

## Notification

Subject : Remote Learning From IIT Bombay Spoken Tutorials (ST)

Bholanath College in association with Spoken Tutorial (ST) Project, IIT Bombay is recommending to engage the students by referring them to access online learning portal Spoken Tutorial to learn the mapped IT Software Courses at home during the shutdown for 15days due to CORONA viral outbreak.

To download the Tutorials : Click on below link

<http://process.spoken-tutorial.org/index.php/Software-Training#Downloading> Spoken tutorials

\_Click <https://spoken-tutorial.org/create cd content/>

-Select FOSS Category for Mapped Courses

-Level – (Select All)

-Language –English

Then Click on ZIP file to Download the Material

Note : Course Mapping – Department Wise has been enclosed

Faculty from each dept. are requested to share the link with students through Whatsapp Groups /Google Groups or any mode. Students can learn remotely through given link and test will happen in campus itself once the classes resumes.

Faculty to contact Training Coordinator, Assam : Partha Goswami, at 8486085798/ 9476845356 for any query related to the process, course, test, etc.

By Order

Principal, Bholanath College

Copy To :

H.O.D. of Different Dept's. under the College

Web Administrator for uploading in the college website

### Curriculum mapped ST Courses – Bholanath College

Sr. No	Department	<u>ST Course 1</u>	<u>ST Course 2</u>
1	Computer Sc. / BCA/ B.Voc (IT)	C, C++	Java, PhP-MySql
2	Mathematics /Physics	C, C++	Scilab
3	Chemistry	GChem-Paint	Jmol –Application /DW- SIM
4	Botany / Zoology	Cell Designer	
4	B.A. All Dept's.	Introduction to Computers	Libre Office Suiter (Writer, Calc, Impress)
5	Commerce	Libre Office Suiter (Writer, Calc, Impress)	Front Accounting

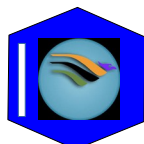
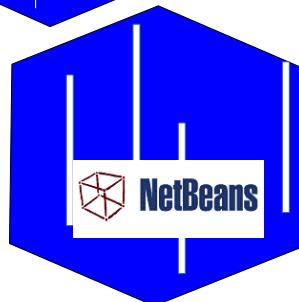
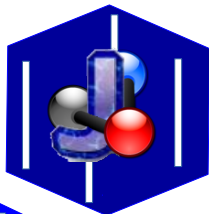
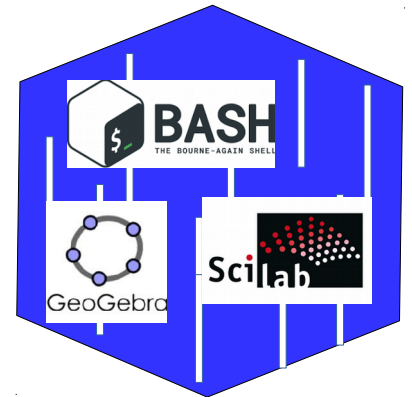
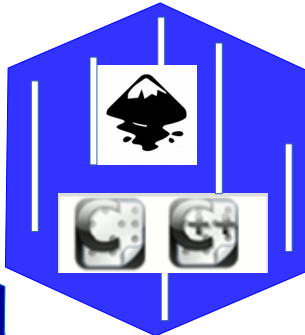


Spoken Tutorial

# Learn Free and Open Source Software through Spoken Tutorial at Very Low Cost



IIT Bombay



## E-Brochure

Arduino    QCad  
 Advanced    DWSIM    Drupal  
 Python    C++    Ruby    Scilab    eSim  
 Ngspace    Blender    HTML    PERL    Tux  
 Linux    AWK    Koha    Typing  
 GIMP    Libreoffice  
 Linux    OpenFOAM    Bio  
 Inkscape    BASH    C/C++    Latex    Python  
 Java  
 OpenModelica    GIT    Jmol    Application    Xfig  
 GeoGebra    ExpEYES    Avogadro  
 Moodle    NetBeans    GChemPaint  
 Cell Designer    PHP & MySQL

### Basic Computer Skills & Office Automation

Software / FOSS name	Applications / Skills & Employability
<b>Introduction to Computers</b>	How to use computers for day-to-day activities.
<b>LibreOffice – Writer, Calc, Impress, Base, Draw, Math</b>	Office Automation system – Documentation, Spreadsheet, Slide making.
<b>Linux, Linux AWK, Ubuntu, BOSS</b>	Free and Open source operating system. Actively being taken up by E-Governance programs and SMEs.
<b>Firefox</b>	Web browser. Used for all internet browsing purposes.
<b>Tux Typing</b>	Teaches 10 Finger typing.

### Programming Languages / Information Technology

<b>C / C++, Advance C++, Java, Java Business Application (JBA), Netbeans</b>	<p><b>C</b> is the most popular language worldwide.</p> <p><b>Java</b> is also popular with ability to run the same program on different systems relevant to World Wide Web <i>software</i>.</p> <p><b>NetBeans</b> is an open-source integrated development environment (IDE). Smooth JavaScript editor, Templates profiler &amp; GUI Design tool.</p> <p><b>JBA</b> is used to create business applications and provide domain expertise.</p>
<b>Ruby</b>	Ruby is an object oriented scripting language used widely for developing web applications.
<b>GIT</b>	GIT is a version-control system for tracking changes in computer files and coordinating work on those files among multiple people.

### Modeling and Simulation

<b>DWSIM</b>	DWSIM is a software for modeling, simulation, and optimization of steady-state chemical processes. Use in Chemical industry.
<b>OpenModelica</b>	OpenModelica is used for Simulating, Optimising, Analysing complex dynamic systems. Eg. in power plant, water treatment, automotive processes optimization.

### Multimedia / Drawing

<b>GIMP (like Photoshop)</b>	GIMP is a graphics editor used for image retouching and editing, free-form drawing etc.
<b>Inkspace (like Corel Draw)</b>	Inkspace designs and creates a wide variety of graphics such as illustrations, icons, logos, diagrams, maps and web graphics.
<b>Blender (like Maya 3D)</b>	Blender is a 3D computer graphics software toolset used for creating animated films, visual effects, art, 3D printed models, games.
<b>QCAD</b>	QCAD is used to create technical drawings such as plans for buildings, interiors, mechanical parts or schematics and diagrams.

### Mathematics / Statistics

<b>GeoGebra</b>	Dynamic Mathematics Software (DMS) for teaching and learning mathematics from middle school through college level.
<b>R (like SPSS)</b>	Programming language used for statistical computing and graphics.
<b>Biopython</b>	Tool for Computational Biology and Bioinformatics.

### Scripting Languages / Web Development

<b>Python</b>	Used for web programming eg. Django, Zope, Google App Engine, Desktop applications, Web Development sites eg. Facebook, Google search, Wikipedia.
<b>PERL</b>	Perl is a general-purpose programming language useful as a Glue language for tying together systems – hence invaluable to System Administrators and for Web Development.
<b>PHP &amp; MySQL</b>	Used as Web development and Database Management Systems package.
<b>Drupal</b>	Drupal is a content management system (CMS) written in PHP and distributed under the GNU General Public License. Useful for website-building and web applications.

### Mechanical / Civil / Electrical – Engineering disciplines

<b>Open Foam</b>	Data processing and visualisation. Aerodynamics, Building constructions.
<b>Oscad (eSim)</b>	Tool for circuit design, simulation, analysis and PCB design.

### Chemistry / Bio-Chemistry

<b>Avogadro</b>	Avogadro is a molecule editor and visualizer.
<b>GChemPaint</b>	GChemPaint allows you to draw and display 2D chemical structures. Very useful to teach and learn abstract chemistry concepts.
<b>Cell Designer</b>	Cell designer is a drawing tool – a structured diagram editor for biochemical networks & gene-regulatory drawings.
<b>Jmol Application</b>	It is used for molecular modelling of chemical structures in 3 dimensions. eg. In molecular biology pertinent structures.

### Electronics / Physics

<b>Arduino</b>	Arduino is an open source platform used for building electronics projects or creating interactive objects or environments. eg. Used in Robotics.
<b>Ngspice</b>	It is a program used in integrated circuit and board-level design to check the integrity of circuit designs and to predict circuit behavior.
<b>ExpEYES</b>	ExpEYES stands for Experiments for Young Engineers and Scientists. A tool for learning science by exploring and experimenting.
<b>Single Board Heater System(SBHS)</b>	The application of this device is in the Control Systems area of Engineering.

### Learning Management System

<b>Moodle</b>	Moodle is a learning management system or an online platform for customized learning, assignment and assessment purposes.
<b>LaTeX</b>	The best tool for Technical writing. eg. Math typesetting for Science, Engineering, Technology writing of theses, projects, journal articles, books etc. LaTeX has automatic generation of high quality PDF reports.
<b>Scilab (like MATLAB)</b>	Scientific computation package for Advanced mathematical computations. Use for academics in Physics, Engineering, Applied mathematics, Statistics & in Data Analytics companies and departments.

### Contact

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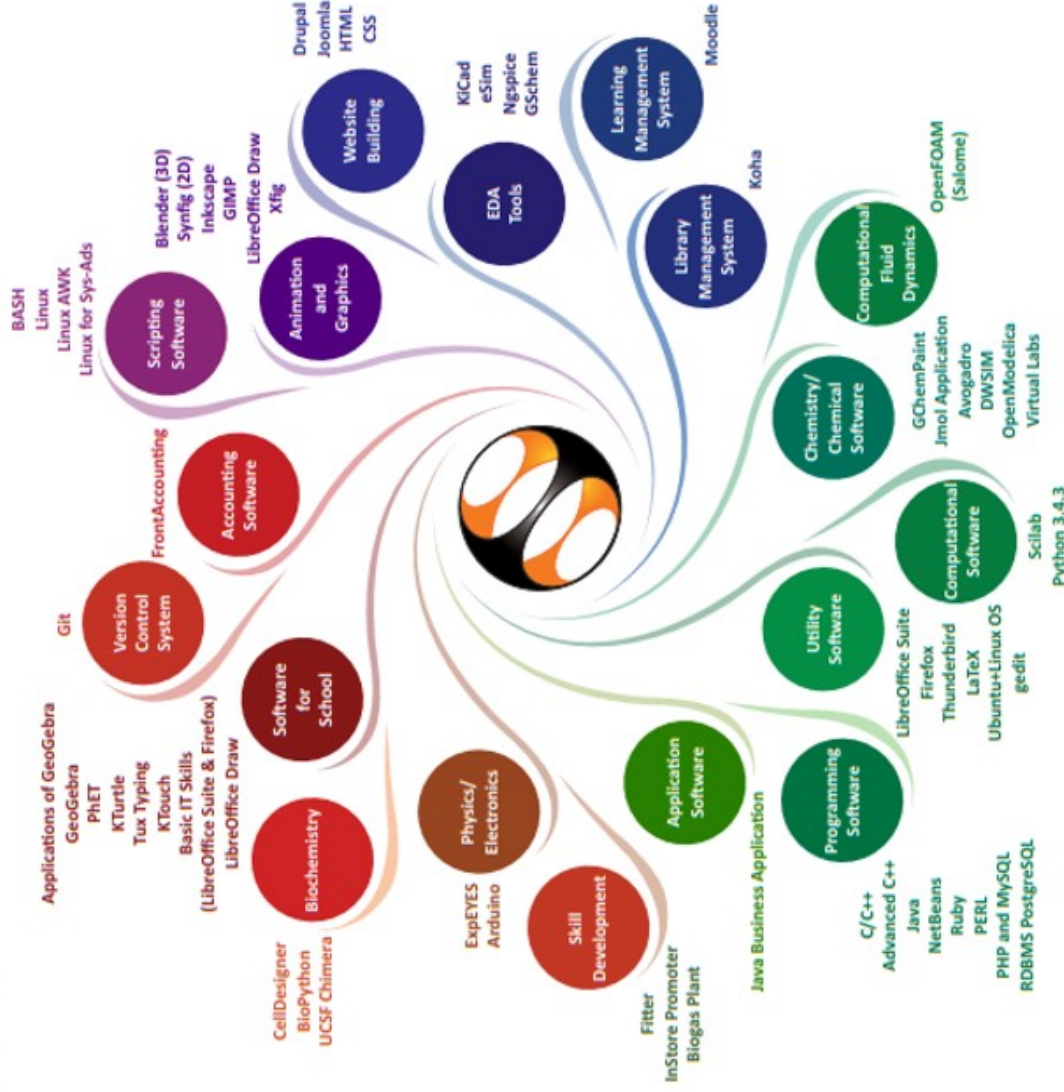
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**Spoken Tutorial project is funded by  
National Mission Education through ICT, MHRD, Govt. Of India.**  
<http://spoken-tutorial.org>





# REMOTE LEARNING WITH IIT Bombay – ST | IT / Software Courses



Educational Institutions have suffered the most due to COVID-19.

## Team Spoken Tutorials is always there for Educators!

We are offering teaching & learning through Remote/Distance method to cater to the IT Skills need of Educational Institutions in current situation.

- ✓ Audio – Video Tutorials
- ✓ Timed Script as a Notes
- ✓ Available in 16 Indian Languages
- ✓ Code Files for Practice
- ✓ Discussion Forum
- ✓ Assignments
- ✓ Certificates



Scan the QR code to visit Spoken Tutorial website