Course Name:
Transportation Engineering

Course Number:
20433

Credit:
3

Prerequisite:
System Engineering

Course Content (outline):

- Introduction (Role of transportation in society, transportation and urban structure, transportation as a system, and transportation system components)
- Transportation planning process
- Problem identification and Objective setting
- Definition of study area and zoning
- Data needs and information gathering in supply and demand of transportation, land use, and socioeconomic variables
- Transportation demand (trip generation and distribution, mode and path of travel)
- Transportation supply (shortest path, traffic assignment) supply relations
- Transportation externalities (air and noise pollution)
- Evaluation and Decision-making
- Transportation system Management (TSM)
  Country-wide transportation planning
- Other modes of transportation

References: