

## Bachelor of Engineering (Honours) in Mechanical Engineering

機械工程學(榮譽)工學士

(84063)

### Programme Structure

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





Requirements		No. of Credits
<b>General University Requirements (GUR)</b>		<b>9 – 18</b>
2 Cluster Area Requirements (CAR) subjects (including 1 designated as China-related) <sup>+</sup> , 3 credits each		6
1 Service Learning OR Free Elective subject <sup>^</sup>		3
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
<b>Discipline Specific Requirements (DSR)</b> <i>(Please refer to the table on page 2 for details.)</i>		<b>58 – 64</b>
Foundation	Up to 4 subjects, 3 credits each (for students without sufficient relevant knowledge only)	0 – 12
Compulsory	14 subjects, 3 credits each (except 2 subjects of 2 credits each & 1 subject of 6 credits)	43
Elective	4 subjects, 3 credits each	12
Practical Training	1 subject	3 (training credits)
<b>Total</b>		<b>67 – 88 (including 3 training credits)</b>

<sup>+</sup> *Within these subjects, students need to fulfil the English and Chinese reading and writing requirements.*

<sup>^</sup> *Subject to the review in early 2020, all students may be required to take a Service Learning subject.*

<sup>\*</sup> *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
<b>Foundation</b> <i>(for students without sufficient relevant knowledge only)</i>	Fundamental Computing in Engineering
	Fundamental Electrical Engineering
	Fundamental Engineering Mechanics
	Fundamental Mathematics
<b>Compulsory</b> <i>(all 14 subjects)</i>	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 
<b>Elective<sup>#</sup></b> <i>(any 4 subjects)</i>	<b><u>Aerospace Engineering (AE) stream:</u></b>
	Aerodynamics
	Aircraft and Spacecraft Propulsion
	Aircraft Performance and Flight Management
	Aircraft Structure and Engineering Composites
	Aircraft Systems
	Fundamentals of Aircraft and Spacecraft Design
	<b><u>Engineering Design and Automation (DA) stream:</u></b>
	Artificial Intelligence in Products
	Automatic Control Systems
	Development of Green Products
	Fundamentals of Robotics
	Industrial Automation
	Product Testing Technology
	<b><u>Mechanical Services and Environmental Engineering (MSE) stream:</u></b>
	Air Conditioning for Indoor Thermal and Environmental Quality
	Combustion and Pollution Control
	Environmental Noise
	Fluids Engineering
	Heat and Mass Transfer
Intelligent Buildings	
<b>Practical Training</b>	Multidisciplinary Manufacturing Project

<sup>#</sup> Offering of any elective subjects is subject to sufficient enrolment.



This course has been included in the list of reimbursable courses under the Continuing Education Fund. The mother course (Bachelor of Engineering in Mechanical Engineering) of this module is recognised under the Qualifications Framework (QF Level 5).

