

# Dynamic Traffic Flow Modeling and Control Special Short Course

Berkeley, California, USA

## About the Course

The design, analysis, and evaluation of many Intelligent Transportation Systems (ITS) requires working knowledge of traffic flow modeling and control techniques, and familiarity with powerful methodologies from the areas of optimization, control, networks and dynamic systems. This intensive 5-day course covers the basic theory and tools necessary for efficient design and evaluation of ITS on road and freeway networks. The course covers the following:

- Traffic flow modeling and validation, including traffic flow models, modeling of traffic networks, and simulation tools
- Measurement devices and estimation problems in traffic networks, including automatic incident detection and origin-destination estimation
- State-of-the-art techniques in freeway control, road traffic control, and integrated control employing ramp metering, signal control, variable speed limits and route guidance via application of modern optimization, control and estimation techniques

## Who Should Attend

Graduate students, engineers, researchers, consultants, and government employees who are interested in improving their understanding of advanced traffic flow modeling and control tools and their application in ITS.

## Instructor Biography

Professor Markos Papageorgiou of the Technical University of Crete is a visiting professor at the University of California, Berkeley. Professor Papageorgiou is an internationally acclaimed scholar in the fields of modeling, optimization, and automatic control, focusing on their applications to traffic systems, transportation systems, and water networks. He has participated in the development and validation of traffic flow models for more than 35 years.

## Location

Faculty Club (Heyns Room)  
University of California, Berkeley  
Berkeley, California 94720 USA

Directions, a map, and information about accommodations are posted on the registration website.

## Dates and Times

Monday, June 6, 2011 through Friday, June 10, 2011  
The class will meet from 8:30 am to 5:00 pm each day.

## Registration Fees

General Registration Fee (received by 5/23/11):  
\$1,950 USD

Late Registration Fee (received after 5/23/11):  
\$2,150 USD

Please Note: A limited number of discounted registrations are available for UC Berkeley graduate students. Please contact Helen Bassham at [hbassham@berkeley.edu](mailto:hbassham@berkeley.edu) to inquire.

## How to Register

Register online at:

[www.techtransfer.berkeley.edu/dynamic](http://www.techtransfer.berkeley.edu/dynamic)

Payment can be made online by credit card or by check. See website for details.

## Registration Includes

Handout material (presentations, readings, exercises and solutions)

- Refreshments
- Daily lunch
- One group dinner

## Questions?

Contact Helen Bassham at  
510-665-3628 or  
[hbassham@berkeley.edu](mailto:hbassham@berkeley.edu)

