



**MANIPAL**  
INTERNATIONAL UNIVERSITY



## MANIPAL AROUND THE WORLD

### UNITED STATES

American University  
of Antigua, Antigua

### INDIA

Manipal Academy of Higher  
Education, Manipal, India

Manipal University Jaipur,  
Jaipur, India

Sikkim Manipal University,  
Sikkim, India

### DUBAI

Manipal Academy of Higher  
Education, Dubai, UAE

### NEPAL

Manipal College of  
Medical Sciences, Nepal

### MALAYSIA

Manipal International  
University, Nilai, Malaysia

Manipal University College  
Melaka, Malaysia

Manipal GlobalNxt  
University, Malaysia

## BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS

(R2/521/6/0012) (06/22) (MQA/FA0599)



## MANIPAL GROUP OF INSTITUTES

**60+**  
YEARS  
of education  
excellence

**450,000+**  
alumni members

**400,000+**  
students



**20+**  
disciplines

**75+**  
academic partners  
worldwide

**10k+**  
alumni faculty

students from  
**59+**  
countries



## INTRODUCTION / OVERVIEW OF THE COURSE

Machines are part of humans since the Industrial Revolution. Mechanical Engineering is one of the broadest engineering disciplines. Mechanical engineers apply problem solving, analysis and critical thinking to design, develop, build, and test products for the benefit of human kind. It is the oldest branch and its often referred to as the “mother” branch of engineering. Mechanical engineering combines principles in physics and mathematics with material science. It is highly sought after in industrialized nations. Mechanical engineers are not only needed in factories as many would perceive. They also required in the aerospace, automotive, robotics, construction, computing, biomedical, human health, marine, and transport industries just to name a few. If you love physics and mathematics; and are interested in designing and making mechanical engineering systems. This program is for you.

## INTAKE:

MARCH 3

AUGUST 8

OCTOBER 10

## CONTACT INFO

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Negeri Sembilan

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📺 manipalmy

🏢 Manipal International  
University

INTAKE: March / August / October  
DURATION: Four years

MIU Pathways

ENTRY LEVEL	ENTRY REQUIREMENTS APPROVED BY MOHE
INTERNATIONAL STUDENTS: Required minimum score of 5.0 for IELTS or 500 for TOEFL or its equivalent	
STPM	Pass with minimum of 2 Grade C including Mathematics and 1 Science subject
UEC	Pass with minimum of 5 Grade B including Mathematics and 1 Science Subject
A-LEVEL	2 Passes in Mathematics and 1 Science subject
Matriculation/ Foundation	Pass Matriculation/Foundation in relevant field (recognized by the Malaysian Government) with minimum CGPA 2.00
Diploma	<ul style="list-style-type: none"><li>Diploma in Engineering/Engineering Technology (recognized by the Malaysian Government) with CGPA 2.00; or</li><li>Diploma in Vocational and Technical/Skills in related field (recognized by the Malaysian Government) with CGPA 2.00</li></ul>
Others	Any other equivalent qualifications recognized by the Malaysian Government

Course Structure / Course Outline

YEAR 1

Engineering Mathematics 1	Computer Programming	Computer Programming Lab 1	Engineering Graphics	English for Professional Communication	Self-Development and Leadership Building
Hubungan Etnik / B.Melayu Komunikasi 2	Engineering Mathematics 2	Engineering Statics	Environmental Science	Electronic Devices & Circuits	Elements of Mechanical Engineering
Elements of Electrical Engineering	Introduction to Psychology	Pengajian Malaysia / TITAS	Family Issues	Co-curriculum	

YEAR 2

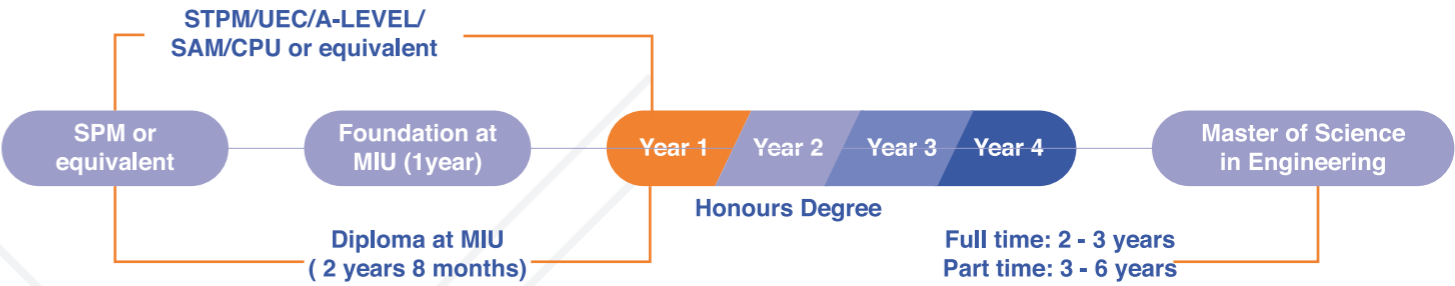
Engineering Dynamics	Thermodynamics 1	Industrial Safety & Health	Engineering Mathematics 3	Material Science & Metallurgy	Entrepreneurship
Theory of Machines	Mechanics of Materials	Mechanical Laboratory 1	CAD/CAM	Operations Research	Manufacturing Processes

YEAR 3

Mechanical Design	Mechanical Measurement	Mechanical Laboratory II	Organizational Behaviour	Capstone Design 1	Computer Aided Engineering
Thermodynamics II	Fluid Mechanics	Heat Transfer	Product & Systems Design	Capstone Design 2	Elements of Mechatronics
R&D Methodology	Project Management	Engineers in Society			

YEAR 4

Final Year Project 1	Mechanical Vibrations	Corrosion Engineering / Quality Management	Turbo Machines / Advance Manufacturing Techniques	Composite Materials / Finite Elements Methods	Production & Operation Management
Technical Seminar	Final Year Project 2	Industrial Training	Control Engineering	Engineering Economics	Robotics / Automobile Engineering



SCHOLARSHIPS & FINANCIAL AIDS AVAILABLE



Facilities around the Campus



Laboratories

49 Engineering, Biotechnology, Computer Science and Mass Comm labs for hands-on experience.



Sports & Fitness

On-Campus sports facilities and various competitions keep our students healthy and strong for all challenges.



Cultural Clubs & Society

Over 15 clubs and societies allow students to exhibit their inner passions and creativity with freedom.



Academic Cognition

Multi-floor library, conducive classroom environments and lush-green campus offers peaceful and focused concentration.



Library

At MIU we have state-of-the-art library with free access to reputable e-databases such as Springer for all the students.



On Campus Hostel

MIU student hostel is 5 mins walking distance from the MIU campus. Amenities such as restaurant, banks and medical center are very close to the hostel. All rooms are airconditioned.

Career Prospects in Engineering



Laboratory Technician



Maintenance Technician



Manufacturing Technician



Assembly Technician



Draftsman



Production Supervisor