



IIT (BHU) URBAN MOBILITY SHORT-TERM COURSE

13-17
MARCH
2023



DAY 1

Cyber-Physical Systems and ITS

Introduction to Cyber Physical Systems:
Fundamentals and Design



Dr. Abhishek Dubey
Associate Professor, Vanderbilt University

Decarbonising Road Transport in India



Amit Bhatt
*Managing Director, International Council
on Clean Transportation*

Intelligent Transportation Systems (ITS)
deployment in Indian smart cities and
pathways for future advancements in
traffic management



Dr. Rajesh Krishnan
*CEO,
ITS Planners and Engineers, India*

Hands-on-Training on Geospatial
analysis: facility planning for Indian
cities, introduction to spatial data ac-
quisition, QGIS exploration,
preparation of maps



Dr. Harish Puppala
*Centre for Geospatial Technology, SRM
AP, Andhra Pradesh*

DAY 2

Data Analytics for Inclusive Urban
Mobility

Transit Scheduling, Dynamic Fleet
Allocation and Route Design in Smart
Cities: Use case development for
cyber-physical systems in the USA



Dr. Abhishek Dubey
Associate Professor, Vanderbilt University



Dr. Ayan Mukhopadhyay
Vanderbilt University

Integrating Public Transportation
Modes in a City and Planning for
Multimodality



G P Hari
*Ex-Additional General Manager,
KMRL*

Non-motorized Transport Planning and
Pedestrian Walkability: Case studies
from Indian Cities



Reashma P S
*Co-Founder and Managing Director,
Street Matrix*

Hands-on Training on R Programming
for Travel Demand Modelling and
Electric Vehicle Adoption



Dr. Varun Varghese
*Assistant Professor,
Hiroshima University, Japan*

DAY 3

Data Analytics for Congestion Mitigation

Urban Traffic Operations: Technological Solutions



Dr. Vijay Kovvali

Professor of Practice at IIT Delhi

Parking Management Action Plan for Cities: Data-driven Models and Policies for Equitable Use of Land



Reashma P S

Co-Founder and Managing Director, Street Matrix

Traffic Management Using Intelligent Transportation Systems (ITS) and Adaptive Routing Algorithms



Dr. Lelitha Devi Vanajakshi

Professor, IIT Madras

Intelligent transportation systems (ITS) and Road Safety



(Dr. Vijay Kovvali)

Professor of Practice at IIT Delhi

DAY 4

Data Analytics for Urban Traffic Management

Hands-on training sessions on traffic micro - simulation using VISSIM Session 1



Dr. Caleb Ronald Munigety

*Head
Mobility Think-tank, Bosch India*

Hands-on training sessions on traffic micro - simulation using VISSIM Session 2



Dr. Caleb Ronald Munigety

*Head
Mobility Think-tank, Bosch India*

Hands-on training sessions on traffic micro - simulation using VISSIM Session 3



Dr. Caleb Ronald Munigety

*Head
Mobility Think-tank, Bosch India*

Urban Freight Planning Best Practices in France



Dr. Jesus Gonzalez-Feliu

*Professor
La Rochelle Business School, France*

DAY 5

Data Analytics for Safe and Sustainable Urban Freight

Big-data Modelling for Crash Prediction and Safety Interventions: Case Studies Safety Analytics in the USA



Dr. Sabya Mishra
Professor, University of Memphis

Hands-on Training on Data Analytics for Choice Modelling with case studies on travel satisfaction, multitasking, and crowding from India, Bangladesh and Japan



Dr. Varun Varghese
*Assistant Professor,
Hiroshima University, Japan*

Urban Freight Planning Best Practices in Sweden – A Case for Smart Freight Parking and Urban Consolidation



Dr. Ivan Sanchez-Diaz
Chalmers University, Sweden

Urban Freight Planning Best Practices in Austria – A Case for Inland Water Freight Transport



Dr. Lisa-Maria Putz-Egger
*Professor
University of Applied Sciences Austria*

Planning and Policies for Urban Freight Movement in India: Addressing the “elephant in the room”



Dr. Agnivesh P
*Assistant Professor
IIT (BHU) Varanasi*

CLOSING CEREMONY



Dr. Agnivesh P
*Assistant Professor
IIT (BHU) Varanasi*



Dr. Ankit Gupta
*Associate Professor
IIT (BHU) Varanasi*



Dr. Varun Varghese
*Assistant Professor,
Hiroshima University, Japan*



Dr. Rajesh Krishnan
*CEO,
ITS Planners and Engineers, India*

Campus tour of IIT (BHU) and Transportation Lab Visits for in-Person participants

**To be held On
13/03/23 (Day 1)**

In-person participants should report on monday 8 AM for collecting their registration kits