

# MANMOHAN TECHNICAL UNIVERSITY

Budhiganga-4, Morang, Koshi Province, Nepal



## INTRODUCTION

The 2015 constitution of Nepal established a federal system of governance giving legal authority to the provincial/state government to establish and operate need-based higher education institutions in their provinces. Manmohan Technical University (MTU) was thus established by the Provincial Government of Koshi Province (the then Province 1) in 2019. In the background, there has been Manmohan Memorial Polytechnic which provides foundations and has already been in successful operation for about one and a half decades with a well-known public image and branding for high-quality engineering technical Diplomas and other relevant vocational/occupational training courses. MTU has been established to produce higher level skilled technical human resources required for the economic progress, and prosperity of the nation and to contribute globally. This institution is the first Technical University in Nepal to provide need based high-quality technical and vocational education at the local, regional, national and international levels.



The University is moving forward with the belief that it will move towards becoming a model Technical University in South Asia. The University has three Schools namely the School of Engineering, the School of Applied Science and Technology and the School of Medicine and Allied Health Sciences. The School of Engineering was established initially with Bachelor in Civil Engineering and Bachelor in Electrical and Electronics Engineering programs in 2078 BS. To meet the need of huge number of Electrical Engineers in the nation, the School of Engineering has launched BE in Electrical Engineering from the Academic Year 2081/082.

## VISION

A Technical University committed to excellence in education research and innovation for contributing to the national and global Technical Education arena.

## MISSION

MTU shall become a model Technical University recognized for quality education, impactful research and entrepreneurship development.

## SALIENT FEATURES

- First Technical University in Nepal
- Well equipped Labs and Workshops
- Practical, project based and work based curriculum (Internship)
- Congenial academic and research environment
- Internal and final marks ratio 50:50 in theory and 60:40 in practical
- Best teaching-learning environment
- Competent and motivating faculty members
- Well equipped library with E-Journal access
- Hostel facility (conditions apply) Girls

## Course Structure of B.E. Electrical Engineering

### First Year First Part

Engineering Mathematics I  
Engineering Workshop  
Engineering Physics  
Engineering Drawing I  
Computer Programming  
Engineering Thermodynamics  
Basic Electrical Engineering



### Second Year First Part

Engineering Mathematics III  
Microprocessors  
Electric Circuit Theory  
Electronics Devices and Circuits  
Measurement and Instrumentation  
Electrical Machine I  
Professional Practice and Ethics



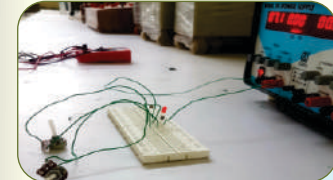
### Third Year First Part

Probability and Statistics  
Transmission System Design  
Digital Control System  
Signals and Systems  
Electrical Machine Design  
Electrical Power System II  
Project I



### Fourth Year First Part

High Voltage Engineering  
Project Management  
Power Plant Engineering  
Electrical Energy System Management  
Research Project  
Elective II  
Elective III



**Elective II**  
Reliability Engineering  
Electrical Vehicle (EV) Technology

### First Year Second Part

Engineering Mathematics II  
Engineering Drawing II  
Applied Mechanics  
Surveying and Computer Aided Drawing  
Object Oriented Programming  
Logic Circuit  
Electrical Engineering Materials



### Second Year Second Part

Electrical Machine II  
Applied Mathematics  
Numerical Methods  
Control System Engineering  
Power Electronics  
Electrical Power System I  
Technology, Environment & Society



### Third Year Second Part

Distribution Line Design  
Illumination Design & Industrial Electrification  
Engineering Economics  
Power System Protection  
Industrial Automation  
Elective I  
Project II



### Fourth Year Second Part

Work Based Education  
Final Project

### Elective I

Flexible AC Transmission System  
Microgrids  
Intelligent Power System

### Elective III

Applied Photovoltaic Engineering  
Micro Hydro Power  
Wind Energy Conversion System

## Course Structure of B.E. Civil Engineering

### First Semester

Engineering Mathematics I  
Engineering Chemistry  
Engineering Physics  
Engineering Drawing I  
Computer Programming  
Basic Electrical and Electronics  
Engineering



### Third Semester

Engineering Mathematics III  
Engineering Mechanics II  
Strength of Materials  
Fluid Mechanics  
Building Technology  
Computer Aided Building  
Drawing  
Surveying I

### Fifth Semester

Probability & Statistics  
Transportation Engineering I  
Theory of Structures II  
Foundation Engineering  
Survey Camp  
Design of Masonry Structure  
Engineering Hydrology

### Seventh Semester

Design of RCC  
Sanitary Engineering  
Hydropower Engineering  
Estimating Costing and Valuation  
Project I  
Elective II  
Elective III

## CRITERIA FOR ADMISSION IN B.E.

As per UGC guidelines:

- Minimum C in all subjects including Math, Physics and Chemistry in class 12 with minimum 45% minimum score with 45% in each subject (PCM).
- Math in class 11 and 12 is compulsory.

## MODE OF INTAKE

- Entrance Examination Form will be available online.
- Entrance Examination (CBT-Computer Based Test) will be conducted on the announced date.

### Second Semester

Engineering Mathematics II  
Engineering Mechanics I  
Engineering Geology  
Workshop Technology  
Engineering Drawing II  
Civil Engineering Materials  
Fundamental of Architecture

### Fourth Semester

Theory of Structures I  
Hydraulics  
Numerical Methods  
Soil Mechanics  
Surveying II  
Concrete Technology



### Sixth Semester

Transportation Engineering II  
Design of Steel & Timber Structure  
Engineering Economics  
Water Supply Engineering  
Construction and Project Management  
Irrigation and Drainage Engineering  
Elective I



### Eighth Semester

Professional Practice and Ethics  
Work Based Education  
Project II





Prof. Dr. Prachand Man Pradhan  
Dean, School of Engineering



Dr. Deepranjan Dongol  
HOD, Department of  
Electrical and Electronics  
Engineering



Er. Om Narayan Chaudhary  
HOD, Department of Civil  
Engineering



### Available Scholarships:

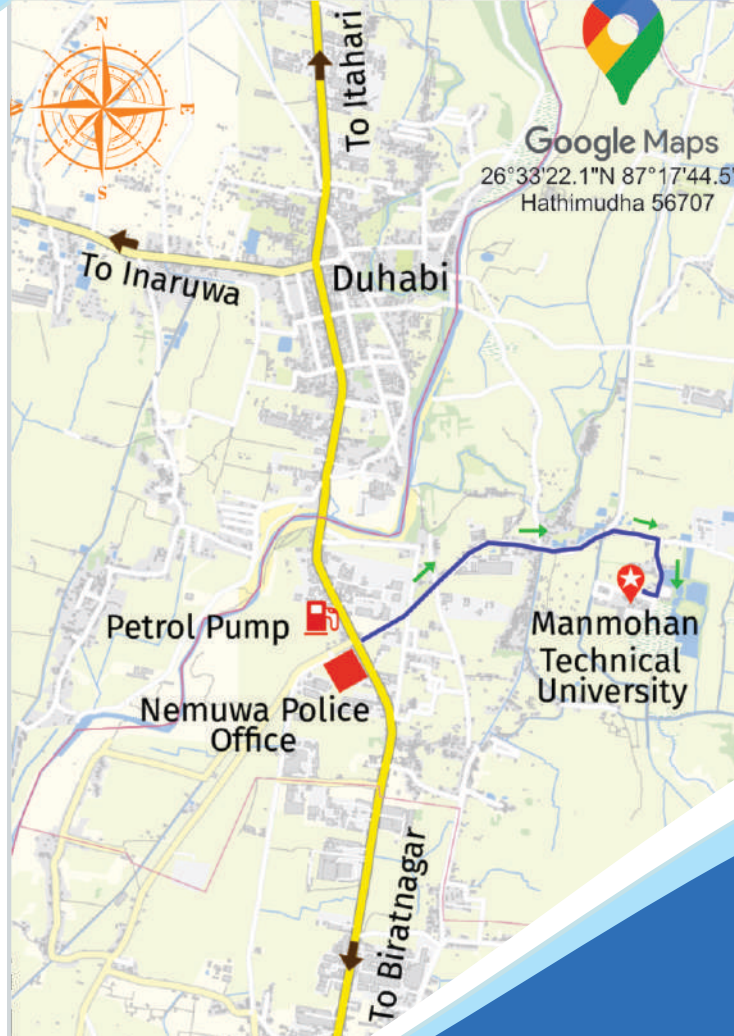
Scholarship Name	B.E. Civil Engineering	B.E. Electrical Engineering
Merit	1	1
Need Based	4	4
Partial Rebatement	4	4

### Full Fee for 4 Years:

(for academic year 2081/082 B.S.)

→ B. E. Civil Engineering : NRs. 5,95,000/-

→ B. E. Electrical Engineering : Rs. 5,85,000/-



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# MANMOHAN TECHNICAL UNIVERSITY



Budhiganga-4, Morang, Koshi Province, Nepal



## SCHOOL OF ENGINEERING

### Courses Offered for 2081/082

→ Bachelor in Civil Engineering : 48 Seats

→ Bachelor in Electrical Engineering : 48 Seats