Introduction: IIT Bombay has been involved with distance synchronous education, since year 2000. We have trained over 1,00,000 teachers, in partnership with IIT Kharagpur, under the T10KT (Train 10 Thousand Teachers at a time) project sponsored by NMEICT. All training workshops so far, were on specific subjects of Engineering and Science Education, most of which are taught as core courses in our colleges and universities. These programs have been beneficial to the participating faculty.

Online educational methodology, and flipped-classrooms with associated pedagogy of active learning, have quickly emerged as the mainstay of effective education in this century. However most of our teachers lack skills and competencies for proper and effective use of ICT in education. It is thus an urgent national requirement that all our teachers, at least those teaching in our professional colleges, are empowered to use technology effectively, to enhance the quality of education.

To meet this requirement IIT Bombay has specially designed a Faculty Development Program (FDP) on "Use of ICT in Education for Online and Blended Learning ". This FDP is designed as a MOOC (Massive Open Online Course), with some face-to-face sessions at Remote Centres. It will be conducted beginning from 2 May 2016. Completion Certificates will be awarded by IIT Bombay to those participants, who successfully complete all online assessments, meaningfully participate in face-to-face sessions, and submit the prescribed team-assignment.

In order to run this FDP at selected remote centers, we invite expert faculty from various remote centers to act as a Workshop Coordinator for the Four Week FDP on ''Use of ICT in Education for Online and Blended Learning'' . The Coordinators supervise the conduct of tutorials and Labs at their Centers. They liaise between the participants at their Remote Centers and IIT Bombay, from where the interactive lectures are transmitted live

Course Content: The following topics will be covered in the Four Week FDP on 'Use of ICT in Education for Online and Blended Learning'

Module 1. Devices for information capture, storage, and display
- Traditional PCs – Keyboard, Monitor, Printer,
- Webcams, Mouse, Hard disks, Software.
- Tablets and Smart Phones
- Servers, Cloud, Storage Farms, CD/DVD, Pen Drive

Module 2. The world of Internet and Web
- Basics of Connectivity, LANs and WANs, Wireless and Bluetooth.
- Organization of Web, IP Address, Domain Names, DNS Servers.
- Browsers and Plug-ins

Module 3. Evolution and Spread of ICT in Education.
- Content Management System: Drupal
- Learning Management System: Moodle
- Real Time Classroom Assessment: Clicker Devices, Smart Phones
- Audio-Video Recording, Spoken Tutorial Methodology.

- Academic Administration, Online Grade Submission,
- Cumulative Performance Index Computation.

Module 4. Using ICT for Effective Educational Communication
- Digital Content Creation: Word Processing, Change-Tracking, File-Formats
- Visual Communication, Design of Presentation Material
- Creating Handouts and Assignments for Online Usage

Module 5. Online Courses
- History of Online Courses,
- Introduction to Features of a MOOC Platform
- Designing and Developing a MOOC
- Conducting a MOOC
- Effective use of Discussion Forum
- Methods of Online Assessment
- Global and Indian Experience

Module 6. Blended/Hybrid Education
- Need for Combining Online and F2F (Face-to-Face) Education
- The Flipped Classroom
- Pedagogy of Active learning, TPS (Think-Pair-Share), Group Discussions
- Collaborative Problem Solving, Peer Assessment
- Local Assessments, Evaluation of Reports and Presentations
- Recognition of Grades and Credits through MOOCs, in Regular Academic Programs

Module 7. Adopting online/blended education in teaching-learning process.
- Using Available Institutional Autonomy: Internal Assessment
- Encouraging Collaboration and Peer Review
- Factoring in Marks of Online Assessment in University Courses

Module 8. Building and Nurturing Collaborative Communities
- Contribution to OERs (Open Education Resources)
- Creating Edited and Focused Content
  - Inviting and Recognizing Innovative Contributions
  - Crowd-Sourcing Methods
  - Quality Assurance
- Curriculum and Taxonomy Standardization
- Lessons from Open Source Community- Evolving Leaders and Mentors
- Participation in Sectoral Communities.

Teaching Faculty : Prof . Deepak B. Phatak, Department of CSE

Prof . Sridhar Iyer, Department of CSE

Prof. Uday Gaitonde, , Department of Mechanical Engineering

Who Should Attend:

The registration of the Workshop Coordinator is limited only to the Remote Centers of IIT Bombay.
Teaching faculty from any domain, who is well versed with use of ICT in education, can become the Workshop Coordinator. There are no pre-requisites for this course.

The WSC should be nominated by the Head of the Institute.

The nominated Workshop Coordinator has to register online for the Half-day Coordinators' Workshop

Duration and Venue:

There will be a Half Day online Session through A-VIEW, transmitted from IIT Bombay which will be conducted during the first week of May (date will be intimated to the registered WSCs).

The Workshop Coordinators are expected to attend this session.

For more details, please refer the announcement of Four Week FDP on 'Use of ICT in Education for Online and Blended Learning'.

How to Apply : Those wishing to be the prospective Coordinators for the FDP, can register online. Confirmation of the registration, will be sent by email. The Prospective Coordinators are requested to upload the nomination letter (duly signed by the Head of the Institute), during the online registration. **The Last date of online registration is 17 April, 2016**

Accommodation : Not Applicable

Note : Please note that this FDP is conducted under the T10KT project of IIT Bombay. Live recording of the course and other created content would be released under Open Source, through a portal. The recorded CD/DVD of the course lectures would be available for distribution at cost, to any individual/ institution. All participants are required to sign a No Objection certificate for such release of contents contributed by them during and after the FDP. All contributors will be acknowledged

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