
Course Title: Transportation demand analysis

Number of Credits: 3

Prerequisite (Corequisite): Structural analysis (I), Concrete Technology **Lecturer: -**

Course Topic

- **Introduction:** the concept of travel demand in transportation – study on demand in transportation
- **Transportation planning:** transportation planning process and demand position in the planning process- general form of travel in urban areas – methods of forecasting travel demand – investigating the effect of transportation facilities on passenger demand – investigating the effect of land use in travel demand – investigating how to get statistics on urban transportation – investigating types of transportation models
- **Travel production in the first level:** the forms of models and relevant variables – methods of estimating model parameters – checking the calibration and evaluation of travel production models
- **Second level, travel distribution:** -growth models- gravity model and different methods of extracting – the model of fundamental opportunities and its relation with gravity model – origin – destination tables – choice theory in estimating transportation – Utility theory – models of choosing destination
- **Third level, travel separation (the share of travel equipment):** - preliminary models – investigation of influential variables and separation models – investigation of the position of separation models in the process of four – step model constructions– types of device selection models

Course Description:

Reading Sources:

Course Goals and objectives:

Evaluation:

Course topics:

The course aims to: