## TRANSPORT, BOARDING & LODGING

Participants are entitled for Sleeper Class (Second Class) or III AC railway fare to and fro by the shortest route from their college to IIT Bombay. All participants will be given auto rickshaw fare from Kanjurmarg/Andheri to IIT on the dates of arrival and departure. Local participants will be paid second class railway fare or BEST Bus fare.

Boarding and lodging will also be provided free of cost. Accommodation will be provided in the Student hostels or Institute Guest House on sharing basis. Since the accommodation is limited family members of the participants cannot be accommodated.

## IMPORTANT DATES

Last date of receipt of registration: 9 June 2017
Notification of acceptance: 14 June 2017
Course Dates: 3-7 July 2017

**Venue for the course:** Seminar Hall, Civil Engineering Department, IIT Bombay

Date and Time of Registration:
3 July 2017, 9:00 AM at the course venue

## REGISTRATION

There is no registration fee for the course. All short-listed candidates are required to confirm their participation by sending **a Demand Draft of Rs. 2,000/- in the name of "Registrar IIT Bombay"**. The above amount will be refunded to the participant if he/she attends the course. In case a participant does not attend the course, the above amount will be forfeited.

Completed registration forms duly forwarded by competent authorities with college seal may be sent latest by **Friday, 9 June 2017**. A brief description (10-15 sentences) stating reasons to attend the course is desired. A preferable and faster way to send is send by email the scanned copy of the complete registration form.

**Registration forms may be sent to:**

**Prof. Gopal R. Patil**
Department of Civil Engineering
Indian Institute of Technology Bombay
Powai, Mumbai – 400076
Tel: 022-25767308 / 022-25767301
Email: *gpatil@iitb.ac.in*

**For any further information regarding QIP programmes at IIT Bombay, contact:**

Professor-In-Charge, CE & Q.I.P.,
IIT Bombay, Powai, Mumbai – 400 076.
Phone: 022- 25767006
Email: **qip@iitb.ac.in**
http://www.qip.iitb.ac.in/index.php

**Quality Improvement Programme**

Short Term Course
*on*

# ADVANCES IN TRANSPORTATION PLANNING AND TRAFFIC MANAGEMENT

3-7 July 2017

*Course Coordinator*

**Prof. Gopal R. Patil**

Transportation Systems Engineering Group
Department of Civil Engineering

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

## Introduction

Transportation Systems are the integral part of the modern society. Efficient transportation systems are vital to the social and economic development any region. Planning, designing, constructing and managing transportation systems are time consuming and expensive. In order to effectively spend the scarcely available fund, it is important to plan the transportation facilities considering future needs. For this purpose an exhaustive travel demand model is needed which can help us to consider outcomes considering different development scenarios. Transportation systems, especially the ones which promote personalized vehicles, creates many negative externalities such as emissions, noise pollution, etc. Thus the planning has to sustainable causing minimum negative impact on the nature. Once a facility, such as a highway is constructed, managing vehicle traffic and pedestrian is another challenging tasks. It is important to understand the traffic behavior and evaluate performance and safety of these facilities. Such analysis can help to propose and assess traffic management measures such as intelligent transport systems. The topics relevant to these issues will be discussed in this course by eminent experts in the field of transportation engineering.

## Broad Objectives

This course is aimed at providing insights into the various aspects related to transportation planning and traffic management for surface transport systems. The course will be useful for faculty members who are teaching or planning to teach undergraduate courses in transportation engineering. Demonstration of some popular softwares such as CUBE Voyager, VISSIM, and NLOGIT will be given. Additional discussion between participants and experts will be facilitated through panel discussions.

## Course Contents

Introduction to Transportation Systems Planning and four-stage demand model, Trip Generation, Trip Distribution, Mode choice and Traffic Assignment, Behavior modeling, Sustainable planning, Public Transportation Planning, Smart Cities and Smart Transportation, Case studies of transportation planning models, Fundamentals of Traffic Flow, Traffic Control at intersections, Traffic Management, capacity and level of service (LOS) concept, Road geometry and traffic, Transport safety, Overview of Cube Voyager, VISSIM, and NLOGIT packages.

## Teaching Faculty

Most of the lectures of the course will be delivered by the faculty members of the transportation system engineering (TSE) group at IIT Bombay. They include **Professors Gopal R Patil (course coordinator), K V Krishna Rao, Tom Mathew, P Vedagiri, Avijit Maji and Nagendra Velaga**. Experts from industry will also be invited. The TSE group is widely recognized in the country for their expertise in transportation planning and traffic management.

## Eligibility

Faculty members of degree level engineering college recognized by AICTE are eligible to attend the course.

## Lecture Notes

Copies of lecture notes/presentations will be made available to the participants.

## Course Evaluation

Successful participants would be awarded Course Completion Certificate

## REGISTRATION FORM

**QIP Training Programme**

*on*

**ADVANCES IN TRANSPORTATION PLANNING AND TRAFFIC MANAGEMENT**

**3 – 7 July 2017**

1. *Name:*_____
2. *College/Univ.*_____
3. *Qualification:*_____
4. *Address:*_____

   _____
5. *Sex ( M/F):*_____
6. *Telephone:*_____
7. *Email:*_____
8. *Prior Exposure to Demand Modeling: Yes / No*
9. *Sign of applicant*_____
10. *Accommodation in Campus: YES / NO*

Signature of Applicant:

Sponsorship & signature of Head of the College / Institute (with date & seal).

(**IMPORTANT:** BY SIGNING ABOVE HEAD OF THE COLLEGE/INSTITUTE CERTIFIES THAT APPLICANT IS A FACULTY MEMBER OF DEGREE LEVEL ENGINEERING COLLEGE RECOGNIZED BY AICTE)