Overview

Mechanical Engineering is a discipline with a long history of technology innovation, and it is at the frontier of a new wave of technological breakthroughs that are characterised by digitalisation, connectivity, and intelligence. With world-class faculty, facilities, and a rigorous but flexible curriculum, the MSc in Mechanical Engineering builds a solid foundation in fundamental theories on structures, dynamics, and controls, and provides students with the latest tools for analysing, designing, producing, and servicing various products and systems.

Who should apply

The programme caters to both full-time and part-time students who would like to pursue a professional career in research and development, manufacturing and servicing, technology management, facility management. Graduates from the programme are expected to find jobs and advance their careers in a wide range of industry sectors that include: Electronics, Semiconductors, Machinery and Robotics, Building and Construction, Pharmaceutical, Aerospace, Defence, Marine, Oil and Gas.
PROGRAMME STRUCTURE
Option 1: Coursework Only (Default Option)
10 Courses
4 Core & 6 Electives

Option 2: Coursework and Dissertation
8 Courses + Dissertation
4 Core & 4 Electives

DURATION OF THE PROGRAMME
Part-Time Study
Minimum Candidature: 2 years (4 semesters)
Maximum Candidature: 4 years (8 semesters)

Full-Time Study
Minimum Candidature: 1 year (2 semesters)
Maximum Candidature: 2 years (4 semesters)

CORE COURSES
MA6801: Advanced Thermal Engineering
MA6802: Engineering Measurements
MA6803: Computational Methods in Engineering
MA6804: Advanced Mechanics of Materials

ELECTIVE COURSES
MA6502: Fundamentals and Advances in Additive Manufacturing
MA6511: Advanced Manufacturing Processes
MA6512: Fundamentals of Precision Engineering
MA6515: 3D Printing of Electronics
MA6703: Supply Chain Analysis & Design
MA6715: Systems Simulation & Modeling
MA6741: Quality Engineering
MA6811: Product Design & Development
MA6812: Advanced Materials Engineering
MA6816: Laser Assisted Manufacturing

QUOTE
“Courses in this programme cover a lot of information in the engineering field, delivered in concise chunks that exhibit clear, logical and effective structure.”

Zhou Xiaoyue
(Class of 2021)

“It is a very beneficial qualification which serves the changing needs of both students and the society. This programme equips me with new skills and knowledge to enhance my current career.”

Tao Minyin
(Class of 2020)

PROGRAMME DIRECTOR
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