



Pandit Deendayal Petroleum University (PDU), Gandhinagar

School of Technology

Department of Civil Engineering

M.Tech in Transportation Engineering

About the Program

Over the past few years, the road construction technology has witnessed a massive change in aspects of design, construction, and maintenance, resulting in an increase in the relevance and importance of Traffic Engineering, Transportation Planning and Sustainability. Transportation Engineering is one of the major branches of Civil Engineering and it involves planning, design, construction, operation and maintenance of transportation facilities. The facilities support air, highway, railroad, pipeline, water, and even space transportation. Transportation Engineering includes sizing of transportation facilities, selection of materials and design of pavement and geometry of roadway.

The Master program in Transportation Engineering offered by the department of Civil Engineering is designed to equip students with the latest knowledge to find the solutions for the challenges faced in Transportation Engineering. The course covers an advanced academic exploration of subjects such as Ground Improvement Techniques, Pavement Analysis & Design, Intelligent Transportation System (ITS) ,Pavement Evaluation & Management Systems, Geometric Design of Highways, Traffic Engineering, Urban Transport Planning, Highway Construction, and Maintenance, etc.

At the end of the course, the Graduates of the program will be able to:

- A fundamental understanding of sizing of transportation facilities, selection of materials and design of pavement and geometry of roadway.
- Students are trained on the application of various software and programming skills for simulation of traffic flow
- Trained in Intelligent Transportation System (ITS) to address urban transportation issues

Who is eligible to apply?

B.E. /B. Tech. in Civil Engineering with minimum 60% or CPI/CGPA of 6.5 on a 10 point scale.

Pre-requisite:

Students are expected to have good background in Transportation /traffic Engineering,

About Curriculum

The curriculum for the course has been designed by referring the curriculum of reputed Indian & Foreign Universities. It is further fine-tuned as per the industry requirement.

The curriculum has been structured in three phases:

1. Core Courses: The core courses are essential to provide critical understanding of theoretical and practical issues relating transportation problem
2. Elective Courses: While core courses provide the breadth of program, the elective courses of Transportation Engineering provide the length in the respective domains of the Transportation Engineering.
3. Research Project: The objective of this course is to affiliate the students from day one towards research in the Transportation field with not only theory but practical aspects and helpful towards final year thesis.