### ISTE Workshops conducted by IIT Bombay

About 10 years ago, an important initiative was taken by IIT Bombay to enhance the teaching skills of our faculty colleagues in Engineering and Science Subjects. This initiative has now become a part of the National Mission on Education through ICT (NMEICT) supported by MHRD. We have conducted two-week ISTE workshops on Computer Programming, DBMS, Thermodynamics, Basic Electronics, Heat Transfer, Software Development Techniques, Solar Photovoltaic, Writing Effective Conference Papers, Computational Fluid Dynamics and Introduction to Research Methodologies. These workshops were attended by about 19,500 participating teachers across the country, at 189 remote centers, through distance mode, using the internet, and A-View software specially developed by Amrita University.

We are glad to announce a Two Day ISTE workshop, **Aakash for Education**, on 10<sup>th</sup> & 11<sup>th</sup> November 2012 **at about 250 Remote Centers across the country.** 

### **Duration and Venue**

The ISTE workshop on **Aakash For Education** will be conducted simultaneously at multiple remote centers across the country, in the distance mode. Every remote center will have about 50-75 participants. The workshop will include the delivery of live interactive lectures from IIT Bombay, and locally organized tutorial and laboratory sessions.

#### Introduction

It is now well established that the quality of education can be improved considerably by proper use of Information and Communication Technologies (ICT), to supplement the conventional mode of education. Aakash tablets were launched by MHRD in October 2011. These are Low Cost Access cumcomputing Devices. The National Mission on Education using ICT (NME-ICT) envisages that these tablets should be deployed for empowering our students and teachers. The first project under this scheme, aims at deploying 1,00,000 tablets in the engineering colleges of the country, for their effective use in higher education. Adequate number of tablets will be issued at no cost to each participating Institute. Any development of contents and applications done by the students and faculty will be released in Open Source. The documentation and testing is expected to meet global standards of quality. It is expected that participation in this project will enhance Research and Development activities in this area, in all the participating Institutes. Larger deployment is being planned in the coming years.

Under this project, IIT Bombay plans to deploy the Aakash tablets in select engineering institutions in India, with two objectives. The first is to test and enhance the effectiveness of these tablets for use in class rooms. The second is development of new educational applications and contents on Aakash, largely through final year Research and Development projects done by BE/ME students at these Institutes.

#### Course outline

The objective of this workshop is to introduce the tablet computers in general, and Aakash tablets in particular, to the participating faculty. The emphasis will be on using applications specially developed for Aakash at IIT Bombay, for effective use of these tablets in the educational process. Following topics will be covered in the workshop

- Introduction to tablet computers and Aakash.
- Applications available on Android platform
- Storing and accessing contents using Aakash
- Special educational applications:
  - Clicker software for conducting tests.
  - Proximity application to develop interactive
  - lessons
  - Programming environment on Aakash
  - (C, C++, Python, Scilab)
  - Engineering application Robot Control
- Research and Development projects involving Aakash
- Future roadmap for Aakash

### **Course Faculty**

Prof. Deepak B. Phatak, IIT Bombay Department of Computer Science

Prof. Uday Gaitonde, IIT Bombay Department of Mechanical Engineering

Prof. Kannan Moudagalya, IIT Bombay Department of Chemical Engineering

#### Note

This workshop is conducted under the eOutreach project of IIT Bombay. Live recording of the course and other created contents would be released under Open Source. 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 a release of contents contributed by them. All contributors will be acknowledged.

#### **Course Fee**

Since the workshop is funded by the National Mission on Education through ICT (MHRD, Government of India), there is **no course fee for participation**.

# **How to Apply**

Those wishing to attend this workshop should enroll on or before **26**<sup>th</sup> **October 2012**, at:

### http://www.it.iitb.ac.in/nmeict/aakash

Enrolment will be strictly online, and no other mode of applications will be entertained.

### **Address for Communication:**

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#### Who Should Attend

Only Faculty members of designated Aakash Project Centers are eligible. These are remote centers of our e-outreach program, which have been nominated as 'Aakash Project Centers' by IIT Bombay. The list is available on the workshop website.

Participants should be employed at these Institutes as teachers, either as permanent or temporary teaching staff. Registered participants are required to attend the workshop at their respective Institutes only

#### Points to be noted

It is mandatory that participants must attend the workshop on both days

Registered participants will be required to submit a group assignment within 2 weeks of the completion of the workshop. Only such participants will be issued ISTE certificates.

Since all participating teachers will be attending the workshop at their own place of work, there is no funding support for TA/DA and accommodation.

Aakash Project Centers will be provided limited funding support for conducting the workshop.

For Teachers from other colleges other than remote centers, similar workshops will be held in the near future.

# 2-Day ISTE Workshop

on

# **Aakash for Education**

Under the

National Mission on Education through ICT (MHRD, Govt. of India)

10<sup>th</sup> - 11<sup>th</sup> November 2012

**Conducted by IIT Bombay** 



## **Course Faculty**

Prof. Deepak B. Phatak, IIT Bombay Prof. Uday Gaitonde, IIT Bombay Prof. Kannan Moudagalya, IIT Bombay

**Project Coordinator** 

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