

**BEngME Normal Progression Pattern for students with Level 2 or above in HKDSE
Physics (or Combined Science with a component in Physics) or equivalent**

(Total credits required for graduation: 124 academic credits + 10 IC training credits)

Year 1 (Common with PAED) (33 academic credits + 4 training credits)	
Semester 1 (15 + 2 training credits)	Semester 2 (18 + 2 training credits)
AMA1110 Basic Mathematics I	AMA1120 Basic Mathematics II
AP10005 Physics I	AP10006 Physics II
CAR I ^^	APSS1L01 Tomorrow's Leaders
ENG1003 Freshman Seminars for Engineering	CAR II ^^
LCR I English Language Subject	ENG2003 Information Technology
	LCR II English Language Subject
Healthy Lifestyle (non-credit bearing)^^	
IC2105 Engineering Communication and Fundamentals (4 training credits)	
Year 2 (Common with PAED) (33 academic credits + 3 training credits)	
Semester 1 (15 + 3 training credits)	Semester 2 (18 credits)
AMA2111 Mathematics I	CAR III ^^
ENG2001 Fundamentals of Materials Science and Engineering/Chemistry/Biology	CAR IV ^^
ENG2002 Computer Programming	EE2901S Basic Electricity and Electronics
ME22003 Visualization and Communication in Design Engineering	LCR III Chinese Language Subject
ME23001 Engineering Mechanics	ME32002 Engineering Design Fundamentals
IC348 Appreciation of Manufacturing Processes (3 training credits)	ME33001 Mechanics of Materials
Year 3 (30 academic credits + 3 training credits)	
Semester 1 (15 + 1.5 training credits)	Semester 2 (15 + 1.5 training credits)
AF3625 Engineering Economics	ME31002 Linear Systems and Control
AMA2112 Mathematics II	ME32001 Manufacturing Fundamentals
ENG3003 Engineering Management	ME34004 Fluid Mechanics
ME31001 Dynamics and Vibrations	ME46002 Numerical Methods for Engineers
ME34002 Engineering Thermodynamics	Service-learning (recommendation: ME3S01 Engineering Design for Community) ^^
IC382 Multidisciplinary Manufacturing Project (3 training credits)	
Year 4 (28 academic credits)	
Semester 1 (13 credits)	Semester 2 (15 credits)
CBS3241P Professional Communication in Chinese (2 credits)	ENG3004 Society and the Engineer
ELC3521 Professional Communication in English (2 credits)	Elective Subject III
Elective Subject I	Elective Subject IV
Elective Subject II	Elective Subject V
ME49001 Final Year Capstone Project (6 academic credits)	

^^ The study pattern for these GUR subjects is indicative only. Students may take the subjects according to their own study plan.

**BEngME Normal Progression Pattern for students without Level 2 or above in HKDSE
Physics (or Combined Science with a component in Physics) or equivalent**

(Total credits required for graduation: 127 academic credits + 10 IC training credits)

Year 1 (Common with PAED) (33 academic credits + 4 training credits)	
Semester 1 (15 + 2 training credits)	Semester 2 (18 + 2 training credits)
AMA1110 Basic Mathematics I	AMA1120 Basic Mathematics II
AP10001 Introduction to Physics	AP10005 Physics I
CAR I ^^	APSS1L01 Tomorrow's Leaders
ENG1003 Freshman Seminars for Engineering	CAR II ^^
LCR I English Language Subject	ENG2003 Information Technology
	LCR II English Language Subject
Healthy Lifestyle (non-credit bearing)^^	
IC2105 Engineering Communication and Fundamentals (4 training credits)	
Year 2 (Common with PAED) (36 academic credits + 3 training credits)	
Semester 1 (18 + 3 training credits)	Semester 2 (18 credits)
AMA2111 Mathematics I	CAR III ^^
AP10006 Physics II	CAR IV ^^
ENG2001 Fundamentals of Materials Science and Engineering/Chemistry/Biology	EE2901S Basic Electricity and Electronics
ENG2002 Computer Programming	LCR III Chinese Language Subject
ME22003 Visualization and communication in Design Engineering	ME32002 Engineering Design Fundamentals
ME23001 Engineering Mechanics	ME33001 Mechanics of Materials
IC348 Appreciation of Manufacturing Processes (3 training credits)	
Year 3 (30 academic credits + 3 training credits)	
Semester 1 (15 + 1.5 training credits)	Semester 2 (15 + 1.5 training credits)
AF3625 Engineering Economics	ME31002 Linear Systems and Control
AMA2112 Mathematics II	ME32001 Manufacturing Fundamentals
ENG3003 Engineering Management	ME34004 Fluid Mechanics
ME31001 Dynamics and Vibrations	ME46002 Numerical Methods for Engineers
ME34002 Engineering Thermodynamics	Service-learning (recommendation: ME3S01 Engineering Design for Community) ^^
IC382 Multidisciplinary Manufacturing Project (3 training credits)	
Year 4 (28 academic credits)	
Semester 1 (13 credits)	Semester 2 (15 credits)
CBS3241P Professional Communication in Chinese (2 credits)	ENG3004 Society and the Engineer
ELC3521 Professional Communication in English (2 credits)	Elective Subject III
Elective Subject I	Elective Subject IV
Elective Subject II	Elective Subject V
ME49001 Final Year Capstone Project (6 academic credits)	

^^ The study pattern for these GUR subjects is indicative only. Students may take the subjects according to their own study plan.

Elective Subjects for BEngME

Students are required to study five elective subjects. Most of the elective subjects are classified into the following three specialism streams:

1. Aerospace Engineering (AE)
2. Design and Automation (DA)
3. Environmental and Energy Engineering (EE)

Elective Subjects [^]	Specialism Stream		
	AE	DA	EE
ENG4001 Project Management	√	√	√
ME41001 Automatic Control Systems		√	
ME41003 Principles of Sound and Vibration			√
ME41005 Noise Control Engineering			√
ME42001 Artificial Intelligence in Products		√	
ME42004 Development of Green Products		√	
ME42008 Computer-Aided Technology for Design		√	
ME42011 Fundamentals of Robotics		√	
ME43001 Advanced Materials for Design and Technology		√	
ME43003 Product Testing Technology		√	
ME44001 Air Conditioning for Indoor Thermal and Environmental Quality			√
ME44002 Engine Technology			√
ME44003 Combustion and Pollution Control			√
ME44004 Heat and Mass Transfer	√		√
ME44007 Fluids Engineering			√
ME45001 Aerodynamics	√		
ME45002 Aircraft Systems	√		
ME45006 Aircraft Structure and Engineering Composites	√		
ME47005 Aircraft Performance and Flight Management	√		
ME47007 Aircraft and Spacecraft Propulsion	√		

[^] *The elective subjects are updated from time to time to ensure the best development of the programme and to ensure the best career for our students. Since there is minimum planned class size for each subject, the Department has the discretion to cease the offering of subjects which fail to enroll students up to the minimum class size.*

This document is subject to review and changes which the programme offering department can decide to make from time to time. Students will be informed of the changes as and when appropriate.

Version: August 2018