



# IIT

# Remote Center

Don Bosco College of Engineering

Academic year 2018-2019

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## OVERVIEW

- The “Teach 1000 Teachers” programme was initiated by IIT Bombay in 2009 under the project, “Empowerment of Students/Teachers,” sponsored by NMEICT (MHRD.) The main aim of this programme is to work with Engineering Colleges in the country to enhance the teaching skills of faculty colleagues in core Engineering and Science subjects.
- The “Teach 1000 Teachers” uses an ICT enabled process involving both synchronous and asynchronous mode to actually reach out and engage a large number of teachers and Live lectures are given by IIT faculty. The participating teachers attend at a remote centre close to their own college, and also attend tutorial and lab sessions conducted in the same centre.
- The lecture transmission and live interaction takes place through distance

mode using the AVIEW technology and the internet, at selected remote centres across the country. Faculty coordinators are appointed at each remote center, to handle the technology infrastructure and other operational logistics. Additionally, for each workshop, there is a workshop faculty coordinator for that subject who will help in the conduct of labs and tutorials at that center. All the lectures and tutorial sessions are recorded. The final edited audio-visual contents, along with other course material are released under Open Source. These contents can be freely used later by all teachers and students.

- A Remote Center acts as the intermediary between IIT Bombay and the participating teachers during the workshop. It is usually a reputed

engineering college, with high academic standards, excellent infrastructure and good faculty with expertise and experience of handling workshop subjects, to guide the participants in Lab work.

- A Remote Center (RC) is a place from where the participants/people can interact with the instructor (faculty at IIT) who is conducting the course or delivering a lecture from IIT Bombay. The live lectures are transmitted at Remote Centers using A-VIEW software.
- Lectures are delivered at IIT Bombay, using multi-way visual interaction. Tutorials and labs are conducted at remote centers by a local senior faculty, trained earlier by the expert.

## OBJECTIVES

- The Remote Center (RC) is usually a reputed engineering college with good facility and infrastructure .
- It acts as a host for the virtual classroom environment created by A-VIEW and enhances distance learning.
- The participant can attend the workshop in a RC close to his/her place. The RC minimizes the logistics of travel, boarding and lodging.

## IIT REMOTE CENTER AT DON BOSCO COLLEGE OF ENGINEERING

Don Bosco College of Engineering has been selected as a remote center for IIT workshops since August 2018. Being a part of this project our Institute has been conducting several remote center workshops, jointly with IIT Bombay.

DBCE being a second remote center in the state of Goa, has been conducting effective faculty development programs and soft skills training for students. The remote center Id of Don Bosco College of Engineering is 1538.

# DEPARTMENTAL ACTIVITIES

The Remote center coordinator of Don Bosco College of Engineering is Prof Amrita Naik.

## SCIENCE & HUMANITIES DEPARTMENT

Don Bosco College of Engineering under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching organized **one – day Workshop on Moodle Learning Management System on 15th March 2019.**

### IIT REMOTE CENTER WORKSHOP ON eSim

Around 103 Remote Centres participated in this workshop all over India, Don Bosco College Of Engineering being one of them. The remote center coordinator of the workshop was Prof. Amrita Naik and workshop coordinator was Prof. Steefni Ema Cruz. The entire workshop was guided by Prof. Steefni Ema Cruz and Mr Amit Sapkal. Moodle is a system which helps teachers and educators to create an online platform for more adaptive and customized learning. In the inaugural function, Prof. Kannan Moudgalya, Principal Investigator, PMMMNMTT and Spoken Tutorial Project, IIT Bombay spoke of the importance of mastering the digital learning systems to make teaching more interesting to the students not only in higher education but also in schools. He said that in this generation, when students are living in the digital world, the method of chalk and talk has to be rethought.

Following this Ms. Nancy Varkey introduced the Spoken Tutorial Forum. The workshop was solely based on this Spoken Tutorial Forum wherein participants were introduced to 17 videos on how to install and work on the Moodle system.

The participants of the workshop were teachers and system admin from various colleges in the states such as Padre Conceição College of Engineering, Agnel Institute of Technology and Design, Shree Rayeshwar Institute of Engineering, Parvatibai Chowgule college, Rosary College of Commerce/Arts and schools such as Kendriya Vidyalaya, Vidya Vikas Academy etc. The participants had to watch each of these videos, follow the instructions and replicate the same in the Moodle system. If there were any difficulties then such questions were to be put up on the forum which was then replied to by the organizers. This was done so that all users of Moodle can see the questions and answers and get their issues resolved. This workshop was entirely based on self-learning so that the participants familiarized themselves to Moodle by getting a first-hand experience.

For the valedictory function, there was a panel discussion wherein the participants asked difficulties related to the working of Moodle in their respective Remote Centres and was answered by Prof. Kannan Moudgalya and Ms. Nirmala Venkat.



## COMPUTER ENGINEERING DEPARTMENT

Don Bosco College of Engineering under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching organized a **One – Day Workshop on “Python Programming” on 22nd June 2019.**

### IIT REMOTE CENTER WORKSHOP ON R PROGRAMMING

Around 103 Remote Centres participated in this workshop all over India, Don Bosco College Of Engineering being one of them. The workshop coordinator was Prof. Amey k Shet Tilve and remote center coordinator of the workshop was Prof. Amrita Naik. The entire workshop was guided by Prof. Amey k. Shet Tilve and well assisted by Mr.Amit Sapkal, Mr.Saurabh Kanekar and Mr.Romeo D’Cruz. In the inaugural function, Prof. Prabhu Ramchandran, Co-Principal Investigator, FOSSEE project, IIT Bombay spoke of the importance of Python and also talked about the total course content to be learnt.

Following this, Ms. Nancy Varkey introduced the Spoken Tutorial Forum. The workshop was solely based on this Spoken Tutorial Forum wherein participants were introduced to 39 videos on Python.

The content of videos included Getting started with IPython, Using plot commands interactively, Embellishing a plot, Saving plots, Multiple plots, Subplots, Additional features of IPython, Loading data from files, Plotting data, other types of plots, Plotting charts, Getting started with lists, Getting started with for, Getting started with strings, Getting started with files, Parsing data, Statistics, Getting started with arrays, Accessing parts of arrays, Image manipulation using arrays, Basic matrix operations, Advanced matrix operations, Least square fit, Basic datatypes and operators, Sequence datatypes, Input-Output, Conditional statements, Loops, Manipulating lists, Manipulating strings, Getting started with tuples, Dictionaries, Sets, Getting started with functions, Advanced Features of Functions, Using Python Modules, Writing Python Scripts, Testing and Debugging, Error and Exception Handling.

The participants of the workshop were teachers from various colleges in the states such as Padre Conceição College of Engineering, Vidya Vikas Academy, Mount Litera Zee School & Girijabai Sail Institute of Technology. The participants had to watch each of these videos, follow the instructions and replicate the same in the python interface. If there were any difficulties then such questions were to be put up on the forum which was then replied to by the organizers. This workshop was entirely based on self-learning so that the participants familiarized themselves to Python by getting a first-hand experience.

For the valedictory function, there was a panel discussion wherein the participants asked difficulties related to Python in their respective Remote Centres and was answered by Prof. Prabhu Ramchandran.



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