

FOSSEE

Free and Open Source Software in Education (<http://fossee.in>) provides free support on FOSS (free and open source software) to eliminate the use of proprietary/commercial software packages in Science and Engineering Education across India. The shift to FOSS packages will help educational institutions monetarily.

The flagship activities promoted by the FOSSEE team are:

Textbook Companion: involves creating codes for solved examples of standard textbooks using FOSS. It is available online for free download and use. The contributors of these Textbook Companions are students and the faculty of colleges from different parts of India. Students and faculty involved in Textbook Companion are given honorarium and certificates for their efforts.

Lab Migration: As long as a college uses proprietary tools as part of their lab curriculum, we cannot eliminate the use of commercial software. The Lab Migration activity aims to migrate college labs using proprietary software to a FOSS only lab. The FOSS code created by a student/teacher is released in open source code for public use. Students and faculty involved in Lab Migration are given honorarium.



Photo: Spoken Tutorial SELF Workshop.

SELF Workshops & Forum Support: FOSSEE team provides domain expertise to SELF workshop(s) which are conducted by the Spoken Tutorial project. Additionally, the FOSSEE team provides forum support, (<http://forums.spoken-tutorial.org/>) where the students post queries if any, post-workshop. The FOSSEE domain experts duly answer these queries.



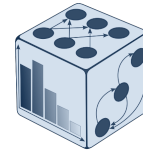
Photo: 5th Scipy India Conference.

Conference: Scipy India - an international conference on scientific computing with Python, is organized every year by FOSSEE since 2009. One of the goals of the conference is to combine education, engineering, and science with computing through the medium of Python.

Currently, FOSSEE team promotes the following software extensively:



Scilab is a free and open source software for numerical computation developed by Scilab Enterprises, France. It is a FOSS alternative to MATLAB. It also includes Xcos which is an open source alternative to Simulink. The Scilab team have successfully created more than 275 Textbook Companions and ported 12 labs through the Lab Migration activity till date. To increase ease of executing Textbook Companion code online, FOSSEE has ported TBC on GARUDA cloud <http://scilab.in/scilab-on-cloud>. Please visit <http://scilab.in> for more details.



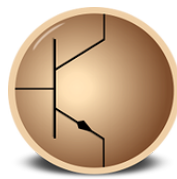
COIN-OR or **CO**mputational **IN**frastructure for **OR**perations **R**esearch is a project to build and support an open-source software for operations research and its applications. **Simpy** (Simulation in Python) is an open source, Python-based, discrete-event simulation software. OR Tools at FOSSEE is promoting COIN-OR, Simpy and other FOSS by developing tutorials, textbook companions and software interfaces in Scilab and Python. For more details please visit <http://or.fossee.in>



OpenFOAM is a free, open source CFD software package developed by OpenCFD Ltd and distributed by the OpenFOAM Foundation. Tutorials in the form of web-casts, for self learning OpenFOAM have been developed by our team. These are available free of cost at <http://cfd.fossee.in>.



Python is a general-purpose interpreted, high-level, object-oriented programming language that is used in a wide variety of application domains. The Python team promotes the use of the language through Python Textbook Companion. Under Python Textbook Companion, 53 textbook companions have been completed. For more information visit <http://python.fossee.in/>



Oscad is developed by the FOSSEE team at IIT Bombay. It is an EDA tool for circuit design, simulation, analysis and PCB design. Free tutorials of Oscad are available at <http://oscad.in/resources/tutorials>.