

Course Name:
Transportation Planning

Course Number:
20591

Credit:
3

Course Content (outline):

1. Introduction
 - Transportation Planning History
 - Transport and Urban Structure
2. Transportation Planning Process
 - System Planning
 - Level and Scope of Planning - Planning Tools
3. Transportation Issues
 - Goals and Objectives
4. Data Collection
 - Zoning
 - Surveys
 - Source of Data
5. Land Use
 - Population Projection
 - Employment Projection
6. Demand in Transportation
 - Four Steps Demand Forecasting: Trip Generation, Trip Distribution, Travel Mode, Traffic Assignment
7. Supply in Transportation
 - Transportation Network
 - Network Equilibrium Traffic Assignment
8. Urban Transportation Challenges
 - Urban Travel Context
 - Pollution
 - Noise
9. Decision Making Process
 - Transportation Solutions
 - Evaluation Methods
10. Transportation Systems Management
11. Comprehensive Transportation Plans
12. Other Topics
13. Conclusions

References:

1. Morlok, E.K., Introduction to Transportation Engineering & Planning, McGraw-Hill, New York, 1978.
2. Hutchinson, B.G., Principles of Urban Transport Systems Planning, McGraw-Hill, New York, 1974.
3. Dickey, J. W., R. C. Stuart, R. D. Walker, M. C. Comingham, A. G. Winslow, W. J. Diewald, & G. Day Ding. Metropolitan Transportation Planning, McGraw-Hill, New York, 1975.
4. Khisty, C. J., Transportation Engineering, Prentice Hall, Englewood Cliffs, 1990.