

CE/BOS/ CE 439/0513

**K L UNIVERSITY**  
**URBAN TRANSPORTATION SYSTEMS PLANNING (11 – CE 439)**

Pre – requisite: 11 - CE 305

L	T	P	Cr
3	0	0	3

**SYLLABUS**

**Transportation Planning:** Introduction to transportation planning; systems approach to transportation planning; types of models; concept of travel demand and supply; socio-economic, land use, network, and transport system characteristics affecting transportation planning.

**Transportation Survey:** Study area definition, zoning principles, cordon and screen lines, data collection through primary and secondary sources, sampling techniques.

**Sequential modeling approach:** Four-stage sequential modeling approach; trip generation; trip distribution; modal split; trip assignment.

**Planning For Public Transport:** Public transport planning, Fares and Subsidies Introduction to Intermediate Public Transport Type and Characteristics of IPT Modes in India, Integration of different modes.

**Urban and intelligent transportation systems:** ITS, first generation of ITS and it's applications, ITS in Various Countries, Mature ITS Applications, Safety and Liability, Second Generation of ITS

**Text Books:**

1. Principles and practices of highway Engineering by Dr. L. R. Kadiyali & Dr. N. B. Lal Khanna publishers, 2003.
2. Principles of Transportation Engineering by Partha Chakroborty and Animesh Das. Prentice Hall of India, New Delhi, 2003.

**Reference Books:**

1. Principles of Highway Engg., and Traffic Analysis by Fred L. Mannering etc., Wiley Publications, 4<sup>th</sup> edition, 2012 reprint.
2. Transportation Engineering by C. Jotin Khisty, B.Kent Lall, Prentice Hall of India, New Delhi, 2008