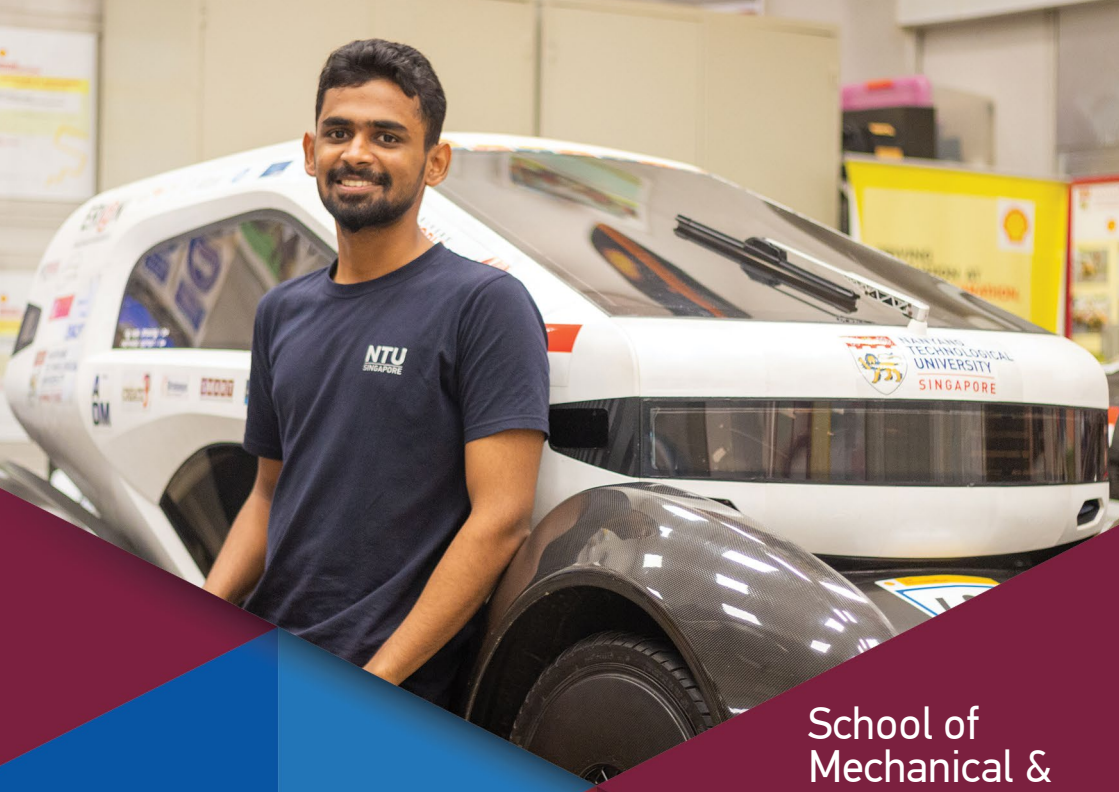

School of Mechanical & Aerospace Engineering

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

**Students in the MSc Mechanical Engineering programme have the option to graduate with a Specialisation in Additive Manufacturing.*

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 Inventory Planning
MA6715: Systems Simulation & Modeling
MA6741: Quality Engineering
MA6811: Product Design & Development
MA6812: Advanced Materials Engineering
MA6816: Laser Assisted Manufacturing
MA6813: *Robotics and Industrial Automation (tbc)*

QUOTE

"A wonderful opportunity to get exposure to the cutting-edge research, technologies, and global industries and also a great chance to inspire yourself and make your wild imaginations and dreams come true."

Zhang Tianyi
(Class of 2022)

"Undoubtedly challenging but also highly fulfilling. Taking this programme has equipped me with relevant engineering skills and knowledge for my future."

Liew Qian Yu
(Class of 2023)

Learn more

PROGRAMME DIRECTOR

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