

INFORMATION TECHNOLOGY APPLICATIONS IN TRANSPORTATION PLANNING & MANAGEMENT

Overview

Urban transport worldwide is facing the combined challenges of increased vehicular kilometers of travel (VKT), lack of physical space to increase capacity, as well as increased emissions. Use of information technology can provide cost effective solutions to mitigate this scenario. This course introduces the audience to the concept of transport planning and management through the use of information and communication technology (ICT) specifically understanding its application in interoperability of transport systems, technology developed/under development, policy, financing and usage using ICT. The course endeavors to disseminate the effectiveness of developing a resource friendly, intelligent, environmental friendly and citizen friendly transport systems using ICT in India.

The primary objectives of this course are to:

- Develop an understanding of travel demand management
- Understand the ways to develop an ITS architecture/network
- Evaluate the effectiveness of various information and communication technologies in transport
- Application of Statistical as well as Multi Criteria Decision Making (MCDM) tools in transportation
- Build necessary skills to generate system architecture of various intelligent transport systems
- Build necessary skills to increase existing infrastructure capacity: Uses intelligent transportation systems (ITS)
- Success case studies of ITS in Japan and evaluating its implementation in Indian context

Course participants will learn these topics through lectures and hands-on experiments. Also case studies and assignments will be shared to stimulate research motivation of participants.

Course dates	▪ March 11 – 15, 2019
You Should Attend If...	▪ you are a civil engineer or research scientist interested in urban transport planning and operations. ▪ you are urban planner interested to learn IT applications in transport planning. ▪ you are a student or faculty from academic institution interested in learning how to do research on developing travel demand management strategies for improving efficiency of urban transport systems.
Fees	The fees for enrolling in the course is as follows: Participants from academic institutions (faculty/researchers): Rs. 5,000 Participants from industry/ research organizations: Rs. 8,000 Individual participants: Rs. 3,000 Participants from abroad: US \$250 The above fee includes all instructional materials, laboratory equipment usage charges, 24 hr free internet facility. The participants will be provided with accommodation on payment basis.

The Faculty



Tetsuo SHIMIZU is professor in the Department of Tourism Science, Tokyo Metropolitan University. His research interest covers transport, urban, regional studies basing engineering, economics, planning and policy knowledge. Current research topics are Intelligent Transport System including IoT issues in transport, travel demand and behavioral analyses, traffic flow analysis, national/regional tourism policy, and data science in tourism industry. Prof. SHIMIZU received his Doctor of Engineering from TIT in 2002 from Tokyo Institute of Technology (TIT). He was visiting researcher at the Inter-University Center for Sustainable Development Research, Sapienza University of Rome in 2010. He was also assigned as the director of Research Institute, Japan Travel and Tourism Association in 2017. For his complete profile, kindly visit <https://researchmap.jp/TShimizu700116/?lang=english>



Arkopal Goswami is an Assistant Professor in the Ranbir and Chitra Gupta School of Infrastructure Design and Management, Indian Institute of Technology (IIT) Kharagpur. Dr. Goswami specializes in transportation infrastructure, where his research interests are in the field of sustainable urban transport infrastructure - its planning, management, and preservation. He received his doctorate in Civil Engineering from the University of Virginia in 2008. Subsequently, he gained experience of working for public and private sector transport organizations in USA. He has published and presented his work in journals and at conferences that include the ASCE Journal of Transportation Engineering and at the Annual Transportation Research Board (TRB) conference in Washington DC. Currently he is a member of the TRB committee on Roadside Maintenance Operations (AHD 50), and life member of the transport research group (TRG), India. For his complete profile, please visit - <http://www.iitkgp.ac.in/departement/ID/faculty/id-akgoswami>



Bharath H Aithal is an Assistant Professor of Indian Institute of Technology (IIT) Kharagpur. His research interest is urban informatics, Disaster management, development of models to visualize urban land use change, land surface temperature modeling, UAV and Decision Support System. For his complete profile, please visit - <http://www.iitkgp.ac.in/departement/ID/faculty/id-bhaithal>

Course Coordinator

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