental Engineering	Academic-35 Years
2	Mr. T. K Georgekutty	M. Tech	Professor	Aeronautical Engineering	Academic – 5 years Industry-31Years
3	Mr. L. V. Prakashan	M. Tech*	Professor	Structural Analysis and Contruction Management	Academic – 6 years Industry- 31 years
4	Dr. Mini Mathew	PhD	Asso. Professor	Ground Water Modelling	Academic- 11years
5	Mr. Binu M Issac	PhD*	Asso. Professor	Structural Analysis and Design	Academic – 2 Industry- 20
6	Ms. Jiss Abraham	M. Tech	Asst. Professor	Structural Engineering	Academic- 8years
7	Ms. Jessy George	M. Tech	Asst. Professor	Structural Engineering	Academic- 6years
8	Ms. Dhanya Krishnan	M. Tech	Asst. Professor	Structural Engineering	Academic- 6years

9	Ms. Soumya Anand	M. Tech	Asst. Professor	Computer Aided Structural Design	Academic- 4years
10	Ms. Margret Sherin James	M. Tech	Asst. Professor	Transportation Engineering	Academic- 10 years
11	Mr. Bevin V Cherian	M. S	Asst. Professor	Structural Engineering	Academic- 2years
12	Mr. C. S. Belarmin Xavier	M. Tech	Asst. Professor	Contruction Engineering and Management	Academic – 2.5 years Industry- 2 year
13	Ms. Neenu K Mathew	M. Tech	Asst. Professor	Environmental Engineering	Academic- 4years
14	Mr. Jeena B Edayadil	M. Tech	Asst. Professor	Structural Engineering	Academic- 1year
15	Mr. George Mohan	M. Tech	Asst. Professor	Transportation Engineering	Academic- 1year Industry- 3 years
16	Mr. Deepak John Peter	M. Tech	Asst. Professor	Transportation Engineering	Academic- 1year Industry- 1 year
17	Mr. George M Varughese	M. Tech	Asst. Professor	Structural Engineering	Academic- 1 year
18	Ms. Priya Philp	M. Tech	Asst. Professor	Water Engineering and Management	Academic- 0.2 year
19	Ms. Anitta P Jose	M. Tech	Asst. Professor	Energy and Environment	Academic- 0.2 year
20	Anjana P	M. Tech	Asst. Professor	Structural Engineering	4 years
21	Jency Sara Kurian	M. Tech	Asst. Professor	Structural Engineering & Construction	1year
22	Finny Alex	M. Tech	Asst. Professor	Structural Engineering	0.5 year
23	Jince P Zachariah	M. Tech	Asst. Professor	Transportation Engineering	0.5 year
24	Febin Sam Philip	M. Tech	Asst. Professor	Structural Engineering & Construction Management	0.5 year

25	Jiji Thomas	M. Tech	Asst. Professor	Structural Engineering & Construction Management	0.5 year
26	Asha Jacob	M. Tech	Asst. Professor	Geotechnical Engineering	0.5 year
27	Serene Sara Simon	M. Tech	Asst. Professor	Structural Engineering	0.5 year
28	Prathibha Rose G	M. Tech	Asst. Professor	Structural Engineering	0.5 year
29	Dony Paulose	M. Tech	Asst. Professor	Structural Engineering	0.5 year
30	Varkey M.V	M. Tech	Asst. Professor	Structural Engineering	0.5 year
31	Vinay Mathews	M. Tech	Asst. Professor	Construction Management	0.5 year
32	Jerison Scariah James	M. Tech	Asst. Professor	Structural Engineering & Construction Management	0
33	Deepa Davis	M. Tech	Asst. Professor	Construction Technology &Management	0
34	Nimmy Kurian	M. Tech	Asst. Professor	M.Planning	0
35	Jiss K Abraham	M. Tech	Asst. Professor	Structural Engineering & Construction Management	0

14. Number of academic support staff (technical and administrative)

Post	Sanctioned	Filled
Workshop Instructor	1	1
Lab Assistant	9	8
Site Supervisor	1	1

Administrative Assistant	1		1					

15. Qualifications of teaching faculty
with DSc/ D. Litt/ Ph. D/ MPhil / PG. :   PhD : 1 + 3 *, PG: 32 + 1 *

Item	Income Generated (Financial Year)	Income Generated (Financial year	Income Generated (Financial Year)	Income Generated (Financial Year)	Income Generated (Financial Year)	Income Generated (F inancial Year)	Income Generated (Financial Year)	Income Generated (Financial Year)
	2015-2016 till Dec 7th	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2009-2010	2008-2009
Land survey using total station	30000	15000	52500	105100	131750	132550	143500	180250
Maintenance of lab equipment	59600	99650	175800	146250	122950	120000	41750	-
Lab consultancy work in AJCE	274600	146900	97300	22450	75550	6900	3300	900
Consultancy work related to building construction	--------	207700	113900	83400	47100	-----	------	-

All civil engineering works as per request from self-governing bodies undergo a big consultancy work with block Panchayath from which we will get 3% of the total amount as consultancy charge. Project cost is very high. It is from Jalanidhi project of the government. One such project is sanctioned and after completing all the government procedures the work is inaugurated and started.

20. Areas of consultancy and income generated

23. Awards / Recognitions received by Faculty and students

Name	Award	Year
Ms Jiss Abraham	Best Faculty Award	2008-09
Ms Jiss Abraham	Best Faculty Award	2009-2010
Ms. Sheena P. Abraham	Best Lab Staff Award	2011-2012
Ms. Margret Sherin Joseph	Best Faculty Award	2012-2013
Ms. Annie Maria Issac	Best Faculty Award	2013-204
Ms. Sheena P . Abraham	Best Lab Staff Award	2013-2014
Mr. Belarmin Xavier	Best Faculty Award	2014-2015
Dr. Mini Mathew	Special Award given for Faculty	2014-2015
Mr. Deepak John Peter	Special Award given for Faculty	2014-2015

25. Seminars/ Conferences/Workshops organized & the source of funding:
a) National

Title of the Conference/ Workshop/ TP	Dates	No. of participants	Funding agency, if any
STTP- AUTO CAD for Civil Engineers (PEACE VII)	23-27 Nov. 2015		ISTE
Work Shop on Concrete mix design	19-9-2015	120	Ultra Tech Cements
STTP-Sustainable Infrastructure Development (PEACE VI)	13-17 July 2015	36	CE DEPT
Seminar on the methods to deal with the pressure of studies through time management	12-13 Feb 2015	240	CE DEPT
STTP- Highway Sector Management (PEACE V)	8-12 Dec 2014	34	CE DEPT
Seminar on Fibre Reinforced Concrete & the roll concrete will play in the coming future	18-9-2014	380	CE DEPT
Seminar on Integrated Water Resource management	27-8-2014	150	CE DEPT
Seminar on Research in Civil Engineering	21-7-2014	160	CE DEPT

	18-7-2014	120	Ultra Tech Cements
Work Shop on Concrete mix design			
STTP- Infrastructure Stability & Geotechnical Aspects (PEACE IV)	9-13 June 2014	35	CE DEPT
STTP - Irrigation & Water Resources Management (PEACE III)	16-20 Dec 2013	31	CE DEPT
Seminar on Faults and Carelessness usually made by Civil Engineers	7-9-2013	65	CE DEPT
STTP- Design & Construction of Earthquake Resistant Structures (PEACE II)	17-21 June 2013	28	CE DEPT
STTP- Environmental protection & Waste Management (PEACE-I)	10-14 Dec 2012	31	CE DEPT
Work shop on NPTEL Video lectures	17-11-2012	75	CE DEPT
Seminar on STRESS and TIME MANAGEMENT for final year students	12-01-2012	60	CE DEPT
STTP - Recent advances in Civil Engineering (RACE 2011)	6-10 Dec 2011	30	ISTE
STTP - Recent advances in Civil Engineering (RACE 2010)	8-12 Nov 2010	21	CE DEPT

3. Department of Computer Science & Engineering

9.   Numberof Teaching posts

Posts	Sanctioned	Filled (2015)	Filled (2014)	Filled (2013)
Professors	1	2	1	2
Associate Professors	0	0	0	0
Asst. Professors	25	24	25	28

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.

Name	Qufn.	Desgn. P-Prof., AP-Asst.Prof.	Speczn.	No. of Years of Experience		No. of Ph. D Students guided for the last 4 years
				In AJCE	Other Inst.	
Manoj T Joy	M.Tech, Ph D*	P	Network Communication & Security	12.1	1	--
Dr. Philips Koshy	M. Tech.., Ph. D.	P	Embedded systems	6 Months	19 Years	---
Dr.Fr.George Athappilly	M.Tech, Ph D	P	Information Communication Engineering	3 Months	19.3	--
Shiney Thomas	M.Tech	AP	Network Communication & Security	11.9	1.3	--
Ms Fabeela Ali Rawther	ME	AP	Computer science and engineering	6.6	1	-
Resmipriya M.G.	ME	AP	Computer science and engineering	7.8	0	--
Santhoshkumar G S	M.Tech	AP	Computer & Communication	9	0.5	--
Syam Gopi	ME	AP	Computer science and engineering	6.6	5	-
Elisabeth Thomas	ME	AP	Computer science and engineering	5.2	11 months	-
Ashji S Raj	M.Tech	AP	Cyber Security	5.6	0	-
Jerin Thomas	ME, Ph D*	AP	Computer science and engineering	5	3	-
Anishamol Abraham	ME	AP	Computer science and engineering	4.8	4 months	-

Niya Joseph	M.Tech	AP	Computer science and engineering	4.4	0	-
Tintu Alphonsa Thomas	M.Tech	AP	Software Engineering	4.4	0	-
Sumy Joseph	M.Tech	AP	Software Engineering	4.4	6 months	-
Jayakrishna V	M.Tech, Ph D*	AP	Computer and Information Technology	4.3	2. 1	-
Neenu R	ME	AP	Computer science and engineering	3.6	0	-
Ansamol Varghese	ME	AP	Computer science and engineering	3.1	2.5	-
Krishnalal.G	ME, Ph D*	AP	Computer science and engineering	3.7	8	-
Neethu C Sekhar	M.Tech	AP	Computer Science & Information Systems	3.7	1 month	-
Sruthi.S	M.Tech	AP	Computer and Information Science	3.1	6 months	-
Sharon Sunny	M.Tech	AP	Computer Science and Information	3.1	2 months	-
Deepu Benson	ME	AP	Computer science and engineering	2.6	2.6	-
Ms Bini M Issac	M.Tech	AP	Computer Science & Engineering	1	1 Year 8 Months	-
Arun K.S	M.Tech Ph. D*	On Study Leave				
Minu George	M.Tech Ph. D*	On Study Leave				

12.   Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty

2015-16 Academic year (July-Dec)

18.2%

13. Student-Teacher Ratio (programmewise)

Programme	S-T Ratio
B. Tech	15:1
M. Tech	12:1

15. QualificationsofteachingfacultywithD. Sc/D.Litt/Ph.D/M. Phil/PG.

Qualification	Number of faculties
PG	24
Ph. D	2+4*+ 2#

* doing PhD (Part time), # doing PhD (on leave)

17. Departmentalprojectsfundedby DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Projects	Funding Agency	Grants
R4radio(2010-11)	IEDC-NSTEDB	Rs.1 lakh
Web Doctor(2011-12)	IEDC-NSTEDB	Rs.1 lakh
LOCATECAB (Android Based Taxi Booking System)(2014-15)	I2U-AJCE	Rs 10000
You2me (Android Based Tracking (system)(2015-16)	I2U-AJCE	In process

19. Publications:
   * a) Publication per faculty: 5.4
   * Number of papers published in peer reviewed journals (national/ Inter national) by faculty and students: 20

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Name	Publications	No: of Publications listed in international databases	Citation index	h-index
Prof. Manoj T Joy	10(C),3(J)	1		
Dr. Fr. George A	2(J)			
Shiney Thomas	10(C),6(J)	3	1	1
Resmipriya M G	3(C),2(J)			
Santhoshkumar G S	5(C),5(J)	1		
Syam Gopi	5(C), 5(J)			
Elisabeth Thomas	1(C), 1(J)			
Arun K S	1(J), 1(C)			
Ashji S Raj	1(C), 1(J)			
Jerin Thomas	1(C),3(J)			
Anishamol Abraham	3(C),1(J)			
Niya Joseph	6(C), 2(J)			
Tintu Alphonsa Thomas	1(C), 6(J)			
Sumy Joseph	9(C), 4(J)	1		
Jayakrishna V	8(C),7(J)	2		
Neenu R	1(C),2(J)			
Ansamol Varghese	1(C)			
Krishnalal.G	3(C),5(J)	2		
Neethu C Sekhar	5(J)			
Anjana V	1(C)			
Minu George	2(C)			
Sruthi S	1(C),1(J)			
Deepu Benson	1(C),3(J)			
Teenu Therese Paul	3(C),1(J)			
Shany Jophin	4(C),3(J)			
Fabeela Ali Rawther	1(C),4(J)			
Bini M Issac	1(C), 2(J)			

C- Conference/s, J- Journal/s

23. Awards/Recognitionsreceivedbyfacultyandstudents:
Faculty Awards/Recognitions:

Sl. No.	Name of Faculty/ Lab Staff	Award	Year
1	Ms. Shiney Thomas	Best Faculty Award	2006-2007
2	Mr. Sunil K.S	Best Faculty Award	2007-2008

3	Mr. Sunil K.S	Best Faculty Award	2008-2009
4	Mr. Arun K.S	Best Faculty Award	2010-2011
5	Ms. Shiney Thomas	Best Faculty Award	2011-2012
6	Prof. Manoj T. Joy	Best Faculty Award	2012-2013
7	Mr. Ajith G.S.	Best Faculty Award	2012-2013
8	Prof Manoj T Joy	Attended Google Map Maker Asia Pacific Conference	Nov3–Dec1, 2012
9	Prof Manoj T Joy	Best Paper Award for "Performance Comparison of Document clustering with ontology knowledge representation" in International Conference on Advances in Science & Technology (ICAST 2014) on 15th & 16th February, Bangkok	2013-2014
10	Mr. Krishnalal G	Best Faculty Award	2013-2014
11	Ms. Shiney Thomas	Best Faculty Award	2013-2014
12	Mr. Santhoshkumar G S	Best Faculty Award	2013-2014
13	Ms. Tintu Alphonsa Thomas	Best Faculty Award	2013-2014
14	Mr. Deepu Benson	Best Faculty Award	2013-2014
15	Ms. Sruthi S	Fifth rank in M.Tech Computer & Information Science, CUSAT	2013
16	Mr. Syam Gopi	Coordinator of first Five Star Rated Remote Centre of IIT Bombay Among 325 Centres Across India.	2013
17	Prof. Manoj T. Joy	Best Faculty Award	2014-2015
18	Mr. Jayakrishna V	Best Faculty Award	2014-2015
19	Ms. Shiney Thomas	Best Faculty Award	2014-2015
20	Mr. Manoj Joseph	Best Lab Instructor Award	2014-2015
21	Ms.Sruthi S	Received letter of appreciation for excellence in coordination at AJCE	2015-2016

		centre of QEEE,IIT Madras,for the semester June-Dec 2015.		

Student Awards/Recognitions:

Name	Batch	Event Name	Category	Date	Venue	Prize/Awards
Shafeena Basheer	MTech 2011-2013	MG University Rank	Academic	-	-	First
Tina Maria Thomas	MTech 2012-2014	MG University Rank	Academic	-	-	Third
Joe Cherri Ross	2002-2006	GEM of AJCE 2006	Overall Topper	-	AJCE	Overall Topper
Jishnu Murlikrishna	2010-2014	National Level Robotics Championship	Robotryst	2-5 March 2012	IIT Kharagpur	Second
Akhil Nagath, Alan Lal	2014-2018	QUIZUP	Quiz Competition	02 Feb 2015	CSE,AJCE in Association with CSI	First
Akhil Nagath	2014-2018	TECHNITROUS 2K15,	IT Quiz Competition	12 to 13 Feb 2015	Dept. of CS, MACFAST, Tiruvalla	Second
Antony Varkey	2014-2018	ESPERANZA 2 K15	Reinvento	11 Sept. 2015	CSE Dept.,Albertian Institute of Science & Technology, Kalamassery	Second
Ashwin Tom	2012-2016	Sports-Inter zone championship	Table tennis	22nd and 23rd November 2012	BK college,amalagiri,kottayam	Second prize
Ashwin Tom	2012-2016	Sports-Inter zone championship	Table tennis	1st,4th and 5th October 2013	chinmaya vidyalaya,ernakulam	First prize

Ashwin Tom	2012-2016	el arte14	Painting	4,5 March 2014	AJCE,Kanjirap pally	First prize
Ashwin Tom	2012-2016	el arte14	Pencil drawing	4,5 March 2014	AJCE,Kanjirap pally	Second prize
Joseph Michael Xavier	2012-2016	Swastika'14	My Gang	24,25 Jan 2014	MBC,Peermad e	Second prize
Ajmal Basheer, Allen M Mathew & Joe N Sabu	2012-2016	ASTHRA 2014	Enigma	7,8 march 2014	St. Joseph College of Engg and Technology, Palai	Second prize
Amal Krishna T & Joel Varghese Joy	2012-2016	Trana 2k14	Web Krunch	14,15 march 2014	KMEA Engg college	Second prize
Francis Alexander Pattara	2012-2016	Trana 2k14	Red Sector	14,15 march 2014	KMEA Engg college	First prize
Christy Thomas Mathew & Joe N Sabu	2012-2016	SEASTA 2014	Quiz competition	29-Mar-14	AJCE,Kanjirap pally	First prize
Joe N Sabu, Allen M Mathew	2012-2016	Abhiyanthriki 2K14	Enigma	19th & 20th Sep 2014	RSET,Kochi	First prize
Allen M Mathew, Charles C Sebastian, Joseph Michael Xavier, Ajmal Basheer	2012-2016	Abhiyanthriki 2K14	A3K Legal	19th & 20th Sep 2014	RSET,Kochi	Second prize
Abina Ajith, Athira Haridas	2012-2016	Navigator'14	C - Coding	27th & 28th August 2014	Marian College, Kuttikkanam	Third prize
Ashwin Tom	2012-2016	Sports-Inter zone championship	Table tennis	Sep-14	BK college,Amalag iri,kottayam	First prize
Abina Ajith, Athira Haridas	2012-2016	Radieux 6.0	C Debugging	30th August 2014	Saintgits college of Engg,Pathamut tom	Second prize

Jazah Javed	2012-2016	Aarohan 2k15	Group dance	28/2/15	AJCE,Kanjirappally	First prize
Alexa Emmanuel,Anita K A	2012-2016	RITU'15	TALAASH	26th February 2015	RIT, Kottayam	Third prize
Joseph Michael Xavier, Allen M Mathew	2012-2016	Nakshatra'15	PC Hardware Design	23rd January 2015	Saintgits college of Engg,Pathamuttom	First prize
Joseph Michael Xavier, Allen M Mathew	2012-2016	Nakshatra'15	Website Hacking	23rd January 2015	Saintgits college of Engg,Pathamuttom	Third prize
Jeeson Joseph, Ajmal Basheer, Jince George, Charles Sebastian	2012-2016	ASTHRA 2015	MEX-HUNT	13th March 2015	St. Joseph College of Engg and Technology, Palai	First prize
Aparna Nelson	2012-2016	Nakshatra'15	Best Singer	22nd January 2015	Saintgits college of Engg,Pathamuttom	Second prize
Abina Ajith, Athira Haridas	2012-2016	ASTHRA 2015	Bash Err	13th March 2015	St. Joseph College of Engg and Technology, Palai	Third prize
Christy Thomas Mathew , Jince George, Ashwin Tom , Jeeson Joseph	2012-2016	Torque 4	MEX-HUNT	12/8/2015	Mangalam college of engineering	First prize
Ashwin Tom	2012-2016	PACE 2016-Sports	Cricket	Feb-16	SJCET Palai	Second prize
Ashley Francis, Anisha John	2012-2016	Brahma 2016	Fusion dance	18,19 Feb 2016	ASIET,Kalady	Second prize
Ane Mary Sonnet	2012-2016	Lumiere 16	Nostalgia	17,18 feb 2016	College of engg, Kidangoor	Third prize
Ashley Francis, Anisha John	2012-2016	Azure 2016	Group dance	12,13 Feb 2016	AJCE,Kanjirappally	First prize

Jazah Javed	2012-2016	Azure 2016	Group dance	12,13 Feb 2016	AJCE,Kanjirap pally	Second prize
Aparna Nelson	2012-2016	Azure 2016	Light Music	12,13 Feb 2016	AJCE,Kanjirap pally	First prize
Jazah Javed, Farzana Mymoon, Janet Thomas,Ashley Francis, Ann Mary Thomas,Dona Reetha	2012-2016	Azure 2016	Oppana	12,13 Feb 2016	AJCE,Kanjirap pally	Third prize
Francis Alexander, Alex Thomas	2012-2016	Dyuthi'15	Black Track	19-21 Feb 2015	Govt.Engg College, Thrissur	First
Francis Alexander, Joe N Sabu	2012-2016	Dyuthi'15	Ultimate Geek	19-21 Feb 2015	Govt.Engg College, Thrissur	Second
Francis Alexander, Joe N Sabu, Joel Varghese Joy	2012-2016	Dyuthi'15	Capture The Flag	19-21 Feb 2015	Govt.Engg College, Thrissur	Second
Joe N Sabu	2012-2016	Dyuthi'15	Play Along	19-21 Feb 2015	Govt.Engg College, Thrissur	Second
Amal Krishna	2012-2016	Dyuthi'15	Web Bully	19-21 Feb 2015	Govt.Engg College, Thrissur	First
Thomas Mathew	2013-2017	NAKSHATRA '15	Android App Develoment	23-01-15	Saintgits College of Engg ,Kottayam	Second
Delma Varghese, Fathima Zaya Imthiaz, Dhanya Mary George, Geethu Alphonsa Thomas, Treesa Joy, Riya Rose Sebastian	2013-2017	NAKSHATRA '15	Amazing Race	22-01-15	Saintgits College of Engg, Kottayam	Third

Stephinmon Antony, Loveena Mathew, Sanjana Joshy	2011-2015	Ajce-ISTE Best Final Project	Audio Enabled Dictionary	Aug-Sept 2014	Amal Jyothi College of Engg., Kanjirapally	Second
Scaria Dixon, Ben George	2013-2017	NAVIGATOR '14	Quiz	27,28-08-14	Marian College Kuttikanam	Second
Selin C Oommen, Tess Zacharas	2011-2015	Azure	Broadway	14-16 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	First
Maria Thomas Thrian, Faizal Ashraf, Sanjana Joshy, Shilpa Susanna Mathew	2011-2015	Nakshatra	Ethnicity	28th Feb - 1st March 2014	Saintgits College of Engg., Kottayam	First
Anjali Tom	2010-2014	Nakshatra	Mr and Mrs Nakshatra	28th Feb - 1st March 2014	Saintgits College of Engg., Kottayam	Second
Jerry Kurian Mathew, Joemon Jacob	2010-2014	Lumiere'14	C Debugging	10-11 Feb 2014	College of Engineering, Kidangoor	Second
Stephinmon Antony, Tony Thomas	2011-2015	CSI Regional Student Convention –	Scramble	6-7 Sept 2013	Rajagiri School of Engineeri,ng and Technology Kochi	First
Allen M Mathew	2011-2015	Azure 13	C-Cryptex	14-17 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	Second
Allen M Mathew	2011-2015	Azure 13	Tech-o-casa	14-17 Aug 2013	Amal Jyothi College of Engg., Kanjirapally	Second
Jewel John, Albin P Albert, Amal Paul, Jishnu Muralikrishnan	2010-2014	Ascend 2013	Arcade Raider	2 Aug 2013	Saintgits College of Engg., Kottayam	Second
Amal Krishna	2012-2016	Dyuthi'13 National Level Multi Fest	Web Bully	11-13 Sept 2013	Govt. Engineering College Thrissur	First

Francis Alexandar, Joe N Sabu	2012-2016	Dyuthi'13 National Level Multi Fest	Capture The Flag	11-13 Sept 2013	Govt.Engineering College Thrissur	First
Francis Alexandar, Joe N Sabu, Allen Mathew	2012-2016	Dyuthi'13 National Level Multi Fest	Backtrack	11-13 Sept 2013	Govt.Engineering College Thrissur	First
Joe N Sabu	2011-2016	Dyuthi'13 National Level Multi Fest	Ultimate Geek	11-13 Sept 2013	Govt.Engineering College Thrissur	First
Sachin	2013-2017	ARENA 2014	Basketball	3-6 March 2014	Amal Jyothi College of Engg., Kanjirapally	Second
Tess Zacharias	2011-2015	Elartel 14	Short Story Writing	March 4-5 2014	Amal Jyothi College of Engg., Kanjirapally	Third
Haritha B	2009-2013	MG University Youth Festival	Light Music	26 Feb 2013	MG University	Second
Adarsh Mathew	2009-2013	MG University InterZone	Chess Tournament	26 Feb 2013	MG University	Runner Up
Tess Zacharias	2011-2015	Elartel 14	Poetry Writing	March 4-5 2014	Amal Jyothi College of Engg., Kanjirapally	Third
Tess Zacharias,Selin C Oommen	2011-2015	Rang De	Mime	15-16 March 2013	Amal Jyothi College of Engg., Kanjirapally	Third

24. Listofeminentacademiciansandscientists/visitorstothe department

Sl No	Date	Event	Academician/Speaker
16	19-Sept-2014	Two day National e-Seminar on Steps 2 Research NMEICT activities and T10KT project in IIT B	Prof. Dr. D. B. Phatak Department of Computer Science, IIT Bombay Project Coordinator Project - T10KT, NMEICT Dr. Mukta Atrey (Senior Project Manager, Project T10KT

		Research issues in Massive IT literacy drive in India	Prof. Dr. Kannan M. Moudgalya, Department of Chemical Engineering, IIT Bombay
		Engineering Research, Incubation and Technology Transfer - The Technopark Story	Mr. G. Vijayaraghavan, Former CEO Techno Park, Member - State Planning Board Kerala
		Obstacles of Research	Dr. K. Alexander Principal, S.D. College, MG University
	20-Sept-2014	Management of Research Process - Philosophy & Practical Tips	Dr. Achuthsankar S. Nair, Centre for Bio Informatics, Trivandrum
		From Teaching to Research in Teaching, "The process of Action Research"	Dr. Sahana Murthy, CDEEP, IIT Bombay
17	18-Jun-14	Motivation class for S3 CSE	Mr.Benson Thomas George (International Trainer)
18	Feb 20,2015	Make an Impact with Your Research – The session are Importance of publications, definition of Impact Factor, how it is determined, grading individuals based on scientific contribution, h-index, basics of ethics in research, etc	Prof. Dr. Jacob Philip (Former Director, Sophisticated Test & Instrumentation Centre, CUSAT)
19	March 14th to 15th 2015	MEGAPIXELS,Two day Basic Digital Photography Workshop in association with CSI	Dr Ullas G Kallapura (Distinguished photographer and a travel enthusiast)
20	April 7,2015	One Day Workshop on Art of Publication & Craft Of Research	Prof. Dr. Job Kurian (Former Dean, Aerospace Engineering, IIT Madras) Prof. Dr. Jacob Philip (Former Director, Sophisticated Test & Instrumentation Centre, CUSAT)
21	6th July 2015 to 10th July 2015	Five day workshop "Aspire '15"in association with ISTE Kerala Section and NIDY,CCE(AJCE)	Prof Dr D B Phatak,IIT Bombay; Dr Sabu Thomas, Director of School of Chemical Science, MG University, Kottayam;Rev Dr Jose Kannampuzha, Principal, Amal Jyothi College of Engineering; Dr Job Kurien, Former Dean &

			HOD, Aerospace Engineering, IIT Madras;Dr Philips Koshy, Senior Software Engineer, NVIDIA, Singapore; Dr G Janardhanan, Professor & HOD, NITTTR Chennai; Rev Dr Tomy Tharayil, Director, Danahalaya, Punnapra; Dr Jippu Jacob, Rtd. Prof, Kerala Agriculture University; Dr Sebastian Narively, Professor, Amal Jyothi College of Engineering,Kanjirappally; Dr Jacob Philip, Founder Director, STIC Cusat;Mr Joe A Skaria, Times of India; Dr Soney C George, Professor, Nanotechnology, Amal Jyothi College of Engineering, Kanjirappally;Mr Jayakrishnan M, IIT Bombay.
22	Aug,7th - 9th 2015	NaturePixels 2K15,Three day Nature and Photography camp at Periyar Tiger Reserve	Dr Ullas G Kallapura (Distinguished photographer and a travel enthusiast)
23	Oct, 5th to 7th 2015	3-days Hands-On workshop on "Introduction to MATLAB in Medical Image Processing"	Dr. B. Priestly Shan (Principal, Royal College of Engineering & Technology, Thrissur),Geevarghese Titus (Asst. Professor, Amal Jyothi College of Engineering, Kanjirappally), Binu Mathew (Asst. Professor, Amal Jyothi College of Engineering, Kanjirappally).
24	Jan 28-30, 2016	NACORE (National Conference on Research in Emerging Areas)	Dr. Vinod P Bhattathirippad, Cyber Forensic Consultant,Prof. R M Vasu, IISC Banglore,Dr. Debashish Roy, IISC Banglore,Mr. Sreekanth R Iyer, Chief Cloud Security Architect IBM Cloud,Francis Alexander, Information Security Researcher

25. Seminars/Conferences/Workshops organized & the source of funding
   a) National   b) International

a) National Level:

Sl No.	Seminars/ Conferences/Workshops	Date	Source of Funding
1	NACORE 2016 (National Conference on Research in Emerging Areas)	28-30 Jan 2016	KSCSTE
2	Five day workshop Aspire '15 in association with ISTE Kerala Section and NIDY,CCE(AJCE)	6-10 July 2015	ISTE Kerala Section

3	Three day workshop on "LaTeX-Typesetting Tool & Technical Paper Writing"	27-29 Oct 2015	ACM Student Chapter,AJCE
4	One week ISTE STTP on Introduction to Algorithm Design	25-30 May 2015	ISTE & IIT Kharagpur
5	Two-week ISTE STTP on Pedagogy for Effective use of ICT in Engineering Education	05th - 7th & 19th - 21stJanuary 2015	ISTE & Ekalavya@IIT Bombay, under National
6	Two week ISTE Workshop on Cyber Security	10-20 July 2014	Mission on Education through
7	Two week ISTE Workshop on Computer Networking	30 June -5 July 2014	ICT (MHRD, Govt. of India).
19	Creative Teaching	5-Oct-2013	ISTE Kerala Section
20	Six days LATEX -Document Typesetting Tool Workshop	7-8,11-12,19-20 Nov 2013	CSI Cochin Chapter
21	Ethical Hacking and Cyber Security	18th -19th February 2014	CSI Cochin Chapter
22	2 days "Hands-on Workshop on OpenGL"	24th & 25th of March 2014	CSE & MCA Dept. AJCE
23	CEASTHA'14- Coding Competition	29th March 2014	CSI Cochin Chapter
24	Mozilla Firefox "APP DAY" and "WEBMAKER PARTY" Workshop..	5th April 2014	CSI Cochin Chapter
25	The CSI Golden Tech-Bridge Programme	9th August 2014	CSI Cochin Chapter
26	Two day National e-Seminar on Steps 2 Research	19-20th Sept. 2014	ISTE Kerala Section & CSI Cochin Chapter
27	Six days LATEX -Document Typesetting Tool Workshop	1-4,22-23 Nov 2014	ISTE Kerala Section

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Batch	Year	Exam	No. of students

	2010-11	GATE	3
		MAT	1
	2011-12	GATE	13
	2012-13	GATE	1
B. Tech CSE	2013-14	GATE	2
		MAT	3
	2014-15	GATE	3
		MAT	1
	2015-16	GATE	Results not published
		MAT	4

30. Details of Infrastructural facilities
   a) Library: Well established department library
    No of volumes: 1226
          No of titles: 520
   b) InternetfacilitiesforStaff&Students: Fully WiFi campus with 50 Mbps
   c) Class rooms with ICT facility: Available in all classrooms
   d) Laboratories:
   - Advanced Systems Lab,
   - Project Lab
   - Programming Lab
   - Hardware & Networking Lab
   - MTech Lab

31.   Number of students receiving financial assistance from college, university, government orother agencies.
   - Scholarships:AJECS,MCM,GATE-STIPEND (Sample entries listed below)

AJECS
Batch	Name of student
2010-14	Ann Maria Thomas, 2010 B.Tech CSE
2010-14	Chinnu T.P., 2010 CSE (S4)
2010-14	Ajil Jose, 2010 CSE (S1S2)
2010-14	Sneha Rachel Thomas, S5 CSE
2011-15	Sneha Rose Kurian
2012-16	Tainu Raju

AJCE Scholarships to the meritorious students based on KEAM

Batch	Name of student	Amount	Reception Year
2014-18	Abin James	66775	2014
2015-19	Rajat Jak Mendus	66775	2015

List of GATE qualified students receiving PG Scholarships

Batch	Name of student	Amount	Reception Year
2012-14	Tina Maria Thomas	CSE	2 years
2012-14	Catherine Jose	CSE	2 years
2012-14	Ivy Jane Thomas	CSE	2 years
2012-14	Bini M Issac	CSE	2 years
2012-14	Bittu Ann Mathew	CSE	2 years
2012-14	Jiss Varghese	CSE	2 years
2012-14	Veena U.K	CSE	2 years
2012-14	Sneha Sebstian	CSE	2 years
2012-14	Ancy Abraham	CSE	2 years
2013-15	Neethu Thomas	CSE	2 years

AJCE Faculty Scholarship

Batch	Name Of Student
2012-16	Tainu Raju, 2012 B.Tech CSE
2011-15	Sneha Rose Kurian, 2011 B.Tech CSE
2011-15	Lakshmi A.P., 2011 CSE (S1S2)
2011-15	Anju P Sebastian, S3 CSE
2010-14	Sneha Rachel Thomas, S7 CSE
2010-14	Ann Maria Thomas, S6, CSE
2010-14	Sneha Rachel Thomas, S5 CSE
2010-14	Chinnu T.P., CSE (S4)
2010-14	Ajil Jose, CSE (S1S2)

32. Details on student enrichment programmes (speciallectures/workshops/seminar) with external experts

Sl. No	Date	Event	Academician/Speaker
1	Feb 18-19 2015	Basics of J2SE to S6 Students	Think – Force Software Solutions
2	March 7 - 2015	One day Workshop on RASPBERRY PI	Team Faberfun

		Digital Photography workshop – MEGA PIXELS	Dr. Ullas Kalappura
3	March 14-15, 2015	Digital Photography workshop – MEGA PIXELS	Dr. Ullas Kalappura
4	July 6 – 10,2015	Five day workshop "Aspire '15" (Train Engineering PG students who are really passionate in teaching)	Inaugurated by Dr. Kuncheria P Issac, Vice Chancellor, KTU.
5	Aug 7-9, 2015	A Three day Nature and Photography camp at Periyar Tiger Reserve NaturePixels 2K15	The camp was headed by the Periyar Forest Division, Dr Ullas G kallapura
6	Aug 20-21, 2015	Two Day Hands-On Workshop On Network Simulation	Mr.Santhoshkumar G S AP CSE,Mr.Deepu Benson AP CSE
7	Oct 5-7,2015	Three-days Hands-On workshop on "Introduction to MATLAB in Medical Image Processing"	Resource Persons : Dr. B Priestly Shan (Principal, Royal College of Engineering & Technology, Thrissur) , Prof. Geevarghese Titus (Asst. Professor, AJCE) , Prof. Binu Mathew (Asst. Professor,AJCE)
8	Oct 27-29,2015	Three Day ACM Workshop On "LaTeX-Typesetting Tool & Technical Paper Writing"	Ms.Shiney Thomas AP CSE,Mr.Deepu Benson AP CSE

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

SL. NO.	ISR & Extension Activities	Remarks
1	Community Extension Developmental Cell (CEDC) of CSE Dept. Project : Societal Technology Educational Programme(STEP)	* Career Guidance programme for +2 students in 1) Govt.HSS , Edakkunam (25/11/2014) 2)St Antony's HSS ,Poonjar(21/11/2014)

		*Organized CSI Golden-Tech Bridge Programme for providing computer literacy to uneducated women in society.(9/8/2014) * Organised Nidy Scholarship Exam for school students on 5th December 2015.
2	NSS coordinator from department & active NSS activities	Ms. Minu George, Various camps organized
3	Social Service undertaken by Students	As a part of their curriculum.
4	Services to other institutions and society	

35. **SWOCanalysisofthedepartmentandFutureplans**

Additional Strength:
- Outreach Initiatives (e-Jyothi)-Training programmes and workshops are conducted on-line through AView tool for over 50 registered nodal centres across India.

4. Department of Electronics and Communication Engineering

6 Participation of thedepartment in thecourses offered by other departments:

Subjects taken forS1 / S2		Hours/week	Credit
S2 MET Metallurgy	EC110Electronics Engineeringworkshop	2	1

Subjects taken forS4 CSE two batches		Hours/week	Credit
CS010 404	Signals & Communication Systems	3	4
CS010 408	Electronics Circuits and Communication Lab	3	2
Subjects taken forS4IT		Hours/week	Credit
IT010 407(EC)	Logic Design lab	3	2
Subjects taken forS5 CSE two batches		Hours/week	Credit
CS010 504	Digital Signal Processing	4	4
CS010 508	Hardware and MicroprocessorsLab	3	2
Subjects taken forS8IT		Hours/week	Credit
IT010 801	Wireless Communication	4	4

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

- LabVIEW certification in associationwith, NationalInstruments,
- Fiber optic 123 certification in association with NeST Institute for Fiber Optic Technology, Aluva (ANFOT)

9. Numberofteachingposts:

Posts	Sanctioned	Filled
Professors	2	2
AssociateProfessors	NIL	NIL
APs	28	28

10. Facultyprofilewithname, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./M. Phil.etc.)

Name	Qualification	Designation	Specialization	Years of Experience	No. of PhD projects
Dr. James Jacob	Ph.D.	Professor	CADfor VLSI	27	6
Mr. K.G. Satheeshkumar	M. Tech.	Professor	Network Communication	24	Nil
Mrs. Therese Yamuna Mahesh	M. Tech.	AP	Network Communication	22	Nil
Mr.Geevarghese Titus	M. Tech.	AP	Network Communication	16	Nil
Ms. DarsanaP	M. Tech.	AP	Communication	11	Nil
Mr.JoseJEdathala	M. Tech.	AP	Sensor System Technology	9	Nil
Mr.Sunish Kumar O	M. Tech.,	AP	Optoelectronics& Communication System	7	Nil
Mr.Anu Abraham Mathew	M. Tech.	AP	Communication Engineering	6	Nil
MsIndu Reena Varughese	M. Tech.	AP	Sensor System Technology	8.5	Nil
Ms. PraseethaB. Nair	M. Tech.	AP	Communication Engineering	8.5	Nil
Ms. DivyaR.S	M. Tech.	AP	VLSIDesign	5	Nil
Mr.C.S.Jaison	M. Tech.	AP	Network Communication	8	Nil
Mr.Binoshi Samuvel	M. Tech.	AP	Signal Processing	9	Nil

Ms. Rosama Sebastian	M. Tech.	AP	Optoelectronics	8	Nil
Ms. Muth Sebastian	M. Tech.	AP	Communication Engineering	5	Nil
Mr. Abubeker K M	M. Tech.	AP	Embedded system	7	Nil
Mr. Shinto Sebastian	M. Tech.	AP	CommunicationSystems	7	Nil
Ms. Ranjitha Rajan	M. Tech.	AP	Optoelectronics	10	Nil
Ms. JomySusanIpe	M. Tech.	AP	Digital Electronics	4	Nil
Mr.Binu C Pillai	M. Tech.	AP	VLSIDesign	7	Nil
Ms. CareenaP	M.E.	AP	CommunicationSystems	5	Nil
Ms. Reeju Elisa	M.E.	AP	VLSIDesign	5	Nil
Ms. Agi Joseph George	M.E.	AP	VLSIDesign	4.5	Nil
Mr.Binu Mathew	M.E.	AP	CommunicationSystems	4.5	Nil
Mr.Ajai Mathew	M.E.	AP	CommunicationSystems	4.5	Nil
Ms. Ria Maria George	M.E.	AP	Communication Systems	4.5	Nil
Ms. TessyAnnie Varghese	M. Tech.	AP	CommunicationSystems	4.5	Nil
Mr.Midhun Joy	M. Tech.	AP	CommunicationEngineering	3	Nil
Mr.MathewGeorge	M. Tech.	AP	CommunicationEngineering	2.5	Nil
Ms. MereneJoseph	M. Tech.	AP	CommunicationEngineering	2.5	Nil

11.   List of senior visiting faculty:

i.Dr. MK Radhakrishnan, Scientist, Academician and Technical Consultant –Nanorel,Singapore

ii.Prof.Rabinder Henry,Chief Technology Officer at Dhi Networks Pvt Ltd

iii.Prof.S Thomas CEO Digital Core Technologies 3rd Floor, Ajiyal Complex Kakkanad, Kochi

iv.Prof.Madhvana Nair, Retired Professor , Govt Engg. College Trivandrum

v.Dr. Johnson V. Thomas, Director VeePhi Innovation Labs, Bangalore

vi.Student –Teacher Ratio (programmewise):

B. Tech.:15:1

M. Tech.: 6:1

17. Departmental projects funded byDST-FIST; UGC, DBT,ICSSR, etc.and total grants received: 7,30,000/-

S. No:	Project	Year	Amount In Rs.	Status	Funded by
1	IntelligentLight Dimmer forAutomobiles	2008	216,000	Completed	KSCSTE
2	Driver's Assistant	2010	100,000	Completed	DST
3	Pre-paid Energy Meter	2010	100,000	Completed	DST
4	Anti-Sleep Driver Alert Sensor (ASDAS)	2011	100,000	Completed	DST
5	GreenHearth	2014	100,000	Completed	IEDC
6	Virtual-i	2015	50,000	Completed	CeDS
7	Blind AssistanceTechnology	2015	50,000	Completed	CeDS
8	Intelligent Helmet	2015	20,000	Completed	IEI
9	Wearable Blind Assist	2015	10,000	Completed	IEI
	Total		7,30,000		

19. Publications:

i. Publicationperfaculty-		5.37
ii. Numberofpaperspublishedinpeerreviewedjournals (national/international)byfacultyandstudents		48
iii.Number of publications listed in International Database (ForEg: Web of Science,Scopus, Humanities International Complete, Dare Data base– International Social Sciences Directory, EBSCOhost, etc.)		48
iv. Monographs		21
v. ChapterinBooks		Nil
vi. BooksEdited		1
vii. CitationIndex		Shown below
viii.SNIP		Nil
ix. SJR		Nil
x. Impactfactor		Shown below

Sl No	Name of Faculty	No. of Publications	No. of Journal Publications	Monographs	Books Edited	Citation Index	h-index
1	Dr. James Jacob						
2	K G Satheeshkumar	5	3	1			
3	Therese Yamuna Mahesh	18	10	1		9	2
4	Geevarghese Titus	13	2	1		5	2
5	Darsana P	8	4	-			
6	Jose J Edathala	9	3	-			
7	Indu Reena Varughese	4	3	1			
8	Divya R S	2	0	1			
9	Jaison C S	5	2	1			
10	Binoshi Samuvel	7	2	3			
11	Rosamma Sebastian	2	2	-			
12	Muth Sebastian	2	1	1			
13	Abubeker K M	9	6	-			
14	Shinto Sebastian	8	4	-			

15	Ranjitha Rajan	2	2	1			
16	Careena P	4	1	1			
17	Reeju Elisa Baby	0	0	1			
18	Binu Mathew	9	4	-			
19	Ria George	5	2	-			
20	Sunish Kumar O.S	5	0	1			
21	Mathew George	5	1	-			
22	Agi Joseph	2	2	3			
23	Ajai Mathew	7	2	1			
24	Anu Abraham	6	3				
25	Binu C Pillai	6	4	-			
26	Praseeda B Nair	2	2	1			
27	Jomy Susan Ipe	0	0	-			
28	Tessy Annie Varghese			1			
29	Merene Joseph	1	0	-			
30	Midhun Joy			1			

21. Facultyas members in
   a. National committees b) International Committees c) Editorial Boards.

c) **EditorialBoards.**

      i.Mr. Sunish Kumar O. S.–Editorial Board Member of3International Journals

      ii.K G Satheeshkumar – Advisory Board Member of International Journal for Transformation of Consciousness

      iii.Binu Mathew – Editorial Board Member of International Journal for Transformation of Consciousness

      iv.K G Satheeshkumar – Chairman M.Tech Communication Engineering KTU, Kottayam cluster

22. Student projects
    i. Percentage of students who have done in-house projects including inter departmental/programme
    ii. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Batch-Year	a) %ofIn house Projects	b) %of Projects OutsidetheInstitution
B.Tech (2010-2014)	100	0
B.Tech (2011-2015)	100	0

23. Awards/Recognitions received by faculty and students:

I.   AwardswonbytheFaculty: 27

Year	Nameofaward	Recipient
2014-15	Best FacultyAward	Prof. K. G. Satheesh Kumar
2014-15	Best FacultyAward	Mr. Gee VargheseTitus
2014-15	Best FacultyAward	Mr. Binu Mathew
2014-15	Best FacultyAward	Mr. Abubecker
2014-15	Best FacultyAward	Mr.Anu Abraham Mathew
2014-15	Best FacultyAward	Mr. Mathew George
2014-15	Best FacultyAward	Mr. Merene Joseph
2014-15	Best FacultyAward	Mr. Binu C Pillai
2014-15	Best FacultyAward	Mr. Rajesh M. G.

ii. Awardswonbystudents:

Year	Nameofaward	Recipient
2013-2015	PG Scholarship scheme for GATE qualified studentsfrom AICTE	Ms. Rinku Sebastian
		Ms. DivyaMohanan
		Mr. Subin Kuriakose

		Mr. Ann MariaMathew
2012-2014	PG Scholarship scheme for GATE qualified studentsfrom AICTE	Ms. RosyJohn
		Ms. AshaR Nair
		Mr. Shefeequ M
		Mr. Devadathan.S
		Ms. Parvathy.S
		Mr. Jobin TPhlip
		Mr. Ratheesh
2010-2014	3rd prizein intercollegiateBasketball Tournament, at DevamathaCollege, Kuravilangad	Mr. JustinJose
		Mr. Renjin Thomas Abraham
2011-2015		Mr. Kevin Vincent
2012-2016		Mr. Ovanalil JerryMathews
2010-2014	IntercollegiateChess Championship, HB CollegeMelukavu	Mr. JithinJ

24.   List of eminent academicians and scientists/visitors to the department:
40 visitors during last 4years

S. No	Name	Designation
23	Dr. Johnson VT	Director, VeePhi Innovation Labs.
24	Dr. Samuel	NeST Fiber Optics Ltd, Cochin
25	Dr. K A Navas	Principal LBS College of Engineering
26	Dr. S Thomas	CEO, Digicore Private Limited
27	Dr. Michal Dykas	NUS, Singapore
28	Dr. Deepu John	NUS, Singapore
29	Dr. Amith Goswamy	University of Oregon, USA
30	Dr. Prahalad Vadakkeppat	National University of Singapore
31	Dr. Richard L. Amoroso	Director Noetic Advanced Studies Institute USA
32	Dr. B. Gregory	Program Director: Master of Arts in Counseling Psychology, Ryokan
33	Geshe Nyima Tashi	Sera Jey Monastic University, Mysore
34	Dr. K.L.Sebastian	IISC, Bangalore

35	Dr. Babu Thalliath	JNU, Delhi
36	Dr. A. Chockalingam,	IISc Bangalore
37	Dr. Neelesh B. Mehta,	IISc Bangalore
38	Dr. P Ubaidulla,	IIIT Hyderabad
39	Dr. Premkumar K	IIITD&M Kancheepuram
40	Dr. Santa PalChuadhuri	Aruba Networks India Pvt. Ltd, Bangalore.

25. Seminars/Conferences/Workshops organized & the source of funding
    a) National

S. No:	Seminars/Conferences/Workshopsorganized	Date	Source of Funding
12	Two-weekISTE workshopon 'Control Systems'	December2 to 12, 2014	IITK&MHRD
13	Two days Science Academies' Lecture workshop on Advances in Wireless Communication and Net working –funded by on	23-24July 2015	Indian academy of science
14	One Day Seminar on "Internet of Cars"	18th August 2015	ISTE Kerala
15	One day Seminar on "ART OF LAB PRACTICE' by K.A NAVAS	18th August 2015	ISTE Kerala
16	NPTEL workshop	21 November 2015	IIT Madras
17	Symposium on "Collaborative Reforms for Post Graduate Engineering Programme"	15thOctober 2015	Department of ECE / AJCE

b.International

S. No:	Seminars/Conferences/Workshops organized	Date	SourceofFunding
2	International conference of Quantum Mechanics and Quantum Consciousness(ICQMQC)	6- 8 January 2015	AJCE

26. Student profile programme/course wise:

Nameofthe Course B. Tech	Applications received	Selected	Enrolled%		Pass percentage
			*M	*F	
2014-2018	1590	119	39.49	60.5	63.25*
2015-2019	1399	87	25.9	74.1	57.7*

*Result based on years completed

Nameofthe Course M. Tech	Applications received	Selected	Enrolled%		Pass percentage
			*M	*F	
2014-2016	54	15	13.33	86.67	93*

*M=Male *F=Female*Resulttobe declared

27. Diversity of Students

Nameofthe Course:B-Tech	%ofstudents fromthe samestate	%ofstudents from otherstates	%ofstudents from abroad
2014-2018	99	1	0
2015-2019	100	0	0

Nameofthe Course:M.Tech	%ofstudents fromthe samestate	%ofstudents from other States	%ofstudents from abroad
2013-2015	100	0	0
2014-2016	100	0	0

28. How many students have cleared national and state competitive eexaminations such asNET, SLET, GATE, Civil services, Defense services, etc.?:

Year	No of students GATE
2014	12
2015	5

29.Details of Infrastructural facilities:

a)Library	Department Library provided in Room No.: DB208
	No: of Titles: 1488
	No.: of Journals and Magazines:163
	No: of Seminar Reports:740
	No: of Mini Project Reports :694
	No: of B . Tech Main Projects: 187
	M. Tech: Industrial TrainingReport:30
	M. Tech Seminar Report:104
	M. Tech Thesis Report:65
	M. Tech Mini-Project:30
b) Internetfacilitiesfor Staff&Students	100Mbps OFC backbone, Wi-Fi forthe entire Department 30 PCs provided to Staff 25 PCs provided forPG Students 80 PCs provided to UGStudents
c) Class rooms withICT facility	10 class rooms providedwith Green board, projector.
d)Laboratories	10 laboratories provided in the department 1. NI LabView Academy Lab 2. ANFOT Optical Lab

30.   Number of students receiving financial assistance from college, university, government Or other agencies:

S. No.	Name ofScholarship	Year	Recipients
1	AJCE Faculty Scholarships	2012-16	Amalu AnnaJoshy
2	PG Scholarship Scheme for GATE qualified students	2013-2015	Ann MariaMathew, Communication Engineering
		2013-2015	Rinku Sebastian, Communication Engineering
		2013-2015	DivyaMohanan, Communication Engineering
		2013-2015	Subin Kuriakose, Communication Engineering

		2013-2015	Alina John, Communication Engineering
3	Fee Waiver from theCollege	2014-18	Aneeta Maria Thomas
			Athira P
			Jesly Joseph
			Melna Shaju
			Vishnur Pillai
			Vyshak P
4	Fee Waiver from theCollege	2015-19	Ashly Biju
			Denita Rose Tom
			Jeena Maria Zacharias
			Jeny Jacob
			Liya George
			Subymol Varghese

32. Details on student enrichment programmes (speciallectures/workshops/ seminar)with external experts

S. No.	Seminars/ Conferences/Workshops organized	Date	SourceofFunding
1	One Day Seminar on "Internet of Cars"	18th August 2015	ISTE Kerala
2	One day Seminar on "ART OF LAB PRACTICE' by K.A NAVAS	18th August 2015	ISTE Kerala

5. Department of Electrical and Electronics Engineering

9. Numberof teachingposts

	Sanctioned		Filled
	UG	PG	
Professors	1	2	3
Associate Professors	4	3	-
Asst. Professors	11		18

10. Faculty profile with name, qualification, designation, specialization,(D.Sc ./ D.Litt ./ Ph.D./M.Phil.etc.,)

Sl No	Name of the Faculty	Designation	Qualification			Experience (Year' and Month")			No. of Ph. D Students guided for the last 4 years
			Bachelor	Masters	Doctoral	Teaching		Industrial	
						In AJCE	Outside AJCE		
1	Mr.VI Cherian	Professor & Dean, Academic	B.Sc (Engg) EE	M.E-Electrical Power System	NA	10 ' 2 "	NA	31 '	NA
2	Dr. PC Thomas	Professor, HOD	B.Sc (Engg) EE	M.Tech Reliability Engg.	P.hD (Power System)	11 ' 3 "	4 '	13 '	NA
3	Mr. K J Thomas	Professor	B.Sc (Engg) EE	M.Sc(Engg.) - Instrumentation & Control System	NA	5 ' 2 "	NA	25 '	NA
4	Mr. Arun S	P.G. Coordinator (PEPS) Assistant Professor	B.E-ECE	M. E-Power Electronics & Drives	NA	6 ' 7 "	3 ' 2 "	1 '	NA
5	Mr. Victor Jose	P.G. Coordinator (ES) Assistant Professor	B.Tech. EEE	M.Tech -Energy Systems Engineering	NA	4 ' 9 "	NA	2 ' 3 "	NA
6	Ms. Sreekala P	Assistant Professor	B.Tech. EEE	M.Tech -PEPS	NA	8 ' 3 "	2 ' 6 "	NA	NA
7	Ms. Sreeja C	Assistant Professor	B.Tech. EEE	M.Tech -PEPS	NA	8 ' 3 "	NA	NA	NA

8	Mr. Joffie Jacob	Assistant Professor	B.Tech. EEE	M.Tech-PEPS	NA	8 ' 3 "	NA	3 ' 7 "	NA
9	Ms. Neenu Rose Antony	Assistant Professor	B.Tech. EEE	M.Tech-PEPS	NA	6 ' 9 "	2 ' 5 "	NA	NA
10	Ms. Reshmi V	Assistant Professor	B.Tech. EEE	M.Tech-Power Systems	NA	6 '	NA	NA	NA
11	Mr. Shinosh Mathew	Assistant Professor	B.Tech. EEE	M.E-Power Electronics & Drives	NA	3 ' 8"	NA	NA	NA
12	Ms. Manjusha V A	Assistant Professor	B.Tech. EEE	M.E.-Power Electronics & Drives	NA	4 ' 9"	6 "	NA	NA
13	Mr. Bobin K Mathew	Assistant Professor	AMIE-EE	M.tech-Integrated Power System	P.hD * (Power System)	4' 6 "	1 '	1 ' 10 "	NA
14	Mr. Anish Benny	Assistant Professor	B.Tech. ECE	M.tech-Industrial Instrumentation & Control	NA	4 ' 5 "	1 '	3 '	NA
15	Ms. Rani Chacko	Assistant Professor	B.Tech. EEE	M.Tech-Energy Systems Engineering	NA	3 ' 8"	NA	NA	NA
16	Ms. Dona Sebastian	Assistant Professor	B.Tech. EEE	M.Tech-PEPS	NA	2 ' 8 "	1 '	NA	NA
17	Mr. Sreenath B	Assistant Professor	B.Tech. EEE	M.Tech-Power & Energy	NA	2 ' 8 "	NA	NA	NA

			System s						
18	Ms. Sonia Sunny	Assistant Professor	B.Tech. EEE	M.Tech - Industri al Drives & Control	NA	2 ' 8 "	NA	NA	NA
19	Mr. Anumod D M	Assistant Professor	B.Tech. EEE	M.E- Power System s Engg.	NA	2 ' 8 "	2 '	NA	NA
20	Mr. Aju S Nair	Assistant Professor	B.Tech. EEE	M.Tech -Energy Manage ment	NA	1 ' 9 "	4 '	NA	NA
21	Ms. Midhu Das B	Assistant Professor	B.Tech. EEE	M.Tech - Machin es Drives & Power Electro nics	NA	1 ' 9 "	NA	NA	NA

13. Student-Teacher Ratio (programme wise):

Programme	Total Number of Faculty	Number of Students	Student -Teacher Ratio
B. Tech	18	183	11:1
M.Tech	8	20	3:1

Details	Programme	Total Number of Faculty
Faculty engaging classes	B.Tech only	8
	M.Tech only	1
	Outside dept only	2
	B.Tech + M.Tech	6
	B.Tech + Outside Dept	3
	M.Tech + Outside Dept	1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
AcademicSupportStaff(technical)	11	9
Administrativestaff	1	0

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.

Sl:No	Qualification	Total No
1	P.G (M. Tech), PhD	1
2	P.G (M. Tech)	20

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR,etc.and total grants received

Duration	No of Projects	Sponsoring Agency	Amount (Rs)
2011-12	1	DST	100000
2012-13	2	DST	200000
		Total Amount : 300000	

19. Publications:

a) Publication per faculty : **7.05**

b) Number of papers published in peer reviewed journals (national/ international)

Year	International Conference	Journal	National Conference	Book	Total
2016	0	0	9	0	9
2015	8	10	0	3	21
2014	16	7	0	2	25
2013	31	6	15	1	53
2012	3	1	35	1	40
Total Publications from Department					148

20. Areas of consultancy and income generated:

An Amount of 10,000/- was given for the Installation of rooftop solar photo voltaic power plant at Kerala Gramin Bank, Malappuram to EEE Department, (June 2014)

21. Faculty as members in

c)Editorial Boards:

Dr. P.C. Thomas is a reviewer in Turkish Journal of Electrical   Engineering & Computer Sciences.

23. Awards/Recognitions received by faculty and students

Best Faculty Awards

Faculty	Designation	Year
Mr. Ramesh P. D	Lab Instructor	2014-15
Mr. P.C.Thomas	HOD EEE	2014-15

Recognitions received by faculty

Faculty	Recognitions received by faculty
Ms. Midhu Das B	Her Publication "High Gain DC-DC Converter Incorporating Switched Capacitors for High Voltage Applications" got the Best paper Award in KETCON 2016

Students Achievements:

2014-15		
Sl No	Contest	Event
1	Tech Top	'Latex Carry-bag' won the first prize in the TechTop project contest at Trivandrum on June 25th 2015
2	Tech Top	Consolation prize for 'Advanced Hair Colouring Technology in the TechTop project contest at Trivandrum on June 26th 2015.
3	Project Presentation	Participated and exhibited the project "Unmanned Aerial Vehicle for Terrestrial Photography and Atmospheric Data

		Collection" in the final round of SRISHTI 2015 held at SaintGits College of Engineering on 13th and 14th Feb 2015
4	Technical Event	Participated in The Technical Event " SIMULINK 2015" in RITU ' 15, The National Level Techno Cultural Fest at RIT Pampady, held on 27th Feb 2015
5	Arts and Sports	2nd Place at National level 3 X 3 Basketball Tournament at NAKSHATRA 2015, Saint Gits College of Engineering., Kottayam
6	Arts and Sports	2nd Place in State level Badminton (PACE 2015) at SJCET Pala
7	Technical Event	Participated in MACE - MUN 2015 at MACE Kothamangalam on March 2015
8	Arts and Sports	1st Place in CONCORDANCE (ECHOSE 2015) National level Basketball Tournament at IIM Kozhikode
9	Arts and Sports	2nd Place at National level 3 X 3 Basketball Tournament at NAKSHATRA 2014, Saint Gits College of Engineering., Kottayam
10	Arts and Sports	3rd Place in Best Choreography in National level Techno Cultural Fest at NAKSHATRA 2014, Saint Gits College of Engineering., Kottayam
11	Arts and Sports	1st Place in Ethinicity in National level Techno Cultural Fest at NAKSHATRA 2014, Saint Gits College of Engineering., Kottayam
12	Paper Presentation	2nd Place in Paper Presentation in National level Techno Cultural Fest at NAKSHATRA 2014, Saint Gits College of Engineering., Kottayam
13	Design Contest	2nd place in the event BEST ENGINEER in National level Techno Cultural Fest at NAKSHATRA 2014, Saint Gits College of Engineering., Kottayam

University rank in M.Tech PEPS/ES

Sl No	Name	Position Held	Course	Year
1	Chithra A S	First Rank	ES	2013-15
2	Jeffy Marin Jose	Second Rank	ES	2013-15
3	Jeena John	Third Rank	ES	2013-15
4	Nisha Prakash	First Rank	PEPS	2012-14
5	Bijo Reji	Third Rank	PEPS	2012-14

24. List of eminent academicians & scientists/visitors to the department:

Sl No	Name	Designation	Year
1	Er.Rajan K	Electrical Inspectorate	2015
2	Mr.Santhosh M Thomas	Assistant Editor, Malayala manorama	2015
3	Mr. Sreeraj R	AE, KSEB	2015
4	Mr. Thomas Mathai	Manager, Tool Room Fabrication Guardian Controls Ltd.Thodupuzha.	2015
5	Dr. Jithesh K A	Technical manager Health , Kerala	2015
6	Mr. Jomy Zacharia	Development Officer, Oriental Insurance	2015
7	Dr. Linda James	Physician, Amala Ayurveda hospital	2015
8	Mr. Baiju and Mr. Joshy John	Manager, Inditrade Capital Ltd	2015
9	Mr.R Sreeraj	Dy Manager (Mechanical), KMML, Kundara	2015
10	Mr. Jose Joseph	Former UN official	2015

25.Seminars/Conferences/Workshops organized& the source of funding

b)International   : Annual International Conference on Emerging Research Areas

(AICERA) AICERA – 2014, 24th to 26th July 2014.

The conference aims at exploring the gamut of relationships between Magnetics, Machines and Drives.

Sponsored by: Amal Jyothi College of Engineering, Kanjirapally, Kerala, India

26. Student profile programme/coursewise:

Year (YOP)	Programme	Applications received	Selected	Enrolled		Pass percentage
				M	F	
2015	B. Tech	2274	59	34	25	54
2015	M. Tech. PEPS	70	18	8	10	94
2015	MTech (ES)	40	23	4	20	100

27. Diversity of Students

Year (YOP)	Total	% of students from the same state	% of students from other States	% of students from abroad
2015	59	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil &Defenseservices.: **11 GATE Qualified**

29. Student progression

Student progression	YOP(Batch)	Total	Count	Against % enrolled
UG to PG	2015	59	3	5
Employed				
• Campus selection	2016	49	22	45
	2015	59	15	25
	2014	60	6	10
• Other than campus recruitment	2015	59	0	0
	2014	63	0	0
Entrepreneurship/Self-employment	2014	60	1	2

30. Details of Infrastructural facilities

a) Library

Sl No	List	Total No
1	Books	1686
2	Periodicals	7
3	Question Banks	36
4	Competitive Exams (GATE)	21
5	General Books	40
6	Projects	50
7	Seminars	290
8	Mini projects	20

31. Number of students receiving financial assistance from college, university, government or other agencies:

Name of the Scholarship	Year	No of students
PG Scholarship scheme for GATE qualified students from AICTE	2013-15	17
AJCE Scholarships to the meritorious students based on KEAM	2014	1
AJCE Faculty Scholarship	2012-16	1
	2011-15	2

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:
- ELEKTRONS (EEE Association) conducted an Induction Training Program - 06 to 11 July 2015

- ELEKTRONS (EEE Association) conducted a Training Course on ―Electrical System Design by SIGMOS, Kochi (07 to 25 June 2015)

- Conducted a talk On ―DSP in association with ISTE:- by Dr. M. V. Rajesh, Principal, ISSAT, Muvattupuzha, Kerala on 25 Feb 2015

- ELEKTRON (EEE Association) conducted a talk on ―How to crack Civil Services- Mr. Abraham Kurien IPS (9th June 2015)

- ELEKTRON (EEE Association) conducted a talk on ―Entrepreneur OR Employment -Mr. Mithun Mathew (12th June 2014)

- Conducted a talk on ―Engineering mind Setting in association with IEEE by - Mr. Mithun Mathew (12th June 2014)

- ELEKTRON (EEE Association) conducted a talk on ―Speaking Skills by -Dr. V J Sebastian Narively (12th June2014)

6. Department of Information Technology

6. Participation of the department in the courses offered by other departments

Sl. No	Programme	Name of the Departments
1		MechanicalEngineering
2	UG	AutomobileEngineering
3		ChemicalEngineering
4		Electrical Engineering

9. Number of Teaching posts

	Sanctioned	Filled
Professors	1	1
AssociateProfessors	--	--
Asst. Professors	10	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No of Years of Experience	No.of Ph.D. Students guided for the last 4 years
Ms.Sandhya Ramakrishnan	M. Tech,Ph.D*	Professor	M. TechComputer&InformationScience	15	--

Mr.Thomas Varughese	M. Tech, Ph.D*	Asst.Professor	ME(Computer Science &Engineering)	13	--
Mr.ShijuGeorge	MS, Ph.D *	Asst.Professor	MS(Software Systems)	13.9	--
Mr. Melbin VargheseJohn	ME	Asst.Professor	ME(Computer Science &Engineering)	9.9	--
Ms.Midhuna JyothiR.	ME, Ph. D*	Asst.Professor	ME(Software Engineering)	9.6	--
Ms. Saumya Sadanandan	M. Tech	Asst.Professor	M. Tech (Computer Science &Engineering)	9.6	--
Mr.JomsAntony	M. Tech	Asst.Professor	M. Tech(Computer Scienceand Engineering)	7.9	--
Ms.AlfinAbraham	M. Tech	Asst.Professor	M. Tech(Computerand Communication)	4.8	--
Ms.JincyLukose	M. Tech	Asst.Professor	M. Tech(Computer Scienceand Engineering)	5.8	--
Mr.P.V.Shijin	M. Tech, Ph.D*	Asst.Professor	M. Tech(Embedded Systems)	6.6	--
Mr.Sunil Zacharia	M. Tech	Asst.Professor	Software Engineering	3.5	

13. Student -Teacher Ratio (programme-
    wise)   UG: B. Tech – **10:1** (Based on Actual Strength)

23. Awards / Recognitions received by faculty and students
    Students:

Johny Thomas	First Prize, C-Coding,NAVIGATOR'14,Marian College Kuttikkanam
Rintu George, Arun Tom, Akhila Nazarudeen,	First Prize, Project Proposal - Safe Drive, AJCE-ISTE Chapter
Shilu Shibily, Anupriya Jose, Brijith Elizabeth Joseph	Secon Prize, project : Microcontroller Based Power Consumption Monitoring and Daily Alerting System, AJCE-ISTE Chapter
Clint Sebastian	Second Prize, Paper Presentation, NAKSHATRA 2015, Saintgits College of Engg., Pathamuttom.

Manu Mathew, Brijith Elizabeth, Johny Thomas	First Prize, Website Hacking, NAKSHATRA 2015, Saintgits College of Engg., Pathamuttom.
Gopu S. Jeevan, Sachin P.	Second Prize, Website Hacking, NAKSHATRA 2015, Saintgits College of Engg., Pathamuttom.
Johny Thomas	Second Prize, C-Debugging, NAKSHATRA 2015, Saintgits College of Engg., Pathamuttom.
Jose George	First Prize, Android Application Development, NAKSHATRA 2015, Saintgits College of Engg., Pathamuttom.
Gokul Gopinath, Thomas John	Second Prize, Bash-Err National Level Technical Fest, ASTHRA15, St.Joseph's College of Engg. & Technology, Palai
Johny Thomas	Second Prize, Best Programmier, DHANUS 15, College og Engineering Kallooppara, Pathanamthitta
Johny Thomas, Manu Mathew	First Prize, Blind Coding, DHANUS 15, College of Engineering Kallooppara, Pathanamthitta
Sujith John Philip	First Prize, Rapid Miner, Ritu15, RIT, Pampady
Allen Shaji, Thomas John	First Prize, Electromemory, DYUTHI'15, Saintgits College of Engg., Pathamuttom.
Sujith John Philip	First Prize, INSIGHT, ASCEND 2015, Dept. of CSE, Saintgits College of Engg., Pathamuttom.
Sobin Mathew, Gokul Gopinath	First Prize, MAZERUNNER, ASCEND 2015, Dept. of CSE, Saintgits College of Engg., Pathamuttom.
Bibin Babu	First Prize, BUGSMASH, ASCEND 2015, Dept. of CSE, Saintgits College of Engg., Pathamuttom.

Faculty

Name of the Faculty	Awards / Recognitions
Mr Joms Antony	Best Faculty Award from AJCE

25. Seminars/ Conferences/Workshops organized & the source of funding
    a) National

Sl. No	Year	NameoftheSeminar/Conference /Workshop/FDP	Date(s)	Sourceof funding
6	2014-2015	Workshop on Android Application Development	06.03.2015 to 07.03.2015	IT Dept. AJCE

a) International

Sl. No	Year	NameoftheSeminar/ Conference /Workshop/ FDP	Date(s)	Sourceof funding

26. **Student profile programme/course wise: B. Tech**

Batch	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2011–2015	2274	54	15	39	58.49
2014 - 2018		24	13	11	

*M = Male *F = Female

29. Student progression

Studentprogression	Against % enrolled					
	2009–2010	2010-2011	2011–2012	2012-2013	2013-2014	2014-2015
UGtoPG	19.35%	19.05%	20.34%	10.87%	15.09%	1.89%
Employed •Campusselection •Otherthancampus recruitment	91.9%	90.5%	83.1 %	78.3%	49.1%	54.7%
Entrepreneurship/ Self-employment	1.61%	1.59%	5.08%	0	15.09%	1.89%

30. Details of Infrastructural facilities

a) Library

The central library has nearly 3116 books; apart from that, the department maintains a small library with 1009 books

b) Internet facilities for Staff & Students

- 10MbpsNME(NationalMissionforEducationthroughInformation&Communication Technology)
- 100MbpsdedicatedlinefromReliance
- 100MbpsdedicatedlinefromBSNL(backup)

c) Class rooms with ICT facility: 04

d) Laboratories

Name of the laboratory	Total Area of lab	Major equipment	PC Configuration	No of Equipments	Software Installed
Database Lab (IT Lab-1)	94.25 sq. m	Computers	Intel Core 2 Duo Processor, Asus P5KPL Motherboard, 2GB DDR2 RAM, 500GB SATA HDD, Logitech Keybord+Mouse, Samsung 18.5" LCD Monitor. Intel I3 Processor computer with DDR3 4GB RAM, Asus H81M-V3 Motherboard, Seagate 500 GB Sata HDD, Samsung 18.5 LED Monitor, Logitech MM Keyboard +Optical mouse	34	Microsoft Windows 10 Professional, IBM Rational Software, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10, Star UML, Java, MySQL, Microsoft Security Essentials, Eclipse, Microsoft Visio 2007, Python.
Project Lab (IT-Lab-2)	94.25 sq. m	Computers	Intel Core 2 Duo Processor, Intel DG31PR Motherboard, 1GB DDR2 RAM, 80GB SATA HDD, Logitech Keybord+Mouse, Samsung 17" LCD Monitor.	26	Ubuntu 14.04, G++, MySQL, Java, NS2, Python, GCC.
Multimedia Lab, Internet Lab (IT Lab-3)	94.25 sqm	Computers	Intel CORE 2 Duo 2.8 GHZ , DG 41 M/B, 2GB DDR2, ATX SMPS, 160 GB SATA HDD, Samsung 15" CRT Monitor. Intel Core 2 Duo Processor, Asus P5KPL Motherboard, 2GB DDR2 RAM, 500GB SATA HDD,	39	Microsoft Windows 7, Visual Studio 2008, Turbo C++, Microsoft Office 2007, Adobe Reader 10, Java, Wamp Server, Dream Viewer, CISCO Packet Tracer 6.0

			Logitech Keybord+Mouse, Samsung 18.5" LCD Monitor.		
Programming Lab (IT Lab-4)	94.25 sq. m	Computers	i3 PROCESSOR,INTEL DH61 M/B, 3 GB RAM,500 GB HDD,,KB/MOUSE, Samsung 18.5" LCD Monitor.	60	Ubuntu 14.04, G++, Java, Eclipse, MySQL, NS2, Python, GCC.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Titleofthe Programme	Special Lecture/Workshop/Seminar	Date(s)
Social Media and New Generation: Some insights	Workshop	14.04.2015
Free and Open Source Software Education (FOSSE)	Workshop	29.04.2015
Free and Open Source Software Education (FOSSE)	Workshop	20.05.2015

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Year	NameoftheActivity	Date
2015	Streetplay'IVAL STHREE on InternationalWomen'sDay	13.03.2015

7. Department of Mechanical Engineering

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

I. **Additional skill acquisition programme (ASAP)** :In modern machining practice under design, align & train (dat) scheme.

INDUSTRIAL COLABRATION	
1	Kelachandra Machines, Chegavanam, Kottayam
2	Hi-Tech Industries, Paika, Kottayam

3	Hevea Auticraft, Paika, Kottayam
4	Konday Autocraft, Kodimatha, Kottayam
5	Kens Tool Room, Ettumannoor, Kottayam

II.   Asian Amal Jyothi Petroleum and Construction Technology

COURSES OFFERED	
1	Piping & Pipeline Engineering (60 hours
2	NDT (ASNT Level II Certification) (30 hours)
3	Certificate Programme in Safety Engineering

8.   Number of Teaching posts:

	Sanctioned	Filled
Professors	3	3
Associate Professors	-	-
Asst. Professors	30 (3 on study leave)	30 (3 on study leave)

9.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.

/Ph.D. / M. Phil. etc.,)

Sl.No	Name	Qualification	Designation	Specialization	Years of Experience
1	Jippu Jacob	Ph. D,	Professor	Farm Machinery	44
2	K. Sreekumar	M.E	Professor & HOD	Metallurgy	41
3	K.P Sundareswaran	M. Tech	Professor	Industrial Engg.	42
4	M N Muralidhran	B.Sc Engg.	AP	Engg.	28
5	Binu Thomas	M. Tech	AP	Manufacturing Engg.	11
6	Toms Philip	M. Tech	AP	Engineering Design	9.5
7	Jibin. C. Jacob	M. Tech	AP	Material Science	7
8	Rakesh. R	M. Tech	AP	Engineering Design	4.5
9	Tenny Thomas	M. Tech	AP	Industrial Engg. & Mngmnt	5.5
10	Roshan Kuruvila	M. Tech	AP	Production	20

11	Richu Thomas	M. Tech	AP	Aerospace Engg.	4
12	Mathew.J.Joseph	M. Tech	AP	Manufacturing	4
13	Abu Mani	M. E	AP	Prodn Engg.	2.5
14	Meby Mathew	M. E	AP	Manufacturing Systems Management	2.5
15	Ashwin Chandy Alex	M. Tech	AP	Machine Design	6
16	Rony Thomas Murickan	M. Tech	AP	Manufacturing Engg.	2.5
17	Ajosh Abraham	M. Tech	AP	Energy Engg.	9.5
18	Tony Varghese	M. Tech	AP	Machine Design	2.5
19	Subin P George	M.S	AP	Engineering Design	4.5
20	Sherin Thampy	M. Tech	AP	Welding Technology	2.5
21	Manu Moses Jacob	M. Tech	AP	Mat. Sc.	1.5
22	Richu Zachariah	M. Tech	AP	Energy Engg.	1.5
23	Vipin Vijayan	M. Tech	AP	Manufacturing	1.5
24	Abi Varghese	M Tech	AP	Machine Design.	1.5
25	George Sebastian	M Tech	AP	Advanced Manufacturing and Production Management	2.5
26	Saju Sebastian	M.E.	AP	Internal Combustion	2.5
27	Sreerag V	M.Tech	AP	Machine Design	0.5
28	Jayakrishnan R	M.Tech	AP	Machine Design	1.5
29	Rohit Rajeev	M. Tech	AP	Engineering Design	-
30	Jojo Saju	M. Tech	AP	Thermal Engineering	0.5
31	Tom Sunny (Study Leave)	M. Tech	AP	Advanced Manufacturing and Production Management	
32	K.R Arjun (Study Leave)	M. Tech	AP	Industrial Engg. & Mngmnt	
33	Arun Thomas (Study Leave)	B. Tech	AP	Mechanical	

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

No. of Academic support staff sanctioned	No. of Academic support staff filled
10	10

15. Qualifications of teaching faculty with M. Tech/ Ph.D

Faculty with Qualification	Number
Ph. D	2
M. Tech	27

16. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl. No	PROJECT NAME	DETAILS OF FUNDING			FACULTY GUIDE
		Amount in Rs	Agency	Year	
1	Robot for Bore Well Rescue	15 Lakh	DST, Govt. Of India	2015	Rev. Fr Jose Kannampuzha
2	Rice Noodle maker with continuous production unit	1.36 Lakh	KSCSTE, Govt. Of Kerala	2015	Subin P George
3	Design and Modeling of Flapping Wing Air Vehicle	1 Lakhs	IIT – M Project Funding Contest	2015	Richu Thomas
4	Design and Modeling of Air Cushion Vehicle	20000	Institute of Engineer	2015	Richu Thomas
3	Patient Transfer Board	20,000	State Commissionerate for persons with Disability, Govt. Of Kerala	2014	Subin P George
4	Smart Walking Stick	20,000	State Commissionerate for persons with Disability, Govt. Of Kerala	2014	Subin P George

5	Cardamom drier	1 Lakh	DST, Govt. Of India	2014	Toms Philip
6	Table Top Power Operated Coconut Husking Machine	1 Lakh	DST, Govt. Of India	2013	Jippu Jacob
7	Soil Mithra	1 Lakh	DST, Govt. Of India	2013	Toms Philip
8	Pepper Separartor	1 Lakh	DST, Govt. Of India	2012	Ajosh Abraham

22. Awards / Recognitions received by faculty and students

Name	Award	Year
Prof. Abi Varghese	Nominated to Gandhian Young Technological Innovation (GYTI) Awards at Rashtrapati Bhavan Cultural Centre, President's Estate, New Delhi	2016
Prof. Ashwin Chandy Alex	Best Faculty awardconstituted by the college	2015-2016
Prof. Abu Mani	Best Faculty awardconstituted by the college	2015-2016
Prof. Tony varghese	Best Faculty awardconstituted by the college	2015-2016
Prof. Meby Mathew	Best Faculty awardconstituted by the college	2015-2016
Prof. Richu Thomas	Best Faculty awardconstituted by the college	2015-2016
Dr.Kurian Antonu	Best Faculty awardconstituted by the college	2015-2016

24. List of eminent academicians and scientists / visitors to the department.

SL.NO	NAME	DATE	TOPIC
1	M R K Menon, Aerosports, Trichur	5-03-2016	Aero modeling and carrier guidance
2	KR Mohan Ananthanarayanan & V Ramachandran, VSSC, Thiruvananthapuram	17-08-2015	Quality Engineering in Aerospace Fabrication
3	Mr V S K Shenoy, Manager HSE Training KNPC Mina - Al-Ahamadi Refinary Kuwait	12-08-2015	From Mediocrity to Excellence
4	J. Jayaprakash, Associate Director, VSSC, Thiruvananthapuram	09-04-2015	ISRO launch Vehicles
5	Sri Jasperlal, VSSC Trivandrum	28-03-2015	Propulsion Through Ages
6	Sunil Paul, Asst Prof., Mechanical Engineering, Muthoot Institute of Technology & Science, Puthencruz	30-08-14	Talk on "Robotics"
7	Capt. George Kurian, Former Director Coal India limited	01-08-2014	Motivation and Professional Challenges"

8	Dr. K Padmanabhan, Asst. Director and Head, centre for excellence in Nano composites, VIT University.	15-07-2015	"Recent trends in Nano Composites"

25. Seminars/ Conferences/Workshops organized & the source of funding
a) National

SL.No	TOPIC OF THE PROGRAM	DATE	SPONSORING AGENCY
1	Aero modeling and carrier guidance	5-03-2016	ISTE Students' Chapter
2	Technical talk on 'Quality Engineering in Aerospace Engineering,	17-08-2015	NIQR
3	Technical talk on Medio Crity to Excellence	12-08-2015	IEI Students' Chapter
4	Seminar on ISRO Launch Vehicles	09-04-2015	IEI Students' Chapter
5	Seminar on Propulsion Through Ages	28-03-2015	IEI Students' Chapter
6	Workshop on Employability quotient of the student from a Global perspective'	20-09-14	Association of Mechanical Engineers
7	IGNITION-2014	28-08-14	Association of Mechanical Engineers
8	Talk on "Robotics"	30-08-2014	IEI Students' Chapter
9	Seminar on "Motivation and Professional Challenges"	01-08-2014	IEI Students' Chapter

b) International:

AICERA 2015	
Topic	International Conference On Manufacturing And Materials Engineering (ICMME-2015)
Dates	23 & 24 July 2015
Venue	AJCE
Chief Guest	Sri. M. NARAYANA RAO.

Invited speakers	Sri. ABHAY K JHA, Head, Materials Processing Division, Vikram Sarabhai Space Centre, ISRO Trivandrum. 2) Sri. K. BHANU SANKARA RAO, Ministry of Steel Chair Professor, Mahatma Gandhi Institute Of Technology, Gandipet, Hyderabad 3) Dr. R. SANDHYA, Head, Fatigue Studies Section, Mechanical Metallurgy Division, Indira Gandhi Centre for Atomic Research, Kalpakkam.
No of papers	18
No of Posters	36
Publication of papers	Transactions of the Indian Institute of Metals, ISSN: 0972-2815 (Print) 0975-1645

31. Number of students receiving financial assistance from college, university, Government or other agencies:

I²U 2015

S.I No.	Title of Project	Team	Class	Faculty Mentor/ Co – Mentor
1	Human Hair Reinforced Bio-Composite	Richu J babu Philip Thomas Sony Mathew Sharon Rony Jacob	ME – S6	Dr. Soney C George
2	Design And Development Of Composite Eco-Wood And Derived Products From Eichronia Crassipes And Coir Pith	Clint T.C Ansen H. Mathew Jacob Roy Anson Mathew	ME – S8	Tony Vargese
3	Manually Operated Waste Compactor	Ram S. Pillai Rex lalan Rohith Radhakrishnan Sanu t. Raju	ME – S8	Francis K.
4	Modified Wheel Chair (As A Patient Transfer Device)	Sohil Varghese Samson Vishnu M. Thanooja Thankom Thomas	M.Tech ME – S2	Subin P. George
5	Efect Of Welding Parametters On Microstructure And Mechanical Properties On Friction – Stir Welding On Aluminum Alloys	Ajin George Dou Mathew Athul John Dilip Jo Thomas	ME – S8	Meby Mathew

6	Design Of A Small Scale Paper Recycling Unit	Jessin Jose Jobitt Joy Abraham Jerrin K. Job Rony Philip Paul Thomas	ME – S8	Subin P. George
7	Patient Lifting Device	Sohil Varghese Samson Vishnu M. Thanooja Thankom Thomas	M.Tech ME – S2	Subin P. George

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

SL.NO	NAME	DATE	TOPIC
1	M R K Menon, Aerosports, Trichur	5-03-2016	Aero modeling and carrier guidance
2	KR Mohan Ananthanarayanan & V Ramachandran, VSSC, Thiruvananthapuram	17-08-2015	Quality Engineering in Aerospace Fabrication
3	Mr V S K Shenoy, Manager HSE Training KNPC Mina - Al-Ahamadi Refinary Kuwait	12-08-2015	From Mediocrity to Excellence
4	J. Jayaprakash, Associate Director, VSSC, Thiruvananthapuram	09-04-2015	ISRO launch Vehicles
5	Sri Jasperlal, VSSC Trivandrum	28-03-2015	Propulsion Through Ages
6	Sunil Paul, Asst Prof., Mechanical Engineering, Muthoot Institute of Technology & Science, Puthencruz	30-08-14	Talk on "Robotics"
7	Capt. George Kurian, Former Director Coal India limited	01-08-2014	Motivation and Professional Challenges"
8	Dr. K Padmanabhan, Asst. Director and Head, centre for excellence in Nano composites, VIT University.	15-07-2015	"Recent trends in Nano Composites"
9	Mr.K.Manikandan, GM, Ashok	20-09-14	Challenges in Automotive job sector

33. Teaching methods adopted to improve student learning
   (i) Group Discussion
   (ii) NPTE Video lectures

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

SL.NO.	NAME OF THE EVENT.	COORDINATORS	PLACE.
1	Kissan Jyothi 2015	Tom Sunny Abi Varghese Mathew J Joseph	kokayar
2	Social Awareness Camp :Zero waste KOTTAYAM	Tom Sunny Jibin C Jacob	Mundakkayam
3	Kissan Jyothi 2015	Tom Sunny Mathew J Joseph Abi Varghese	Parathod
4	Share a Little- Care a Little	Rony T Murickan	AJCE
5	Kissan Jyothi 2015	Tom Sunny Abi Varghese	Kalaketty
6	Road Safety Week Campaign	Department of Mechanical Engineering & Automobile Engineering	CMS, Kottayam
7	Getting to Zero!	Department of Mechanical Engineering	AJCE
8	Blood Donation Drive and Donation Challenge	Rony T Murickan	AJCE

8. Department of Metallurgy

10.Numberof teachingposts: 9

	Sanctioned	Filled
Professors	1	1
AssociateProfessors	0	0
Asst.Professors	8	8

11. Facultyprofilewithname, qualification, designation, specialization,(D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	Specialization	Experience (years)	Ph.D.Students guidedforthe last4years
Dr. K.G.Samuel	Ph.D	Professor	MM	42	
Jithin Devasia	M.Tech	AP	MMS	2	
Manu Harilal	M.Tech	AP	MMS	0	
Siva Prasad	M.Tech	AP	MMS	0	
M. Rijesh	Ph.D	AP	MF		
P.K. Mandal	M.Tech	AP	Iron and steel making		
Mebin T Kuruvila	M.Tech	AP	Welding	0	
V. Vijeesh	M.Tech	AP		0	

M. Pooja	M. Tech	AP	Corrosion	0	

MM: Mechanical Metallurgy, MMS: Metallurgy & Material Science, MF: Metal Forming

13. Student-Teacher Ratio (programmewise): 13:1
14. Number of academic support staff (technical) and administrative staff; sanctioned andfilled:
    Technical: 4   Administrative: 0
15. Qualifications of teaching facultywithDSc/D.Litt/Ph.D/MPhil/PG.
        Ph.D   : 1   PG   : 8
16. Number of faculty with ongoing projects froma) National b) International funding agencies
    and grants received:

Projects	No of Faculties	Grants Received
National	1	Rs 20,000
International	Nil	Nil

19. Publications:
    1. Effect of Micro Arc Oxidation on Corrosion Behaviour of Magnesium AZ31 Alloy GTA
        Welds.
        M. Siva Prasad, M. Ashfaq, N. Kishore Babu, A. Sreekanth, K. Sivaprasad, V.
        Muthupandi
        *International Conference on Advances in Design and Manufacturing (ICAD&M'14),
        National Institute of Technology, Trichy; December, 2014.*
    2. A Comparison of Corrosion Resistance of Stainless Steel Fabricated with Selective Laser
        Melting and Conventional Processing
        Kurian Antony, M. Siva Prasad
        International Journal of ChemTech Research, 7(6), (2015), 2632-2635
    3. The Effect of Repeated Repair Welding on the Corrosion Behaviour of Austenitic Stainless
        Steel and Mild Steel Dissimilar Weldment.
        Paulson Varghese, M. Siva Prasad, Febin Joseph, Merrin John Varkey, Kurian Antony,
        A.Sreekanth
        *International Conference on Advances in Materials, Manufacturing and Applications
        (AMMA-2015), National Institute of Technology, Tiruchirappalli; April 2015.*
    4. Study of tensile behaviour of thermally aged alloy D9 wrapper tubes of fast breeder reactor
        using acoustic emission
        C.K. Mukhopadhyay, C. Phaniraj, T. Jayakumar and K.G. Samuel
        Strength, Fracture and Complexity 8 (2013/2014) 219–229
    5. Post-ECAP Ageing Treatment of Aluminum 6063 Alloy
        T. S. Shanon, N. Ahmed, M. Bharath, J. Valder, M. Rijesh

        American Journal of Materials Science 5(3C), (2015), 74-76
    6. Proceedings of the Annual International Conference on Emerging Research Areas (AICERA
        2015) Special Issue:
        K. G. Samuel, K. Sreekumar, M. Rijesh and Kurian Antony (Editors)
        Transactions of Indian Institute of Metals, July 2015
    7. Effect of welding voltage on microstructure and transition temperatures of MIG welded
        EN 8 steel weldments
        Kevin Davis, Jeevan James, Melvin Abraham, Stephen George Raju and K.G. Samuel

Total Publications per faculty:

Name of Faculty	Publications					
	No	Journal	Monographs	Books edited	Books with IBSN/ISSN Numbers	h-index
Dr. K.G. Samuel	53	41	Nil	Nil	Nil	10
Jithin Devasia	--	--				
Manu Harilal	--	--				
Siva Prasad	3	1				
M. Rijesh	17	7				
P.K. Mandal	36	16				
Mebin T Kuruvila	--	--				
V. Vijeesh	14	10				
M. Pooja	1	--				

20. Areas of consultancy and income generated: Nil
21. Faculty as membersin
c) Editorial Boards: 1
22. Student projects
a) Percentage of students who have done in-house projects including interdepartmental/programme: 100%
   b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
23. Awards/Recognitions received by faculty and students
   Faculty

Name	Semester	Award	Acheivement	Details
Dr.K.G.Samuel	2013-EVEN	Rs 1000/-	100 % pass	Nuclear Engineering. S8-ME
Jithin Devasia	2014-EVEN	Rs. 1000/-	100% Pass	Electrical, Electronic & Magnetic Materials. S4-MT
K.Sreekumar	2014-ODD	Rs 1000/-	100% Pass	Pyro, Hydro, Electro Metallurgy. S5-MT
Jithin Devasia	2014-ODD	Rs 1000/-	100% Pass	Metal Joining Technology. S5-MT
Manu Harilal	2014-ODD	Rs 1000/-	100% Pass	Fuels, Furnaces & Refractories. S5-MT
Dr. M. Rijesh	2015-EVEN	Rs 1000/	100% Pass	Secondary and advanced steel making. S6-MT
Dr. M. Rijesh	2015-EVEN	Rs 1000/-	100 % Pass	Non-ferrous Extractive Metallurgy. S6-MT

Manu Harilal	2015-EVEN	Rs 1000/-	100% Pass	Metallography and X-ray diffraction. S6-MT
M. Sivaprasad	2015-EVEN	Rs 1000/-	100% Pass	Design and selection of materials. S6-MT

Students

Name	Amount	Batch	Achievements
Paulson Varghese	1500/-	2012-16	Overall topper in Eng. Graphics-S1&S2
Paulson Varghese	1000/-	2012-16	Semester topper (Metallurgy- S1&S2)

24. Listofeminentacademiciansandscientists/visitorstothe department

No	Name	Position	Affiliation
1	Dr. UTS Pillai	Sr. Principal Scientist	CSIR-NIIST, Trivandrum
2	Dr. TPD. Rajan	Senior Scientist	CSIR-NIIST, Trivandrum

30. Details of Infrastructural facilities
a) Library
b) Internet facilities for Staff & Students
    20Mbps OFC back bone , Wi-Fi for the entire Department
    4 PCs provided to Staff of Metallurgy department
c) Class rooms with ICT facility
    3 class rooms provided with Green board, projector
d) Laboratories
   (i) Metallography Lab
   1. Specimen Cutting Machine
   2. Specimen Mounting Press using bakalite
   3. Belt Grinding Machine
   4. Hand Polishing Unit
   5. Double Disc Polishing Unit
   6. Electrolytic etching unit
   7. Optical Microscope with image analyzer

   (ii) Heat Treatment Lab
   1. Muffle furnace -2
   2. Tubular furnace -2
   3. Jominy quench test apparatus -1
   4. Quenching baths- 2

   (iii) Mechanical Testing Lab
   1. Screw Driven universal tensile testing machine
   2. Fatigue testing machine
   3. Vickers Hardness testing Machine
   4. Rockwell cum Brinell Hardness testing Machine

(iv) Electrochemical Lab
1. DC Power supply sources – 3 Nos

(v) Foundry Lab
1. Sieve shaker
2. Flowability meter
3. Permiability meter
4. Mold hardness tester
5. Mold permeability tester
6. Shatter index tester
7. Weighing balance

(vi) Welding Lab
1. Arc welkding unit 2 Nos
2. MIG welding unit 1 No
3. TIG welding unit 1 No
4. Pug cutting machine 1 No
5. Grinding machine 1 No
6. Hand cutting set 1 No

(vii)   Metal Forming Lab
1. Laboratory Rolling Mill -1 No
(viii)   NDT Lab
(ix)   Ultrasonic testing equipment
(x)   Magnetic particle testing equipment
(xi)   Dye penetrant testing kit

31. Numberofstudentsreceivingfinancialassistancefromcollege, university, governmentorotheragencies:

No	Batch	No of Students			
		College	University	Government	Others
1	2013-17	4			

9. Department of Chemical Engineering

9.   Numberof Teaching posts   (Calculation based on total students from Second Year)

	Sanctioned	Filled
Professors	1	0

AssociateProfessors	0	0
Asst.Professors	3	2

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Prof. V K Sasikumar	M Tech	Professor and HOD	Chemical Engg.	Acdamic Experience - 36 years Industrial Experience - 7 years
Mrs.. Jayasree.P.K	M.Tech, PhD*	Head in Charge	Process Control.	Academic- 13Years
Ms.Surya Sathyan	M.Tech	Assistant Professor	Chemical Plant Design	Academic -2.5 years
Rana Prathapan A D	M.Tech	Assistant Professor	M.Tech Chemical Engineering	Academic -3years
Anoop S S	M.Tech	Assistant Professor	M.Tech Nano Technology	Acdamic Experience - 8Months Industrial Experience - 4.1 years7years
Nikhi Maria Raju	M.Tech	Assistant Professor	M.Tech Computer Aided Process Design	Acdamic Experience - 8Months
Dr. Jose Varghese Parambil	M.Tech	Assistant Professor	PhD Chemical Engineering,	Acdamic Experience - 1.5 years

Rijin Tom M D	M.Tech	Assistant Professor	M.Tech Computer Aided Process Design	Industrial Experience - 2.1 years7years

13. Student-Teacher Ratio (programme-
     wise)   13:1 (Calculation based on total
 Students in Second Year)

15. Qualifications of teaching faculty
 With DSc/D. Litt/Ph. D/M.Phil/PG.   : PG- 8, Ph D - 1

21. Faculty as members in
    a) National committeesb) International Committeesc) Editorial Boards.

Name of the Faculty	Designation	National/ International	Committee/Board
Prof. V K Sasikumar	Life member	National	Indian Institute of Chemical Engineers
	Life member	National	Indian Society for Technical Education
	Fellow member	National	Institution of Engineers
	Life member	Regional	Energy Conservation Society of Kerala
	Life member	Regional	Thrissur Management Association
Prof. Jayasree.P.K	Member	National	Indian Society for Technical Education
	Associate Member	National	Indian Institute of Chemical Engineers

Ms.Surya Sathyan	Associate Member	National	Indian Institute of Chemical Engineers

23. Awards/Recognitions received by

Faculty and students

Name of the Faculty/ Student	Faculty/ Student	Awards/Recognitions	Organisation
Prof. V.K Sasikumar	HOD	EMINENT CHEMICAL ENGINEER award by the Indian Institute of Chemical Engineers, Kochi Regional centre,2015	IIChE
Prof. Jayasree.P.K	Assistant Professor	Best faculty award	MET'S School of Engineering
		Best faculty award	Amal Jyothi College of Engg, 2014-15
Ms Surya Sathyan ,	Assistant Professor	2nd Rank in B.Tech-Chemical engineering in 2011	University of Kerala
		Gold Medal for B. Tech	T K M College of Engineering, Kollam
Mr. Anoop S S	Assistant Professor	Scientific & Technical Education Development Council India Award for Oil and Gas safety.	STED Council
		NEBOS H IGC certification in Industrial safety,2012	National Examination Board for Occupational Safety and Health, United Kingdom

Ms. Nikhi Maria Raju	Assistant Professor	First Rank in M Tech Computer Aided Process Design, 2015	University of Calicut,
		Third Rank in B Tech Chemical Engineering, 2013	University of Kerala
Dr. Jose Varghese Parambil	Assistant Professor	President's Graduate Fellowship from National University of Singapore(NUS) for outstanding performance in research,2013	University of Singapore(NUS)
		Geoff Hewitt prize from Imperial College London for special achievement on the M Sc courses in Advanced Chemical Engineering, 2010.	Imperial College London
Mrs. Indira V	Assistant Professor	Third Rank in M Tech Chemical Process Control , 2010	University of Calicut
Mr. Rijin M D Tom	Assistant Professor	First Rank in Piping design and Plant Layout-Finishing,2014	School program from VK Design Technologies Bangalore

Sherin Mary Mathew	Student	Second prize in Jam English	SaintGits College of Engineering, Kottayam
Rinnu Ann Raju	Student	Second Best Artist	SaintGits College of Engineering, Kottayam
Chandu Das , Muhammed Shafeek, DannJose, Adarsh David Lal	Students	First prize for project Expo (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam
Muhammed Shafeek Adarsh David Lal	Students	First prize for chemist (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam
Chandu Das	Student	First prize for Aqua Rocket (Nakshatra 2K14) I^2U selection	Saint Gits College of Engineering, Kottayam Amal Jyothi College Engineering
Dann Jose Sebin Anto Allen Jose Sbu	Students	Second Prize in Product Launch	Mariam College, Kuttikanam
Amal S Mundayil Basil Jose	Students	First Prize in Paper Presentation (INFUCE 2014)	Mahatma Gandhi University College of Engineering, Muttam
Thasleem Ali	Student	First Prize in Pace Tournament In Cricket	St. Joseph College of Engineering, Pala
Basil Jose Chandu Das K Vinil Varghese	Student	Mad Chemist-First	DYUTHI 2015, GEC Thrissur
Bill C john Denish M D Sajid Kabeer	Student	Chem Car-First	DYUTHI 2015, GEC Thrissur

Shammas Saleem			
Chandu Das K Dann Jose	Student	Paper Presentation-First, Best Civil engg Award, Best Innovation Award	NAKSHATRA 2K15, Saintgits College of Engineering
Ajay Sunny K Akhil Joseph Akshay O V Allan Jose Sabu Dann Jose	Student	ADZAP-First	TEZORO 2K15,TKM College of Engineering, Kollam
Chandu Das K	Student	Chemist-First	College of Engineering, M G University
Dann Jose Chandu Das K Adarsh David Lal	Student	Project Expo-First	College of Engg, M G University
Dann Jose	Student	Tathva '15	NIT Calicut
Fajar Hisamudeen K	Student	3X3 foot ball - first	Rithu 2K15, TKM
Josy Johnson	Student	Treasure Hunt- first	Shristi 2K15, Saintgits College of Engineering
Karthik Suresh	Student	Badminton	Smash 2015, MG University
Mridul Hari	Student	PC hardware design- third	Nakshtra'15 ,Saintgits College of Engineering
Dann Jose	Student	Blue Print - Chem - Second	Tathva '15 NIT Calicut
Dann Jose Chandu Das K Adarsh David Lal	Student	Research Expo-First	Shaastra 2016, IIT Madras
Denish M D Ajay Sunny Vinil Varghese Akhil Babu	Student	Project Expo-First	GEC, Palakkad

Dann Jose Chandu Das K Adarsh David Lal	Student	FugenExpo- First, Best Innovation	SNGCE,Kadayirippu
Dann Jose Chandu Das K Adarsh David Lal	Student	Fermio 16, Best Project	S H Thevara
Dann Jose Chandu Das K Adarsh David Lal	Student	Project Expo- First	Aavishkar 16, Holy Kings, Muvattupuzha
Dann Jose Chandu Das K Adarsh David Lal	Student	Paper Presentation- First	Aavishkar 16, Holy kings, Moovattupuzha
Dann Jose Chandu Das K Adarsh David Lal	Student	Research Expo-First	Shaastra 2016, IIT Madras

24. Listofeminentacademiciansandscientists/visitorstothe department

Name	Designation	Organisation/Industry/Department
Mr. Suresh Kumar	Manager	Pollution Control Dept, FACT – Udyogamandal Division
Mr. Harinath	Manager	Manufacturing, BPCL, Kochi
Dr. Avinash Balakrishnan	Head and R & D manager,	Technocommercial and innovation centre, English India Clay Ltd.
Mr. Gadahar Reddy	Founder of Noppo Technologies,	Noppo Technologies, Bangalore

25. Seminars/Conferences/Workshopsorganized&thesourceoffunding
   a) National   : 1. Two week AICTE Sponsored FDP on Recent Advances in Nanoscience and Nanotechnology, from April 20 - May 1 2015, Organized by Amal Jyothi Center for Nanoscience and Technology in association with Dept. of Basic Science and Dept. of Chemical Engineering.

   b)International : NIL

26. Student profile programme/course wise:

| Year | Name of the Course/programme | Applications received | Selected | Enrolled | | Pass percentage |
				*M	*F	
2015 – 16	B. Tech - CH		62	39	23	NA

27. Diversityof Students

Year	Nameofthe Course	%of students fromthe samestate	%ofstudents fromother States	%of students from abroad
2015 – 16	B. Tech - CH	100	NIL	NIL

30. Detailsof Infrastructural facilities

a) Library   :   No of Texts-185,

    Journals   :   6

b) InternetfacilitiesforStaff&

Students   : Total 60 MBPS with Wi-Fi facility

c) Class rooms with ICT facility   : 3

d) Laboratories   : 1. Physical and Analytical laboratory
2.. Software lab(Common with IT)

        3. Fluid mechanics laboratory (Common with ME)
        4. Physical & Organic Chemistry Lab
        5. Mechanical Operations lab
        6. Chemical Technology Lab
        7. Heat Transfer Operations Lab
        8. Environmental Engineering Lab

31. Numberofstudentsreceivingfinancialassistancefromcollege, university, government or other agencies

| Batch | No. of Students | | | |
	Government	University	College	Other Agencies
2013-2017	23	0	0	0

32. Details on student enrichment programmes (speciallectures/workshops/seminar) with external experts
:

Sl.#	Topic	External Expert Name
1	Frontiers for Chemical Engineers	Dr G. Madhu, Syndicate Member , CUSAT
2	Nanotechnology A Myth or Reality' invited talk by Dr. Avinash Balakrishnan	Dr. Avinash BalakrishnanHead and R & D manager, Technocommercial and innovation centre, English India Clay Ltd. on October 20, 2015
3.	Nanotubes, Synthesis and Applications	Mr. Gadahar Reddy, Founder of Noppo Technologies, Bangalore on Jan 22, 2016

10. Department of Computer Applications

9. Numberof teachingposts:

	Sanctioned	Filled 2015	Filled 2014	Filled 2013	Filled 2012	Filled 2011	Filled 2010
Professors	6	0	0	0	2	1	1
Associate Professors	2	0	0	0	0	1	1
Asst. Professors	26	26	18	15	7	7	3

10. Faculty profile with name, qualification, designation, specialization,(D.Sc./D.Litt. /Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience		No. of Ph. D Students guided for the last 4 years
				In AJCE	Other Inst.	
Fr. Rubin Thottupuram	MCA, M. Tech, Ph. D	Assistant Professor	Computer science and engineering	5	2.5	-

Mr. T.J. Jobin	M.Tech	Assistant Professor	Network Communication	12.8	2	-
Mrs. Merin Manoj	M.Tech	Assistant Professor	Network Communication	8.5	2	-
Mrs. Lisha Varghese	MCA, M.E.	Assistant Professor	Computer science and engineering	8.4	3	-
Mr. Ajith G.S.	MCA, M. Tech	Assistant Professor	Computer science and engineering	6	9.5	-
Mr. Jinson Devis	MCA, M. Tech	Assistant Professor	Computer Communications	5	7.5	-
Mrs. Shelly Shiju George	MCA, M. Tech*	Assistant Professor	MCA	5	3	-
Sr. Elsin Chakkalackal	M.E. Ph. D (Pursuing)	Assistant Professor	Computer science and engineering	5	0	-
Mr. Juby Mathew	MCA, M Phil, M. Tech, Ph. D (Pursuing)	Assistant Professor	Computer Communications	6	7	-
Mrs. Jetty Benjamin	MCA	Assistant Professor	Computer Applications	1.8	10 Months	-
Mrs. Gloriya Mathew	M.Tech	Assistant Professor	Computer Applications	1.8	5 Months	-
Ms. Dilu Mariya Joseph	MCA	Assistant Professor	Computer Applications	1.8	6 Months	-
Ms. E.C.Nisha	MCA	Assistant Professor	Computer Applications	4	3.8	-
Ms. P.J.Maria	MCA	Assistant Professor	Computer Applications	11 Months	-	-
Ms. Jismy A.Khan	MCA	Assistant Professor	Computer Applications	2	2	-
Ms. Anit James	MCA	Assistant Professor	Computer Applications	8 Months		-
Ms. Sona Maria	MCA	Assistant Professor	Computer Applications	8 Months		-
Sruthimol Kurien	MCA	Assistant Professor	Computer Applications	7 Months		-
Ankitha Philip	MCA	Assistant Professor	Computer Applications	7 Months		-
Binimol Babu	MCA	Assistant Professor	Computer Applications	7 Months		-
Teenu V Therese	MCA	Assistant Professor	Computer Applications	7 Months		-

Nimmy Francis	MCA	Assistant Professor	Computer Applications	7 Months		-

13. Student-Teacher Ratio (programme wise)

S-T Ratio	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
MCA	15:1	15:1	15:1	15:1	15:1	12:1	6:1

14. Number of academic support staff (technical) and administrative staff;sanctioned and filled

Course	Sanctioned Lab Instructor	Filled Lab Instructor
MCA	5	5

15. Qualifications of teaching faculty with D Sc/D. Litt/Ph. D/MPhil/PG.

Qualification	Number of faculties
M. Phil	1
PG	22
Ph. d*	3

*- doing PhD

19. Publications:

a) Publication per faculty

Number of papers published in peer reviewed journals (national/ International) by faculty and students

Number of publications listed in International Database (For Eg: Web ofScience, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory,EBSCOhost,etc.)

Monographs, Chapter in Books, BooksEdited, Books with ISBN/ISSN numbers with details of publishers, Citation Index, SNIP, SJR, Impact factor, h-index

Name	Publications	No: of Publications listed in international databases	Monographs	Chapter in books	Books edited	Books with ISBN/ISSN No.	Citation index	SNIP	SJR	Impact Factor	h-index
Fr. Rubin Thottupuram	10 (C) 2 (J)	2					3				1
Mr. Ajith G.S	NIL			1							
Mrs. Lisha Varghese	5 (C)										
Mr. Jinson Davis	1(C) 1(J)										
Mrs. Shelly Shiju George	4(C) 3 (J)										

Sr. Elsin Chakkalackal	2 (C)													
Mr. Juby Mathew	2(C) 5 (J)													
Merin Manoj	NIL													
Mr. T.J.Jobin	1(C)													
Mrs. Jetty Benjamin	NIL													
Mrs. Gloriya Mathew	2(C) 3 (J)													
Mrs. Dilu Mariya Joseph	1(C)													

22. Student projects
    a) Percentage of students who have done in-house projects including inter-departmental/programme: 95%
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ otheragencies: 5%
25.   Seminars/Conferences/Workshopsorganized & the source of funding
a) National   b) International

Sl No	FDP/STTP/WORKSHOP /SEMINAR	Title of the Program	National/ International/Re gional Level	Funding Agency/ Sponsored By
4	ISTE e- workshop	Steps2Resesearch	National	ISTE Kerala chapter
5	ISTE workshop	Latex Typesetting Tool	State	ISTE AJCE
6	ACM workshop	Latex Typesetting Tool	State	ACM
7	ISTE e- workshop	Technical Communication	National	ISTE, IIT Bombay
8	NACORE (National Conference on Research in Emerging Areas)	Conference – Cyber Security	National	ISTE, NIDY, KSCSTE

26.   Student profile programme/coursewise:

Nameofthe Course/programme	Applications received	Selected	Enrolled		Pass percentage
			M	F	
MCA, 2011	110	55	17	38	96.36%
MCA, 2012	70	52	36	16	90.38%
MCA, 2013	80	55	22	33	-
MCA,2014	40	25	15	10	-
LE MCA,2014	115	60	51	9	-
DD MCA,2014	80	59	28	31	-

MCA, 2015	80	43	14	29	
LE MCA, 2015	75	32	24	35	
DD MCA, 2015	105	58	3	29	

*M=Male *F=Female

29. Student progression

Studentprogression	Against%enrolled
Employed	
Campus recruitment	69
Other than campus recruitment	117
Entrepreneurship/Self-employment	6

31. Number of students receiving financial assistance from college, university, government or other agencies

    Scholarship from Management: 20
    MCM scholarship: 39

32. Details on student enrichment programmes (speciallectures/workshops/seminar)with external experts

Date	Title	Conducted by
19/20 September 2014	Steps2Research	ISTE and CSI AJCE Chapters
29 September 2014	Cloud Computing	Oracle Academy
22/23 December 2014	Latex Workshop	ISTE
27th October 2015	Latex Workshop	ACM
27th June 2015	Python Workshop	Mr.Ignatious Kunjumon, Director, CUSAT
26th November 2015	Techie Hangout **-** Agile Development - SCRUM Method	Sudeep Balachandramenon, Technical Architect/Consultant at AT&TMiddletown, New Jersey Information Technology and Services
15th September 2015	Techie Hangout - DUMB - THE RIGHT WAY	Mr. Walter F. (Walt) Edwards, CEO of Medical Accounts Receivable Systems (MARS), USA.
3rd February 2016	Webinar - Assurance Services, Current trends and career paths	TCS

34. Participation in Institutional Social Responsibility (ISR) and Extension activities
    1. An Ongoing Social outreach program is organized for students of UP and HS of St. Mathews H.S.Elikkulam and St. Thomas H.S.S. Erumely which gives an opportunity for them to involve in real requirements of the society.

11. Department of Basic Sciences

6.   Participation of the department in the courses offered by other departments

S.No		Subject	Program & Branch
1.		Calculus	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
2.		Differential Equations	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
3.		Engineering Physics	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
4.		Engineering Chemistry	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
5.		Mathematical Methods For Nanotechnology	M.Tech Nano
6.	Kerala Technological University	Analytical Methods in Engineering	M. Tech CASE SECM
7.		Optimization Techniques for Engineering Applications	M. Tech PEPS &ES
8.		Analytical Foundations for Communication Engineering	M. Tech CE
9.		Advanced Engineering Mathematics	M. Tech MD
10.		Numerical Methods	M. Tech MD
11.		Engineering Mathematics I	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
12.		Engineering Physics	B. Tech AUE, CH CE, ME, MT, ECE, EEE, CS, IT, CH
13.		Engineering Chemistry and Environmental Science	B. Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
14.		Engineering Mathematics II A	B. Tech AUE, CE, ME, MT, ECE, EEE, CH
15.		Engineering Mathematics II B	B.Tech CS ,IT
16.	M.G. University	Engineering Mathematics III	B.Tech AUE, CE, ME, MT, ECE, EEE, CS, IT, CH
17.		Engineering Mathematics IV A	B. Tech AUE, CE, ME, MT, ECE, EEE,CH
18.		Engineering Mathematics IV B	B.Tech CS, IT
19.		Physical and Analytical Chemistry	B.Tech CH
20.		Analytical Chemistry Lab	B.Tech CH
21.		Organic Chemistry	B.Tech CH
22.		Organic Chemistry Lab	B.Tech CH

23.		Mathematical Foundations for Computer Science	MCA
24.		Probability and Statistics	MCA
25.		Operations Research	MCA
26.		Principles of Management	MCA
27.		Analytical Foundations for Communication Engineering	M. Tech CE
28.		Mathematical Foundations for Computer Science	MCA(Integrated)
29.		Statistics -1	MCA(Integrated)
30.		Statistics -2	MCA(Integrated)
31.		Operations Research	MCA(Integrated)
32.		Advanced Engineering Mathematics	M. Tech ME
33.		Analytical Methods for Engineering	M. Tech CASE, SECM
34.		Optimization Techniques	M. Tech PEPS &ES
35.		Computational Intelligence	M. Tech CSE
36.		Numerical Methods for Civil Engineering	M. Tech CASE

9.   Number of Teaching posts:

	Sanctioned	Filled
Professors	5	5
Associate Professors	1	1
Asst. Professors	16	16

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 5 years
1.	Joy Cyriac	M. Sc	Professor	Statistics	48	Nil
2.	Soney C.George	M. Sc, Ph. D (PDF)	Professor	Chemistry (Polymer Science)	17	1 (Guided) , 6 guiding
3.	Jacob Philip	M. Sc, Ph. D (PDF)	Professor	Applied Physics and Instrumentation	30	5 (Guided), 5 guiding

4.	Lisa Mathew	M.Sc, M. Phil, Ph. D	Professor	Mathematics (Theoretical computer science)	18	Nil
5.	K. Karunakaran Nair	M. Sc. Ph. D	Professor	Physics (Electronics)	35	Nil
6.	Abin Manoj	M. Sc. Ph. D	Assoc. Professor	Physics	13	Nil
7.	Lisa Rani Alex	M. Sc, M. Phil, B.Ed	Asst. Professor	Mathematics (Graph Theory)	7	Nil
8.	Linu Tess Antony	M. Sc, B. Ed	Asst. Professor	Mathematics	6	Nil
9.	Deepamol S	M. Sc, M. Phil	Asst. Prof	Mathematics(Topology)	8	Nil
10.	Thomaskutty Stephen	M. Sc	Asst. Professor	Mathematics	4	Nil
11.	Jasmine Mathew	M. Sc	Asst. Professor	Mathematics (Graph Theory)	4	Nil
12.	Nimmy Chacko	M. Sc	Asst. Professor	Mathematics	4	Nil
13.	Sini Rose Devasia	M. Sc M. Phil, B. Ed	Asst. Professor	Mathematics (semigroup theory)	5	Nil
14.	Rino Laly Jose	M.Sc B.Ed	Asst. Prof	Pure Chemistry	9	Nil
15.	Rose Jacob	M.Sc, M. Phil	Asst. Professor	Physics	3	Nil
16.	Nobin Thomas	M.Sc, M. Phil	Asst. Professor	Mathematics	3	Nil
17.	Deepa H. Nair	M.Sc, PhD	Asst. Professor	Mathematics (Applied Analysis)	2	Nil
18.	Dilip Kumar	M.Sc, B Ed, PhD	Asst. Professor	Mathematics (Special Functions)	2	Nil
19.	Jaimon Yohannan	M. Sc, Ph. D	Asst. Professor	Physics	3	Nil
20.	Nelson Joseph	M. Sc, M. Phil, PhD	Asst. Professor	Chemistry	1	Nil
21.	Thomaskutty Jose	M. Sc	Asst. Professor	Chemistry	2	Nil
22.	Anand K	M. Sc	Asst. Professor	Chemistry		Nil

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Sanctioned	Filled
Support staff (technical)	4	4

Administrative staff	Nil	Nil

15. Qualifications of teaching faculty with D. Sc/ D.Litt./ Ph.D/ M. Phil / PG.

Degree	Number
Ph. D	8
M. Phil	7
P.G	22

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

S.No	Name of faculty	Funds Available
1.	Dr Soney C George	33.05 Lakhs

19. Publications: Details

∗ a) Publication per faculty: 2.9

S.No	Faculty	No of papers	Mono graphs	Chapters in books	Books Edited	Books with ISBN/ISSN numbers with details of publishers
1.	Dr Soney C George	6	1	4	1	1, S.Chand, New Delhi
2.	Dr Deepa H Nair	1	Nil	Nil	Nil	Nil
3.	Dr. Dilip Kumar	2	Nil	Nil	1	Nil
4.	Dr. Jacob Philip	34	Nil	1	1	1, Intech Publishers, Croatia 1, Educational Publishers, Cochin

23. Awards / Recognitions received by faculty and students

S.No	Faculty	Awards / Recognitions

1.	Dr Soney C George	Fellow, Royal Society of Chemistry, 2014 Best Faculty Award (Professor Category)-AJCE-2013-2014 Best Faculty Award (Professor Category)-AJCE-2011-2012 member for revising the syllabus of Engineering Chemistry 2011 and 2015 Externals examiner for Ph.D Viva Voce Examination (Bharathiar University) Delivered 8 invited talks at various forums
2.	Dr Jacob Philip	Fellow, Alexander von Humboldt Foundation (Germany) Fellow, Institute of Physics (UK) Fellow, Kerala Academy of Sciences Invited speaker at several seminars
3.	Lisa Mathew	Delivered 2 invited talks at various forums
4.	Karunakaran Nair	Top Performing Faculty Award (Professor Category)-AJCE-2012-2013
5.	Sini Rose Devasia	Top Performing Faculty Award (Professor Category)-AJCE-2012-2013
6.	Rose Jacob	Top Performing Faculty Award (Professor Category)-AJCE-2012-2013
7.	Dilip Kumar	Top Performing Faculty Award (Professor Category)-AJCE-2012-2013

24. List of eminent academicians and scientists / visitors to the department

1.	Dr A M Mathai	Director, C M S Pala
2.	Dr. Shahul Hamid	Kannur University
3.	Dr K. Reji Kumar	Assistant Professor, NSS Nilamel
4.	Sr Germina	Professor ,Central University
5.	Dr Sunil Mathew,	Professor, NIT Calicut
6.	Dr Swaminathan	Ramanujam Research Centre Chennai
7.	Dr. M.S. Samuel	Director MCA, MACFAST
8.	Dr. K.K. Jose	Former Principal, St. Thomas College, Pala
9.	Dr. K. Jayakumar,	Calicut University
10.	Dr. N. Balakrishna	Professor , CUSAT
11.	Dr. M.J. Jacob	Professor, NIT Calicut
12.	Dr. Debashish Sen Gupta	Professor, ISI Calcutta
13.	Dr. Sebastian George	Professor, St. Thomas College, Pala
14.	Dr. E.S Jeevanand	Professor ,U.C. College, Aluva
15.	Dr. Ho Sung .Kim,	Professor ,University of Newcastle, Australia
16.	Professor M A Pathan,	Director and Retired Professor in Mathematics and Statistics, Aligarh Muslim University Professor, Centre for Mathematical and Statistical Sciences (CMSS), Peechi Campus, KFRI, Peechi, Trissu
17.	Dr. Joanna Ewa Izdebska	Professor, Warsaw University of Technology, Poland

18.	Adelaja Osibote	Professor , Cape Penisula University of Technology, South Africa	

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

	Title	Dates	Source of funding	Remarks
1.	Faculty Development Programme on Recent Advances in Nanoscience and Nanotechnology	20th April - 1st May 2015	AICTE	
2.	Inauguration of Science Popularisation programme on " Introduction of Polymer Chemistry to the undergraduate students of Mahatma Gandhi University	October 2015 to September 2016	KSCSTE	

30. Details of Infrastructural facilities

 a) Library with 450 books

b)   Internet facilities for Staff & Students: 17 PCs with internet and intranet access

c) Class rooms with ICT facility   : NA

 d) Laboratories   : Physics Laboratory

                                                                               : Chemistry Laboratory

35. SWOC analysis of the department and Future plans

Strengths (Additional)

1. The department has a strong team of committed and experienced faculty
2. Eight faculty members have Ph. D degree, Seven have M. Phil degree and two have worked as post doctoral fellows in a foreign universities
3. The department has received project funding worth Rs. 88 lakhs from various national agencies.

12. Department of Humanities

4. Names of Interdisciplinary courses and the departments/units involved –Principles of Management, Financial Mangement ,Economics and Communication skills , English ,Technical Skills ,Soft Skills .

5.   Annual/ semester/choice based credit system (programme wise)   semester -NA

6.   Participation of the department in the courses offered by other departments

S.No	Subject	Program & Branch
1	Principles of Management	MCA
2	Principles of Management	Lateral MCA
3	Economics and Principles of Management	B.Tech AUE,CE,ECE,IT,ME, EEE,CS,MTG
4	Financial Management	B.Tech IT
5	Communication Skills	B.Tech AUE,CE,ECE,IT,ME, EEE,CS,MTG
6	Soft Skills	B.Tech AUE,CE,ECE,IT,ME, EEE,CS,MTG
7	Career Readiness	B.Tech AUE,CE,ECE,IT,ME, EEE,CS,MTG
8	English	Integrated MCA
9	Technical English	Integrated MCA

9.   Number of teaching posts

	Sanctioned	Filled
Professors	3	3
Associate Professors	Nil	Nil
Asst. Professors	5	5

10.   Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. V. J. Sebastian Narively	MA PH.D	Professor	English Language and Literatue	49	Nil
EM Gracy	MA	Professor	Economics	37	Nil
P K Kuruvilla	M A B Ed	Professor	Economics	31	Nil
Yelana Thomas	M.A. B.Ed	Asst. Professor	English Language and Literature	9	Nil
Shamini James	MBA (Finance)	Asst .Professor	MBA (Finance)	10	Nil

Jose Dominic Joseph	MTM BEd	Asst .Professor	Tourism	31	Nil
Sangeeta S	M.A. B.Ed	Asst. Professor	English Language and Literature	5	Nil
Jince Kappen	MPE	Asst. Professor	Physical Education	7	Nil
Thomas Paul	MBA	Placement Officer	Marketing	21	Nil
Rony Tom	MCA	Assistant Public Relation Officer	Programming	4	Nil
Fr Joseph Maniangatt	MA, PD,EdS (USA)	Counsellor	Counselling	21	Nil
Fr Mathew Mulangacheriyil	MA (Soiology) MS (USA)	Counsellor	Counseling	6	Nil
Sr. Molly Joseph AO	Diploma in Counselling	Counsellor	Counselling	4	Nil

14.   Number of academic support staff (technical) and administrative staff; sanctioned and filled-1

15.   Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Degree	Number
Ph.D	2
M.Phil	Nil
P.G	5

19.   Publications: Details

∗   a) Publication per faculty: 4

Jince Kappen:

1. Co- authored a research paper published in International Journal of Scientific Research, Vol.I, Issue VIII. August 2013, 431-432, ISSN No.2277-8179 with Dr. Suresh Kutty K and Sleem M. K titled Effect of Progressive Relaxation Training on Selected Psychological Variables of College Students
2. Co- authored a research paper published in International Journal of Scientific Research, Vol.II, Issue IV. April 2013, 323-325, ISSN No.2277-8179 with Dr. Suresh Kutty K

titled Effect of Moderate Hypoxia on Selected Biochemical and Physiological Variables of Middle and Long Distance Runners

3. Authored a research paper published in International Journal of Scientific Research, Vol.I, Issue VII. December 2012, 163-165, ISSN No.2277-8179 titled Effect of Sand Running and Weight Training on Selected Physiological Variables of College Men

4. Authored a research paper published in Indian Journal of Applied Research, Vol.II, Issue II. November 2012, 134, ISSN No.2249-555X titled Effect of Aerobic Training on Body Mass Index on Sedentary Obese Women

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme   NA

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies   NA

23. Awards / Recognitions received by faculty and students
   - Dr. Sebastian Narively *: LIMCA laureate as 'India's Youngest Lecturer'*-
                                 LIMCA BOOK OF RECORDS 2001
   - Ms . Yelana Thomas: *Best Paper Presenter Award* -SET Conference, VIT,   Vellore -June 2015.
   - Ms. Shamini James: *Best Faculty Award* , Amal Jyothi -2013-14.

24. List of eminent academicians and scientists / visitors to the department

   Dr. K.K John –Head, Dept of Economics, St. Thomas College Palai

30. Details of Infrastructural facilities

 a) Dept Library with books and CDs to facilitate students for the placement

b) Internet facilities for Staff & Students

c) Class rooms with ICT facility

d) Laboratories –

   - Language Lab – To help students develop their skills
   - Softskills Lab – To help students prepare for their placements

e) Interview Cubicles – To conduct mock interviews

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