### Notification

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

NIT, Silchar 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 1 month 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 http://www.spoken-tutorial.org/create\_cd\_content/

-Select FOSS Category for Mapped Courses

-Level – (Select All)

-Language -English

-Add selected FOSS

Then Click on ZIP file to Download the Material

Note: Course Mapping – Department Wise has been enclosed

Assigned 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

Director

#### Copy To:

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

Web Administrator for uploading in the website

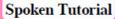
## <u>Curriculum mapped ST Courses - NIT, Silchar</u>

Sr. No	Department	Subject	ST Course 1	ST Course 2
	1 All Dept's.	Computer Programming Lab	C, C++	Advance C, Advance C++
		Java Programming Lab	Java	
		Computer Graphics	GIMP	
		Unix Network Programming & Simulation Lab	Linux Ubuntu	
		Fluid Mechanics Lab	OpenFOAM	
		CAD Lab	QCAD	
		Electrical and Electronics Engineering Lab/VLSI Design	e-SIM	Arduino
		Database Mangement system Lab	MySQL	RDBMS – PostgreSQL
		Web Development		
		Web Technology Lab	PHPMySQL	Drupal
		Operating System	Linux Ubuntu	
		Digital Signal Processing/Numerical Method	Scilab	
		Mathematics/Physics/Simulation Lab	Scilab	Python
		Chemistry/ Molecular Biology	Avagadro	DWSIM
		Multimedia Technologies	Blender	
2		Seminar/Project	LaTeX	
	3 M. Tech		LaTeX	Scilab, PhP-MySql



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





















# E-Brochure





Arduino **QCad** 

Advanced **DWSIM** Drupal

Ruby **Python** Scilab eSim

**Ngspice** HTML

Linux AWK Koha Libreoffice

**OpenFOAM** Bio Latex

Linux **Python** BASH C/C++ Java

InKscape **Jmol** GIT **Application** Xfig OpenModelica

GeoGebra

GIMP

**ExpEYES** 

**Avogadro** 

Moodle NetBeans GChemPaint

Cell Designer PHP & MySQL









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

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

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

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

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

	Scripting Languages / Web Development
Python	Used for web programming eg. Django, Zope, Google App Engine, Desktop applications, Web Development sites eg.Facebook, Google search, Wikipedia.
PERL	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.
PHP & MySQL	Used as Web development and Database Management Systems package.
Drupal	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	
	Data processing and visualisation. Aerodynamics, Building constructions.
Oscad (eSim)	Tool for circuit design, simulation, analysis and PCB design.

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

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

Learning Management System		
Moodle	Moodle is a learning management system or an online platform for customized learning, assignment and assessment purposes.	
LaTeX	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.	
Scilab (like MATLAB)	Scientific computation package for Advanced mathematical computations. Use for academics in Physics, Engineering, Applied mathematics, Statistics & in Data Analytics companies and departments.	

## $\underline{Contact}$

Shyama Iyer — 9702545816 - shyama.stiitb@gmail.com Diana Low — 9833188090 - dianaly3129@gmail.com

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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