

Bachelor of Engineering (Honours) in Mechanical Engineering

機械工程學(榮譽)工學士

Programme Structure

Students are required to complete the following requirements with satisfactory results for an honours degree:

Requirements		No. of Credits
General University Requirements (GUR)		9 – 18 credits
2 Cluster Area Requirements (CAR) subjects (including 1 designated as China-related) ⁺ , 3 credits each		6 credits
1 Free Elective subject		3 credits
Up to 3 Language and Communication Requirements (LCR) subjects (2 in English & 1 in Chinese), 3 credits each <i>(for students who have not met the equivalent standard of undergraduate degree LCR based on their prior sub-degree studies only)*</i>		0 – 9 credits
Discipline Specific Requirements (DSR) <i>(Please refer to the table on page 2 for details.)</i>		58 – 64 credits
Foundation	2 subjects, 3 credits each (for students without sufficient relevant knowledge only)	0 – 6 credits
Compulsory	14 subjects, 3 credits each (except 2 subjects of 2 credits each & 1 subject of 6 credits)	43 credits
Elective	4 subjects, 3 credits each	12 credits
Practical Training	1 subject	3 training credits
Total		67 – 82 credits (including 3 training credits)

⁺ Within these subjects, students need to fulfil the English and Chinese reading and writing requirements.

* Students' fulfilment of LCR will be assessed based on their academic records of sub-degree studies. They will be advised if they are required to take LCR subjects on admission.

Discipline Specific Requirements (DSR)

Subject Nature	Subject Title
Foundation (for students without sufficient relevant knowledge only)	Fundamental Engineering Mechanics
	Fundamental Mathematics
Compulsory (all 14 subjects)	Advanced Materials for Design and Technology
	Design and Manufacturing
	Dynamics and Vibrations
	Engineering Management
	Engineering Thermodynamics
	Final Year Capstone Project (6 credits)
	Fluid Mechanics
	Linear Systems and Control
	Mathematics II
	Mechanics of Materials
	Numerical Methods for Engineers
	Professional Communication in Chinese (2 credits)
	Professional Communication in English (2 credits)
	Society and the Engineer
Elective[#] (any 4 subjects)	<u>Aerospace Engineering (AE) stream:</u>
	Aerodynamics
	Aircraft and Spacecraft Propulsion
	Aircraft Performance and Flight Management
	Aircraft Structure and Engineering Composites
	Aircraft Systems
	Fundamentals of Aircraft and Spacecraft Design
	<u>Engineering Design and Automation (DA) stream:</u>
	Artificial Intelligence in Products
	Automatic Control Systems
	Development of Green Products
	Fundamentals of Robotics
	Industrial Automation
	Product Testing Technology
	<u>Mechanical Services and Environmental Engineering (MSE) stream:</u>
	Air Conditioning for Indoor Thermal and Environmental Quality
	Combustion and Pollution Control
	Environmental Noise
	Fluids Engineering
Heat and Mass Transfer	
Intelligent Buildings	
Practical Training	Multidisciplinary Manufacturing Project

[#] Offering of any elective subjects is subject to sufficient enrolment.