

CE/BOS/ CE E72/0210

**K L UNIVERSITY**  
**TRAFFIC ENGINEERING (09 – CE E72)**

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**SYLLABUS**

**UNIT – 1: Introduction**

Significance and scope, Characteristics of Vehicles and Road Users, Skid Resistance and Braking Efficiency (Problems), Components of Traffic Engineering- Road, Traffic and Land Use Characteristics.

**UNIT-2: Traffic Surveys and Analysis**

Surveys and Analysis - Volume, Capacity, Speed and Delays, Origin and Destination, Parking, Pedestrian Studies, Accident Studies and Safety Level of Services- Problems.

**UNIT-3: Traffic Control**

Traffic signs, Road markings, Design of Traffic signals and Signal co-ordination (Problems), Traffic control aids and Street furniture, Street Lighting, Computer applications in Signal design.

**UNIT-4: Geometric Design Of Intersections**

Conflicts at Intersections, Classification of Intersections at Grade, - Canalized and Unchanallised Intersection - Grade Separators (Concepts only), Principles of Intersection Design, Elements of Intersection Design, Canalization and Rotary design (Problems), Grade Separators.

**UNIT-5: Traffic Management**

Traffic Management- Traffic System Management (TSM) and Travel Demand Management (TDM), Traffic Forecasting techniques, Restrictions on turning movements, One-way Streets, Traffic Segregation, Traffic Calming, Tidal flow operations, Exclusive Bus Lanes - Introduction to Intelligence Transport System (ITS)

**TEXT BOOKS:**

1. Kadiyali L R, 2000, Traffic Engineering and Transport Planning, Khanna Technical Publications, Delhi.
2. Khanna K and Justo C E G, 2000, Highway Engineering, Khanna Publishers, Roorkee.

**REFERENCEBOOKS:**

1. Indian Roads Congress (IRC) specifications: Guidelines and special publications on Traffic Planning and Management.
2. Guidelines of Ministry of Road Transport and Highways, Government of India