



MASTER OF TECHNOLOGY (M.TECH.) IN **TRANSPORTATION ENGINEERING**













GLIMPSE OF M.TECH. IN TRANSPORTATION ENGINEERING (TE)



Transportation infrastructure planning, design, construction, operation, maintenance using state of art and advanced technology in the areas are need of present time. Programme covers areas with main focus on highway-pavement, urban transport, rural road, road safety, pavement maintenance management and traffic engineering.

ELIGIBILITY

B.E. /B. Tech. (Civil), Minimum with 50% or more than that for open category with PGCET.

FEATURES OF THE PROGRAMME

Intake: 12 Duration: 4 semesters (2 years)

The courses offered in the programme cover a wide range of areas such as Transportation Planning, Traffic Engineering, Highway Materials and Construction, Advance Pavement Construction, Pavement Design, Transportation System Planning and Management, EIA of Transportation Projects, Pavement Management, GIS-GPS application in Transportation Projects.



The students will get experience of laboratory tests and field studies, and also trained on Various softwares such as IITPAVE, KENPAVE, KENSLAB, IIT RIGID, Autocad-CIVIL 3D, MXROAD, OPEN ROAD.

All students have to carry out group projects, seminars, and research thesis for one year for their major project. The programme is of two years' duration for full time.

COURSE CURRICULUM

Detailed outcome based scheme and syllabi can be accessed on: www.darshan.ac.in In addition to in-house facility, experts from the industry are also invited to give special lectures and training. Industrial visit is also arranged for field exposure.



LABORATORY AND COMPUTATIONAL FACILITIES

The transportation laboratory offers all major facilities to support the M. Tech.-(TE) Programme. The laboratory has facilities for testing of aggregates, bitumen, soil & cement; & also has facilities for designing of bituminous mix and concrete mix. The equipment required for traffic related field studies- video based traffic data collection system, traffic speed radar etc. are available. For pavement testing MERLIN, Benkelman beam, DCP, Axle load pad and Core cutter etc. are available

FACULTY INVOLVED IN TEACHING

Dr. U. J. Solanki

Associate Professor, Civil Engineering 31+ Years of Experience

K. K. Vala

Assistant Professor, Civil Engineering 5+ Years of Experience

D. D. Dave

Assistant Professor, Civil Engineering 6+ Years of Experience

D. A. Jalalpara

Assistant Professor, Civil Engineering 1+ Years of Experience

CONSULTANCY WORK

20+

Traffic Survey

50+

Flexible Pavement Design

50+

Concrete/Rigid Pavement Design

110+

Bituminous Mix Design 30+

Pavement Quality Concrete Design **50+**

Pavement Evaluation using Benkelman Beam and DCP

50+

Pavement Condition Survey 50+

Roads inspected as an Independent Quality Monitor (IQM) under Mukhya Mantri Gram Sadak Yojana (MMGSY) 5+

Flyover feasibility studies for arterial roads of Raikot city

DEPARTMENT APPROVALS

Material Testing laboratory Approved by :-

- National Accreditation Board for Testing and Calibration Laboratories (NABL)
- Airport Authority of India (AAI)
- Roads and Buildings Department (R&B), Gujarat
- Gujarat Industrial Development Corporation (GIDC)
- Rajkot Urban Development Authority (RUDA)
- Rajkot Municipal Corporation (RMC)

CONSULTANCY WORK CARRIED OUT BY DARSHAN UNIVERSITY RAJKOT IN THE AREA OF TRANSPORTATION ENGINEERING

MAJOR CLIENT

- Concrete pavement design at ward no. 5, Navagam police station to RMC limit 600 m length road
- Condition assessment of existing asphalt road for construction of three arm flyover bridge at Civil Hospital Chowk, ward no. 3



- Traffic survey, Axle load survey, Soil test, Pavement design & construction of metaling and carpet paver work at ward no. 12 in Punitnagar 80 feet ring road (24.00 m TP Road)
- Design of Dense Bituminous Macadam (DBM), Bituminous Concrete (BC), Semi-dense Bituminous Concrete (SDBC), Granular Sub-Base (GSB) Construction work for flyover bridge at 150 feet ring road - Nana Mava Chowk and Ramdevpeer Chowk
- Mix Design of Pavement Quality Concrete (PQC) (1) Construction of (H.V.F.A.) C.C. road from Mavdi main road to Bidi Kamdar Society in ward no. 11 (2) Construction of (H.V.F.A.) C.C. road from Umiya chowk (Radhe Hotel) to Bapa Sitaram chowk in ward no. 12



 Design of overlay and Soil test at proposed Nagalpar GIDC using Benkelman Beam Deflection technique



• Flexible Pavement Design of 90 meter T.P. Road from Jamnagar Highway (Ghanteshwar) to AIIMS Hospital to connect Morbi road's.



 Design of Dense Bituminous Macadam (DBM Grade-II), Bituminous Concrete (BC Grade-II) for the development of Smart City Area in Rajkot.



- Testing of materials for the construction of New Greenfield Airport at Hirasar, Rajkot.
- Design of Dry Lean Concrete (DLC), Design of Pavement Quality Concrete (PQC) for the construction of New Apron with link taxi for AB 320 Aircraft at CA Rajkot



University Campus

Rajkot-Morbi Highway, Rajkot - 363650

Counseling Centre

- ♥ 401, Lotus Arcade, 8 Royal Park, 150 Ft. Ring Road, Rajkot
- Galaxy Plaza, Nr. Umiya Circle, Opp. Bajaj Showroom, Morbi