Important Dates and Registration

Last date for online registration: **Nov. 30, 2018**
Course schedule: **Dec. 10 – Dec. 14, 2018 (9:00 AM – 5:30 PM each day)**
Venue for Course: VMCC, IIT Bombay
Date & Time of Desk Registration: Dec. 10, 2018, 8:30 AM onwards at course venue, IIT Bombay

For QIP course details and ***registration*** *visit*:
https://portal.iitb.ac.in/ceqipapp
https://portal.iitb.ac.in/ceqipapp/courseDetails.jsp?c_id=1041

For CEP course details and ***registration*** *visit:*
https://portal.iitb.ac.in/ceqipapp
https://portal.iitb.ac.in/ceqipapp/courseDetails.jsp?c_id=1042

Course Fee

Faculty members of AICTE approved Institutes (***should register in QIP course***): No registration fee. However, a participation confirmation fee of ₹.2000/- need to be paid online through the above portal. This amount will be refunded on attending the course but forfeited if not attended.

Other interested participants (should register in CEP course)
Faculty members of other Institutes: ₹.17,700/-
Students: ₹.8,850/-
Government Organisations: ₹.17,700/-
Industry Participants: ₹.23,600/-
Overseas / Foreign Nationals: ₹.70,800/-
Module wise registration and payment of fees is possible online.

> Note: The course fee is for all 5 days and includes applicable taxes. Participants will receive lunch, tea, registration kit and course materials in soft copy.

Eligibility

- Practicing Engineers in Industry and Government sectors
- College Teachers, Researchers, Students and Researcher Scholars.

Transport, Boarding & Lodging

Faculty members of AICTE approved Institutes: Entitled for to and fro railway fare in II Class (Sleeper Class) or III AC by the shortest route from their institute to Mumbai and auto fare from nearest railway station to IIT Bombay on the dates of arrival and departure. Also, they can avail free accommodation on a shared basis in IIT Bombay student hostels (non-AC). If the Institute is in Mumbai region, then they are entitled to IInd Class railway or BEST bus fare.

Other participants: Limited paid shared accommodation in IIT Bombay Guest house (AC) / student hostels (non-AC) is available on first come first serve basis.
Note: Family members of the participants cannot be accommodated.

Continuing Education and Quality Improvement Programme (CE&QIP)

Short Term Course

Advances in Urban Water Engineering and Management

10th – 14th December, 2018

Course Coordinators

Prof. Pradip Kalbar (kalbar@iitb.ac.in)
Centre for Urban Science and Engineering (CUSE)

Prof. Subhankar Karmakar (skarmakar@iitb.ac.in)
Centre for Environmental Science and Engineering (CESE)

Office of Continuing Education & Quality Improvement Programme
Indian Institute of Technology Bombay Powai, Mumbai - 400 076

Introduction

Urbanization has posed challenge on water resources in cities. Both the water quantity shortage and deteriorated water quality are the prevailing issues in the cities. Physical losses and non-revenue water are the major concerns of water supply systems in cities. Lack of sewage collection and treatment infrastructure cause contamination of surface water bodies and ground water. Apart from water quality issues, stormwater management has become a major challenge in cities in India. Frequent flooding in urban areas in most of the cities in India point out the need for developing plans for stormwater management.

In this course all these aspects of water management in cities will be dealt with by delivering modules on advanced methods, technologies and solutions related with water infrastructure (water supply, sewerage, wastewater treatment, stormwater management). The use of new techniques/software such as GIS for planning and design of water infrastructures, operation and maintenance of the water infrastructures, assessment of the floods and estimation of risks associated with the floods will be focused in details. The course will also expose the participants to sustainability and resilience for climate change in urban water sector.

Course outline

- **Module 1: Urban Water Supply (10th and 11th Dec. 2018)**
  - GIS based Hydraulic Modelling
  - Water Audit
  - Strategies for Improving Service Level Benchmarks
  - NRW Reduction Approaches
  - Use of Information and Communications Technologies (ICT)

- **Module 2: Wastewater Treatment (12th Dec. 2018)**
  - Water Quality Monitoring and Assessment
  - Basics of Biological Treatment
  - Wastewater Treatment Technologies (conventional, advanced and natural treatment systems)
  - Technology Selection for Wastewater Treatment

- **Module 3: Stormwater Management (13th and 14th Dec. 2018)**
  - Urban Hydrology
  - Sewer and Stormwater Network Design
  - Urban Flood Risk Estimation (Hazard and Vulnerability Assessment)
  - Urban Flood Mitigation Options and Selection

Course benefits

This course is useful for municipal corporations, planning agencies, public health departments, water supply and sanitation departments, practicing engineers, college teachers and researchers. This will be a great opportunity for young engineers interested to enter into urban water sector. However, senior experienced engineers will get enhanced with new set of skills and knowledge. The course will also serve as a platform for participants to meet, network and discuss problems and solutions through our mutual interests in urban water sector.

Software training

Relevant software products will be demonstrated during the course.

Course instructors

The sessions will be delivered by the experts from CUSE, CESE and Civil Department at IIT Bombay. The core faculty members will be Prof. Pradip Kalbar - http://cuse.iitb.ac.in/people/faculty/kalbar/
and Prof. Subhankar Karmakar –
http://www.cese.iitb.ac.in/people/facinfo.php?id=skarmakar

Other details

The lecture notes/slides will be made available to the participants at the end of the course. Participants can also access library facility at IIT Bombay during this course.

Participation certificate

Successful participants will be awarded `Course Participant Certificate' on the last day of the course/module.

Contact information

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