



School of Mechanical & Aerospace Engineering

MSc Mechanical Engineering

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

M6104: Advanced Mechanics of Materials

M6801: Advanced Thermal Engineering

M6802: Engineering Measurements

M6803: Computational Methods in Engineering

ELECTIVE COURSES

L6103: Supply Chain Analysis & Design

M6102: Advanced Materials Engineering

M6141: Quality Engineering

M6205: Systems Simulation & Modeling

M6235: Advanced Manufacturing Processes

M6303: Fundamentals of Precision Engineering

M6401: Product Design & Development

M6423: Prototype & Rapid Prototyping

M6816: Laser Assisted Manufacturing

QUOTE

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

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Zhou Xiaoyue

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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.

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Tao Minyin
(Class of 2020)

Website: [http://mae.ntu.edu.sg/Programmes/ProspectiveStudents/Graduate\(Coursework\)/MECH](http://mae.ntu.edu.sg/Programmes/ProspectiveStudents/Graduate(Coursework)/MECH)



PROGRAMME DIRECTOR

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