



A Short Course on Discrete Choice Theory and Modelling Applications in Transportation



25th – 27th July 2018

Centre for infrastructure, Sustainable Transportation and Urban Planning (CiSTUP)
&
Department of Civil Engineering
through,
Centre for Continuing Education

Indian Institute of Science (IISc), Bangalore, India

Course Content and Schedule:

- Day-1 (Basics of Choice Modelling): Utility-based choice theory, Basic choice models, Maximum likelihood estimation
- Day-2 (Multivariate Extreme Value and Mixture models): Nested logit, GEV, Mixed logit, and latent class models
- Day-3 (Multiple Discrete Choice Models): Multiple discrete-continuous Choice Models (MDCEV and variants)

Date and Time	9 am to 11 am	11 to 11:15 am	11:15 am to 1 pm	1 to 2 pm	2 pm to 4 pm	4 to 4:15 pm	4:15 to 6 pm
Wednesday 25th July	Basics of Choice Models and Utility Theory	Tea Break	Binary and Multinomial Logit Models	Lunch	Ordered Response and Count Models	Tea Break	Modelling Lab
Thursday 26th July	Nested logit and GEV Models		Mixed Logit and Latent Class Models		Modelling Lab		Modelling Lab
Friday 27th July	Introduction to Multiple-Discrete Choice Models		MDCEV Models		Modelling Lab		Modelling Lab

Prerequisites: Course participants are expected to be comfortable with matrix algebra, differential and integral calculus, and probability and statistics, including estimation and interpretation of linear regression models and hypothesis testing.

Who will benefit from the course:

- Post graduate students and research scholars working in fields of Transportation Engineering and Planning, Urban Planning, Geography, Economics and Management Sciences
- Faculty members and research staff from academic institutes and R&D centres
- Practicing professionals in industry and in transportation planning and transit agencies

Course Dates: 25th – 27th July 2017 (begins at 9am on 25th July and ends at 5pm on 27th July)

Venue: Centre for infrastructure, Sustainable Transportation and Urban Planning (CiSTUP), IISc Bangalore