

## The Spoken Tutorial project

- ▶ Self explanatory: uses simple language
- ▶ Audio-video: uses multisensory approach
- ▶ Small duration: has better retention
- ▶ Learner-centered: learn at your own pace
- ▶ Learning by doing: learn and practice simultaneously
- ▶ Empowerment: learn a new FOSS

## Target group

- ▶ Undergraduates/Postgraduates
- ▶ Research scholars
- ▶ Teachers

The Spoken Tutorial Project Team conducts workshops on DWSIM and several FOSS using spoken tutorials and gives certificates to those who pass an online test.

For more details, please write to [contact@spoken-tutorial.org](mailto:contact@spoken-tutorial.org)

<http://dwsim.fossee.in>

General Queries:

[contact\\_dwsim@fossee.in](mailto:contact_dwsim@fossee.in)

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# Spoken Tutorial



### Contact Us

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## Overview

DWSIM is an open-source CAPE-OPEN compliant chemical process simulator for Windows, Linux and Mac. Built on the top of the Microsoft .NET 4.0 and Mono Platforms and featuring a rich Graphical User Interface (GUI), DWSIM allows chemical engineering students and chemical engineers to better understand the behavior of their chemical systems by using rigorous thermodynamic and unit operations models with no cost at all.

## Features

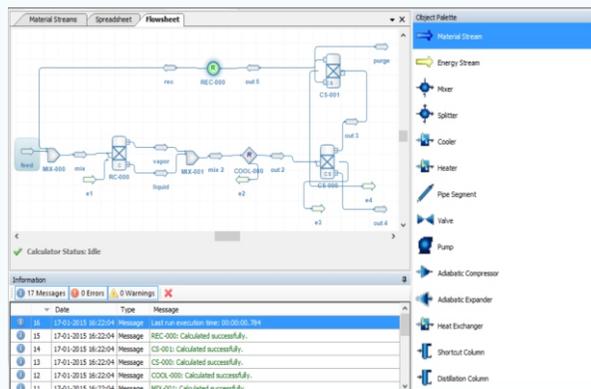
**DWSIM has an easy-to-use graphical interface with many of the features present in commercial simulators:**

- ▶ VLE, VLLE, SLE & Aqueous Electrolyte calculations using Equation of State, Activity Coefficient & Rigorous Distillation/ Absorption Column models
- ▶ Supports CAPE-OPEN Unit Operations and Thermo 1.0/1.1 Property Packages
- ▶ Thermodynamic Equilibrium and Property Calculators
- ▶ Supports ChemSep's Component Database, Column Model & Chemical Reactions/Reactors
- ▶ DWSIM supports the following Flash types: Pressure - Temperature (PT), Pressure - Enthalpy (PH), Pressure -Entropy (PS), Pressure - Vapor Fraction (PVF) and Temperature - Vapor Fraction (TVF)

## Downloads

You can get started by visiting <http://dwsim.inforside.com.br/wiki>

- ▶ It will give you a general idea of DWSIM features. All the links from Downloads to Tutorials can be found on the left hand side pane



The recycle and purge in synthesis of Methanol

## Flowsheeting Project

The Flowsheeting Project aims to port the flowsheet created for any process development project, using the Free and Open Source Software DWSIM.

**The objectives of this project are:**

- ▶ To make it easy for students to create their process flowsheet directly in DWSIM
- ▶ To make available a large number of flowsheeting examples through crowdsourcing
- ▶ To demonstrate the power of DWSIM to the industry and to encourage them to adopt it
- ▶ To bring good students to the attention of industry for possible internship and employment
- ▶ To serve as the starting point for more advanced simulation, such as dynamic simulation, startup and shut down simulations using other open source simulators such as OpenModelica

## Textbook Companion

The Textbook Companion (TBC) activity aims to port solved examples from standard textbooks using a Free and Open source software.

Create Textbook Companions for DWSIM. Earn attractive honorarium and certification.

**The objectives of this project are:**

- ▶ To make individuals learn FOSS through a practical approach
- ▶ Provide a huge database of Textbook Companions as a learning resource
- ▶ To make it easy for users of such text-books to start using FOSS
- ▶ To improve the documentation available for FOSS

## Lab Migration

Migrate labs that use proprietary software to DWSIM. Colleges can save a large amount of money that is spent on procuring licenses for commercial software by switching to FOSS.

**The Lab Migration team helps in the following ways:**

- ▶ Provide suggestions on the different ways FOSS can be implemented in the laboratory
- ▶ Coordinate the migration of the lab to a FOSS only laboratory
- ▶ Provide solutions to the lab's problem statements
- ▶ Conduct DWSIM workshops