

SPOKEN TUTORIAL PROJECT

IIT BOMBAY

National Mission On Education through ICT – MHRD, Govt. Of India



From IIT Bombay – Google award winning MOOCs Program for IT Training

- We are running a successful IT training program since the last 4 years
- To date we have trained close to 8 lakh students and teachers across India
- This is through self-learning material and offered in distance education method
- The focus is imparting IT Skills
- These are for 2 purposes – Skills Focus for Employment and Academic focus for improving exam performance
- MHRD funded so entire program with Certificates is FREE of COST
- In colleges, Volunteers organise the training
- Our organisation at IIT Bombay has managers representing different states
- We are moving the Education-Extension way and tied with 68 affiliating universities

WHAT IS SPOKEN TUTORIAL

- Spoken tutorial is an audio-video tool that teaches Open Source Software
- Through active learning method, students learn a software in short, simple steps
- They can replicate the instructions, build and run their own program codes

Advantages

- In programming, the greatest thrill is writing your own program, compiling and running it
- It is well known that listening is always better than reading and that is why this methodology works
- It helps that in addition to reading theory, you see the concept in a small program, practice it and understand it in a very simple way

Created by experts. Over 8 lakh students have been trained in colleges, polytechnics and ITI s in the past 4 years!

1. Broadly we observe the following -
CSE, ECE, IT, Bio engineering, Instrumentation etc. streams are already teaching in different courses, software like C, C++, Java, PHPMySQL. For this group the Spoken Tutorial workshops on that particular software are recommended and to be held during the designated lab hours.

2. C or C++ language is compulsory for 1st year Engg. students across streams/ departments in several universities. Again Spoken Tutorial workshops are recommended.

1. MBA and MCA, Physics PG students as well as Applied Mathematics and Statistics (PG) students are eagerly learning Scilab for various Quantitative and Computational needs in their course work or project/research work. They have heard Matlab recommended and have gone for the Free and Open Source alternative Scilab.

1. Open Source labs and/or Linux courses are offered in some places - Linux Spoken Tutorials are useful in this case.
2. Where Multi media courses are there as core or elective course options, Blender and GIMP are recommended. Also for Design Labs (Civil)
3. Python is recommended in some instances for learning Basic Programming, as C substitute, because it is simpler and shorter than C language.
4. The topics covered for that particular Software Spoken Tutorial series we have found have a >75% fit with topics covered when the Software is being taught as is. (You have received detailed Mapping sheets generated by Dr. Janardhanan, NITTTR, Chennai in advance

Dear Shyama,

We have been trying to use Scilab spoken tutorial workshops since the last 3 years in our National Programme for Differential Equations (NPDE) Under Graduate (UG) level workshops. NPDE UG level workshops are one month long training workshops for undergraduate students in Mathematics and Engineering all over India and are held every year in summers since 2012. We conduct exclusive Scilab sessions in these workshops and the students are quite enthusiastic to learn and implement programmes in Scilab.

A part from these, I have been recommending Scilab in other advanced workshops conducted by NPDE and to academic institutions like IIST, Thiruvananthapuram and colleges in Kerala and Mumbai. We have also conducted a Scilab workshop in the Mathematics department, IIT Bombay.

The workshops are very well organised and even the first year undergraduate students find it quite easy to learn.

Congratulations to the team and wish you all the very best!

Best regards,
Sincerely,
Neela (Math dept. IIT Bombay)

09/07/14

Dear Kannan,

This semester I taught our introductory programming course (In C) SI-415. I introduced the students to the Spoken Tutorials on C and used some of them in class (for example on functions, pointers etc.). The students also took the test.

- 1) I found that most important is that their fear will go away. They feel that because they are learning in short simple steps they also can replicate the instructions and run the programs. In this way the initial barrier will break down. In programming it is always better and there is nothing like writing your own program, compiling and running it.
- 2) Even for language features like function, recursion, link list--- the same approach is used, all manageable programs which they can build and run. This builds their confidence highly.
- 3) It is well known that listening is always better than reading and that is why this works and is suited for independent learning.
- 4) It helps that instead of reading theory you see the concept in a small program, do it, practice it and understand it hands on very simply. It is interactive in nature and hence works.

I highly recommend Spoken Tutorials as a resource for a first course in C.

Regards,
Murali

09/07/14

SPOKEN TUTORIAL TRAINING

- Each software training session consists of a first session which is 2 hours long, followed by self revision of the remaining topics and a 1 hour long online assessment test, after a month or so
- The 2-hour session or can be accommodated in the lab hours of the related course being taught
- Once downloaded from the website and installed in the systems, learning can be offline, so internet is not needed
- The course content includes Spoken Tutorials that are 10-minute long video tutorials, that cover various topics, Assignment questions and an Instruction sheet
- The course is designed for individual self-learning, without the need of an expert Teacher
- Students do not need to leave the campus but learn in their own labs
- Students do not have to pay 1000s of Rs. to learn- Course, Training, Certificate are FREE of COST
- Guidance is provided by the team at IIT Bombay

LIST OF SOFTWARE OFFERED

Basic IT Skills Graphic & Animation

Linux, BASH

**LibreOFFice - Writer,
Calc, Impress, Base**

Firefox

Blender

GIMP, Inkspace

Q-CAD

Programming Languages, Web development Database Management

C/C++

Java, Netbeans

Java Business Appl

Python

Perl, K-Turtle

PHPMySQL

Specialty packages Technical Writing

Gchempaint, Jmol Appl

Oscad, Ascend

OpenFOAM

Scilab, Cell Designer

LaTeX, Ruby

.....and many more

Next Steps for College

1. Nominate 2-3 Faculty Coordinators per college.
2. Arts/ Sc./ Comm colleges select Comp. Sc./ IT/ BCA Faculty.
3. Register on the Spoken Tutorial website and get your own Membership Login ID.
4. Complete the Semester Training Planner, seen in the spoken-tutorial.org website, as soon as the semester starts.
5. Download the selected Spoken Tutorial Software courses in the Lab systems.

N.B : Guidance at each step given by Training team at IIT Bombay

THANK YOU! QUESTIONS?

**Contact your state Training Coordinator
for any help.**

Visit

<http://spoken-tutorial.org>