

Today, SMEs and Govt. departments are moving to Open Source Software like Linux OS. Students with this knowledge will have an edge in the job market. They can also become entrepreneurs and use Open Source Software in their businesses, and save money vs., if they were using commercial software. Net - it is a win-win situation for all. We are having a very good experience with colleges across the length and breadth of India with this format. They start with one and move to cover more batches, more departments, different FOSS series....All working together to Bridge the Digital Divide in our nation.

About School Programme

[Click here School Brochure](#)

See the Documents given below to know about all the courses we offer and how easy it is to avail of this training and also get an idea on all the wonderful benefits to students.

[Click here Information on Training PPT](#)

Use the above PPT to motivate and train your faculty.

[Click here E-Brochure](#)

See the pdf given below for information on which Spoken-tutorial software is suited for which department.

[Click here Sample Time Table Mapped with ST courses - Engineering](#)

[Click here Sample Time Table Mapped with ST courses - Arts/Science/Commerce](#)

See the pdf given below for information on which FOSS would be relevant for which course using Spoken-tutorial.

[Click here Matching spoken-tutorial](#)

[Click here Change in Training Policy](#)

Progress To Date

The trainings started in July 2011. These have spread across several Institutions- Degree colleges, Polytechnics, ITIs and even Schools, NGOs, Govt. Offices and some Corporates. To date, around 4965000 students and teachers from all states of India, have taken this Software training. Students from rural places have also benefited from this training. Students are using Linux, Python, PHP & MySQL, C/C++, Java and Scilab in their curriculum. Several colleges are going for Lab Migration, which is switching from Matlab (proprietary) to Scilab. Academia is using LaTeX the de facto standard for technical writing. We have dedicated colleges acting as RESOURCE centers in all states of India.

Refer to the India Map Link: <http://spoken-tutorial.org/statistics/>

Software Offered

Currently Spoken Tutorial project offers software training on the below mentioned list of software, applications and programming languages.

Spoken Tutorial Software Series

No.	Software	Certificate Criteria	Application
1	Basic IT Skills		Learn how to use

	package		<ul style="list-style-type: none"> ▪ The Linux operating system ▪ LibreOffice Suite - for basic Office applications and ▪ Firefox web browser - to browse the internet safely <p>This package is useful to all who wish to learn basic IT skills. Absolute must for beginners.</p>
2	Applications of GeoGebra	Certificate	Applications of GeoGebra Interactive Geometry, Algebra and Calculus application for UG/PG students (12th standard and above) as well as Research Scholars.
3	Arduino	Certificate	<p>Arduino is open source hardware, software and micro-controller based kit. It is used for building digital devices and interactive objects that can sense and control physical devices.</p> <p>Useful for High School and UG/PG Electronics students, hardware professional.</p>
4	Ascend	Training only, No certificates	<p>ASCEND is a free, open source, mathematical modelling system.</p> <p>Its main uses have been in the field of chemical process modelling, with its novel modelling language conventions and powerful solver. Useful for UG/PG Chemical Engg and Chemistry students.</p>
5	Avogadro	Certificate	<p>Avogadro is a free and open source, advanced molecule editor and visualizer designed for cross-platform use in computational chemistry, bioinformatics, etc. It offers flexible high quality rendering.</p> <p>Useful for UG/PG Chemistry and Bioinformatics students.</p>
6	BASH	Certificate	<p>Bash is a "Unix shell" command-line interface for interacting with the operating system. Bash has the ability to run an entire script of commands, known as a "Bash Shell script" or "Shell script".</p> <p>Familiarity with GNU/Linux command lines, and familiarity with basic programming concepts is a pre-requisite for learning BASH. Polytechnic/UG/PG computer hardware students and system administrators will greatly benefit by learning to automate common tasks using BASH.</p>
7	Biopython	Certificate	<p>Biopython is a collection of Python tools for computational biology and bioinformatics. Biopython contains modules and classes to represent protein sequences, nucleic acid sequences and sequence annotations.</p> <p>Useful for UG/PG Bioinformatics students.</p>
8	Blender	Certificate	<p>Open source equivalent to Maya and 3DMax. Useful to create 3D Animation for Architecture & Animation students.</p> <p>Can be used by UG/PG Civil Engineering students, also.</p>
9	C and C++	Certificate	Powerful features, simple syntax, and portability make C a preferred

			<p>language among programmers, for business and industrial applications. Widely used in the development of operating systems.</p> <p>Useful for High School and UG/PG CSE/CS/IT students and anyone who wishes to learning basic programming.</p>
10	Advanced C	Training only, No certificates	<p>For Advanced C series, learner should necessarily go through C and C++ series beforehand.</p> <p>Useful for High School and UG/PG CSE/CS/IT students and anyone who wishes to learning advanced programming.</p>
11	Advanced C++	Certificate	<p>For Advanced C++ series, learner should necessarily go through C and C++ series beforehand.</p> <p>Useful for UG/PG CSE/CS/IT students and anyone who wishes to learning advanced programming.</p>
12	CellDesigner	Certificate	<p>CellDesigner is a process diagram editor for drawing gene-regulatory and biochemical networks. CellDesigner is used for user-friendly visualization Modeling and Simulation of genetic regulatory networks, Protein networks and metabolic networks.</p> <p>Useful for UG/PG Bio-Chemistry students.</p>
13	Chemcollective Virtual Labs	Certificate	<p>ChemCollective Virtual Labs is a simulation of a chemistry laboratory. It allows students to explore and reinforce fundamental concepts, select various standard reagents (aqueous) and use them as they use in a real laboratory.</p> <p>Useful for Chemistry students from 9th standard onwards.</p>
14	Drupal	Certificate	<p>Drupal is a free and open source content management system (CMS) written in PHP and distributed under the GNU General Public License. Useful for website-building and web applications.</p> <p>Useful for web developers, website administrators, and UG/PG CSE/IT/CS students who wish to learn website management.</p>
15	DWSIM	Certificate	<p>DWSIM is an open-source CAPE-OPEN compliant chemical process simulator. It allows us to conduct experiments and analyze data using advanced models and operations.</p> <p>Useful for UG/PG Chemical Engineering students to run the simulations and get a better understanding on a phenomenon.</p>
16	Expeyes	Certificate	<p>ExpEYES stands for Experiments for Young Engineers and Scientists. It is used to perform basic Physics and Electronics experiments.</p>

			ExpEYES junior can be used from secondary to graduate level and also in some engineering branches.
17	Firefox	Training only, No certificates	Free, open source and popular web browser. Allows you to view Internet web pages, navigate through web pages, and search for web pages using search engines such as Google, Yahoo Search or Bing. Anyone who wishes to learn web browsing.
18	FrontAccounting	Certificate	Free, open source accounting software (having features similar to Tally). Useful for UG/PG Commerce students.
19	GChemPaint	Certificate	GChemPaint allows you to draw and display 2D chemical structures. Very useful to teach and learn abstract chemistry concepts. This application is useful for school students (9th standard and above) as well as school teachers. Works only on Linux
20	GeoGebra	Certificate	Interactive Geometry, Algebra and Calculus application. Very useful to teach and learn abstract geometry concepts. Useful for school students (7th standard and above) as well as school teachers.
21	gedit Text Editor	Certificate	gedit Text Editor is a powerful general purpose text editor. It is free and open source software. It is simple and ease of use with simple GUI. Useful for everyone who wish to learn to use a text editor in Linux. Works only on Linux
22	GIMP	Certificate	Graphics art and design software application for the editing and creation of original images, icons, graphical elements of web pages and art for user interface elements. Useful for all graphic related work. Open source equivalent of Photoshop . Useful for High School and UG/PG students who wish to learn photoediting and create graphics.
23	GIT	Certificate	Git is a distributed version control software. It is a free and open source software. It keeps track of changes made to a file or set of files. It helps in tracking the project progress history. Useful for UG/PG CSE/IT/CS students, working professionals
24	Inkscape	Certificate	Graphics art and design software application for the editing and creation of original images, icons, graphical elements of web pages and art for

			<p>user interface elements. Useful for all graphic related work. Open source equivalent of CorelDraw and Illustrator.</p> <p>Useful for High School and UG/PG students who wish to learn desktop publishing work - creating banners, posters, brochures, CD cover image, artwork for textiles, etc.</p>
25	Introduction to Computers	Certificate	<p>Absolute basic tutorials on parts of a computer, connecting the parts using cables, printer configuration, creating a gmail account, sending and receiving mails and using the Google Drive.</p> <p>Useful for first-time computer users of any age group.</p>
26	Java and Netbeans	(Java) Certificate (Netbeans) Test In Progress	<p>Learn to use Java</p> <ul style="list-style-type: none"> Free and open source, high level, simple as well as object-oriented programming language. Included in the curriculum of schools and colleges offering Computer Science and IT subjects. <p>Learn to use Netbeans IDE</p> <ul style="list-style-type: none"> NetBeans IDE is an open-source integrated development environment. NetBeans IDE supports development of all Java application types (Java SE including JavaFX, (Java ME, web, EJB and mobile applications) With Netbeans IDE, one can quickly and easily develop desktop, mobile and web applications with Java, HTML5, PHP, C/C++ and more. <p>Useful for UG/PG CSE/IT/CS students We recommend that Java series be followed with Netbeans series.</p>
27	Java Business Application	Certificate	<p>Learn how to create a business application from scratch.</p> <p>For Java Business Application series, learner should necessarily go through Java and Netbeans series beforehand.</p> <p>Useful for UG/PG CSE/IT/CS students and working professionals.</p>
28	Joomla	Certificate	<p>Learn how to a Content Management System for building websites, webpages, etc.</p> <p>Useful for web developers, website administrators, and UG/PG CSE/IT/CS students who wish to learn website management.</p>
29	Jmol Application	Certificate	<p>Learn how to create 3D chemical, crystal and biomolecules structures. Very useful to teach and learn abstract chemistry concepts.</p> <p>This application is useful for school students (9th standard upto Post Graduation level) as well as school teachers.</p>
30	Koha Library	Certificate	<p>Learn how to create a library, a librarian, add books, journals, and other</p>

	Management System		<p>library items, Marc framework, order a book, cataloging, circulation, add subscription, serial subscription, receive serials, OPAC search, access library on web, cataloging using Z39.50, manage budgets and funds, convert Excel data to MARC, import MARC in Koha.</p> <p>Koha is useful for Library Science students and Library Staff who wish to create a Koha library for their institute.</p>
31	KTurtle	Certificate	<p>An educational programming environment which helps in learning how to build logic and how to program, in an easy manner. Some of its features are: intuitive syntax highlighting, simple error messages, integrated canvas to make drawings on, integrated help function, slow-motion or step execution, and more.</p> <p>Recommended for all who would like to learn programming logic. Useful for school students (7th standard and above)</p>
32	LaTeX & XFig	(LaTeX) Certificate (XFig) Certificate	<p>LaTeX is a typesetting software for preparing reports, letters and presentations - specially useful for persons engaged in writing/publishing documents from science/ arts/ commerce fields.</p> <p>Xfig is a free and open source vector graphics editor. In Xfig, figures may be drawn using objects such as circles, boxes, lines, spline curves, text, etc. ... and used in LaTeX and other documents. Useful for UG/PG students, faculty and research scholars.</p>
33	LibreOffice Suite	Certificate	<p>Trains in basic computer usage skills like Word processing, Spreadsheet, Presentation using the LibreOffice components Writer, Calc and Impress. One can also learn other useful components like Draw, Math and Base in this series.</p> <p>Useful for school students (7th standard and above), anyone who wishes to learn to use an OFFICE suite.</p>
34	Linux & Ubuntu BOSS Linux	Certificate	<p>Free operating system, almost neutral to virus attacks and no hassles for licensing issues.</p> <p>Polytechnic/UG/PG computer hardware students and system administrators will greatly benefit by learning to use the Linux OS.</p>
35	Linux AWK	Certificate	<p>Linux AWK is a language for processing text files. AWK is typically used as a data extraction and reporting tool. It is a standard feature of most Unix-like operating systems.</p> <p>Polytechnic/UG/PG computer hardware students and system administrators can learn how to use the wide variety of AWK commands of Linux, to handle files, directories, processes etc.</p>
36	Moodle Learning Management System	No certificate	<p>Moodle LMS is one of the most popular LMS used globally by educational institutes.</p> <p>This Moodle series is divided into 2 parts -</p> <ul style="list-style-type: none"> ▪ one for Moodle site administrators and

			<ul style="list-style-type: none"> ▪ another for teachers. <p>Moodle site Administrators</p> <ul style="list-style-type: none"> ▪ will install Moodle on the server ▪ create course categories as per institute guidelines and ▪ manage courses and user accounts for multiple courses <p>Teachers will learn to-</p> <ul style="list-style-type: none"> ▪ upload and edit content for their course. ▪ create assignments and quizzes to assess the students' progress and ▪ enroll students to their course and communicate with them. <p>Useful for any institute's system administrator or faculty. Not meant for students</p>
37	OpenFOAM	Certificate	<p>Open source/ free CFD (Computational Fluid Dynamics) software available for solving and analyzing problems and to create a real world fluid flow movie. Open source equivalent to FLUENT. Widely used in Academics and is gaining popularity in Industry as well- Companies including AUDI, Tata Steel, Volkswagen, and Govt. agencies like BARC (Babha Atomic Research Center).</p> <p>Useful for Mechanical, Civil, Chemical Engineering students in 3rd and 4th year. Works only on Linux</p>
38	OpenModelica	Certificate	<p>OpenModelica is an open source modelling and simulation environment intended for industrial and academic usage. It is an object oriented declarative multi domain modelling language for complex systems.</p> <p>Useful for Chemical Engg students to learn how to do energy balance</p>
39	Oscad- now eSIM	Training only, No certificates	<p>Open Source EDA tool for circuit design, simulation, analysis and PCB design. It is an integrated tool built using open source software such as KiCad, Ngspice and Scilab.</p>
40	Perl	Certificate	<p>Practical Extraction and Reporting Language commonly known as PERL is a high level, general purpose and dynamic programming language. PERL has been used in graphics, web and network programming etc and you can find it's footprints in finance and bioinformatics domain, too.</p> <p>Useful for UG/PG CSE/IT/CS students to learn programming of business applications.</p>
41	PHP & MySQL	Certificate	<p>Package for developing interactive websites and establishing back-end connectivity with a database - Famous websites using PHP include Facebook, Google, and Wikipedia.</p> <p>Useful for UG/PG CSE/IT/CS students</p>

42	Python 3.4.3	Certificate	<p>Numerical computational software for Science and Engineering Education - used in 3D animation and Gaming industry, Artificial Intelligence, YouTube, NASA, CERN, Yahoo and so on.</p> <p>Useful for UG/PG CSE/IT/CS students and CBSE high school students</p>
43	QCAD	Certificate	<p>QCAD is a free, open source application for computer aided drafting (CAD) in two dimensions (2D).</p> <p>Learn to create technical drawings such as plans for buildings, interiors, mechanical parts or schematics and diagrams using QCAD.</p> <p>Useful for UG/PG architecture students</p>
44	RDBMS	Certificate	<p>RDBMS stands for Relational Database Management System. RDBMS is the basis for SQL, and for all modern database systems like MS SQL Server, IBM DB2, Oracle, MySQL, PostgreSQL and Microsoft Access. PostgreSQL is a powerful, open source relational database system. It runs on all major operating systems, including Linux, Windows and Mac OS. It supports most SQL data types, foreign keys, joins, views, triggers and stored procedures. It has programming interfaces for C/C++, Java, Perl, Python, Ruby etc.</p> <p>Useful for UG/PG CSE/IT/CS students to learn industry database management</p>
45	Ruby	Certificate	<p>Dynamic, open source, general-purpose, interpreted, true object-oriented programming language. It is a server-side scripting language similar to Python and PERL. Large programs written in Ruby are easily maintainable. It can be easily connected to DB2, MySQL, Oracle, and Sybase.</p> <p>Useful for UG/PG CSE/IT/CS students to learn industry level programming</p>
46	Scilab	Certificate	<p>Mathematical and scientific calculation software, open source substitute for MATLAB, very useful for all science and engineering students, in academics particularly.</p>
47	Single Board Heater System	Certificate	<p>A single-board heater system is a low cost, open source, lab-in-a-box setup. It consists of a heater assembly, fan, temperature sensor, ATmega16 micro-controller and associated circuitry.</p> <p>The application of this device is in the Control Systems area of Engineering. All Undergraduate level experiments and most Post graduate level control experiments can be performed on the SBHS device.</p>
48	Synfig 2D animation	Certificate	<p>2D animation software designed as a powerful industrial-strength solution for creating film-quality animation using a vector and bitmap artwork.</p> <p>Useful for High School and UG/PG students who wish to learn animation.</p>

49	UCSF Chimera	Certificate	UCSF Chimera is a program for interactive visualization and analysis of molecular structures and related data. Using Chimera, one can generate high-quality images and animations. Useful for UG/PG Chemistry students.
	Typing Software		
46	KTouch	Training only, No certificates	Typing tutor - teaches how to type using an online interactive keyboard. Learn typing at your own pace. Gradually increase your typing speed and along with it, your accuracy.
47	TuxTyping	Training only, No certificates	Typing application especially for children Start typing, Practice lessons, Play a typing game, Set a language for typing
	Utility software/application		
48	K3B	Not for Training	Learn to burn audio/video/data CDs/DVDs using K3B
49	Filezilla	Not for Training	Learn to configure and use Filezilla , a free file transfer protocol application that's easy to set-up and customize.
50	Thunderbird	Not for Training	Learn to configure and use Thunderbird , a free email application that's easy to set-up and customize.
	Screen-reading software for the Visually Impaired		
51	Orca	Training only, No certificates	Orca helps a visually-impaired person to navigate and use a PC/laptop for his/her day-to-day activities on their own without aided help.

Upcoming Spoken Tutorial series are eSIM, R, HTML, CSS, jquery, javascript, STEMI, Python Django, Python Flask, Linux for Sys-Ads, QGIS, Kotlin using Android Studio, XMGrace, Freeplane, Marble, Apps on Physics, GCompris, XCos Toolbox, Gnuplot

Be a Part of the Spoken Tutorial Project

The Spoken Tutorial Project-IIT Bombay, welcomes one and all to be part of an IT revolution and contribute to spread awareness amongst students, teachers and other individuals of society. You can contribute as a -

1. Training Organiser
2. Training RESOURCE Center
3. Training Partner

1. Training Organiser:-

Any Staff/Officer/Faculty member can be an organiser for the training. They make the first contact with the Spoken Tutorial team, IIT Bombay. As mentioned, Organisers need not know the Software to be taught in the Training/Workshop. The Organiser will arrange the computer lab and coordinate with students to fix a date and time for the first training. He/She will be in touch with the Spoken Tutorial team, IIT Bombay, on a regular basis to ensure that the training is successfully completed. It is recommended for almost all students in the college to get a chance to take the training. For this, the Organiser should identify faculties from other departments to register and start requesting training sessions. A calender or time table should be made to plan training and tests for maximum departmental coverage.