

**BEngPAED 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 ME) (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 ME) (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 (31 academic credits + 3 training credits)	
Semester 1 (15 + 1.5 training credits)	Semester 2 (16 + 1.5 training credits)
AF3625 Engineering Economics	CBS3241P Professional Communication in Chinese (2 credits)
ME31003 System Dynamics	ELC3521 Professional Communication in English (2 credits)
ME32001 Manufacturing Fundamentals	ENG3004 Society and the Engineer
SD348 Introduction to Industrial Design	ENG4001 Project Management
Service-learning (recommendation: ME3S01 Engineering Design for Community) ^^	ME41004 Mechatronics and Control
	SD3401 Designing for Humanities
IC382 Multidisciplinary Manufacturing Project (3 training credits)	
Year 4 (27 academic credits)	
Semester 1 (15 credits)	Semester 2 (12 credits)
ME34003 Thermofluid Mechanics	ME46003 Numerical Fluid Mechanics and Heat Transfer
ME42005 CAD/CAE Technologies for Product Development	Elective Subject I
ME42007 Design for Product Safety and Reliability	Elective Subject II
ME42011 Fundamentals of Robotics	
ME49003 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.

**BEngPAED 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 ME) (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 ME) (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 (31 academic credits + 3 training credits)	
Semester 1 (15 + 1.5 training credits)	Semester 2 (16 + 1.5 training credits)
AF3625 Engineering Economics	CBS3241P Professional Communication in Chinese (2 credits)
ME31003 System Dynamics	ELC3521 Professional Communication in English (2 credits)
ME32001 Manufacturing Fundamentals	ENG3004 Society and the Engineer
SD348 Introduction to Industrial Design	ENG4001 Project Management
Service-learning (recommendation: ME3S01 Engineering Design for Community) ^^	ME41004 Mechatronics and Control
	SD3401 Designing for Humanities
IC382 Multidisciplinary Manufacturing Project (3 training credits)	
Year 4 (27 academic credits)	
Semester 1 (15 credits)	Semester 2 (12 credits)
ME34003 Thermofluid Mechanics	ME46003 Numerical Fluid Mechanics and Heat Transfer
ME42005 CAD/CAE Technologies for Product Development	Elective I
ME42007 Design for Product Safety and Reliability	Elective II
ME42011 Fundamentals of Robotics	
ME49003 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 BEngPAED

Students are required to study two elective subjects from each category as below:

Elective Subject I [^] <i>(Students must choose at least one subject from the following list)</i>	Elective Subject II [^] <i>(Students must choose at least one subject from the following list)</i>
ISE376 Entrepreneurship and Innovation	ME42001 Artificial Intelligence in Products
ISE430 New Product Planning and Development	ME42004 Development of Green Products
ISE4006 Integrative Studies in Enterprise Systems and Management	ME43003 Product Testing Technology

[^] *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.