

5. SPECIFIED PROGRESSION PATTERN

For non-local students from Chinese Mainland or countries which have an education system different from the current Hong Kong system entering this programme in 2010/11, they should have studied the Foundation Year prior to pursuing study in Year 1, Year 2 and Year 3. The progression pattern of the Foundation Year is reproduced in the following from the *2010/11 Foundation-Year Curriculum* for completeness of this document. For details, please refer to the original booklet#.

Foundation Year (32 Credits)	
Semester 1	Semester 2
AMA103 Foundation Mathematics I for Science and Engineering	AMA104 Foundation Mathematics II for Science and Engineering
AP101 College Physics	AMA105 Logic : Qualitative and Quantitative
APSS184 Understanding the Hong Kong Community	AP102 College Physics II
CBS2050 Elementary Cantonese*	ENG1002 Foundation Year Seminar II
ENG1001 Foundation Year Seminar I	ELC1005 English for University Studies II
ELC1004 English for University Studies I	XXX Foundation Year Elective

Foundation Year Electives

- ABCT102 Foundation Biology
- ABCT103 Fundamental Chemistry*
- AF1603 Foundations of Economics*
- APSS185 Discovering Psychology*
- COMP100 Introduction to Information Technology*
- COMP102 Enterprise Information Technology
- COMP111 Information Technology Systems
- ELC1003 Extended Writing Skills
- GEC225 Exploration of the Cosmos*
- GEC270 History of Hong Kong*
- ITC1001 Design and Applied Technology*

Details of the Foundation-Year Curriculum can be found here:

https://www2.polyu.edu.hk/as/Polyu/SUBREG/Foundation/Foundation_Year_Curriculum.pdf

* Elective subjects for students who come from Guangdong Province and have been exempted from taking 'CBS2050 Elementary Cantonese' by the Programme Leader.

5.1 Full-time mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3	IC2111 IC Training I (5 training credits)
Year 2 (32 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
AMA305 Probability and Engineering Statistics	EIE305 Integrated Analogue and Digital Circuits
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE331 Communication Fundamentals	EIE333 Data and Computer Communications
EIE311 Computer System Fundamentals	Choose any <u>two</u> subjects out of these three subjects
ELC3508 English for Effective Workplace Communication	EIE329 Integrated Project
EIE320 Object-oriented Design and Programming OR EIE306 IC Technology and Processes	EIE338 Applied Electromagnetics
Semester 3	EIE413 Digital Signal Processing
	IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)
Year 3 (35 Credits)	
Semester 1 (20 credits)	Semester 2 (15 credits)
EIE433 Honours Project	EIE433 Honours Project (cont'd)
AF2617 Economics for Engineers	ENG306 Engineering Management OR MM2021 Management and Organisation
CBS2080 Fundamentals of Chinese Communication	ENG307 Society and The Engineer
EIE Technical Elective	EIE Technical Elective
EIE Technical Elective	EIE Technical Elective
EIE Technical Elective	
GEC "Broadening" subject	

5.2 Sandwich mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3	IC2111 IC Training I (5 training credits)
Year 2 (32 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
AMA305 Probability and Engineering Statistics	EIE305 Integrated Analogue and Digital Circuits
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE331 Communication Fundamentals	EIE333 Data and Computer Communications
EIE311 Computer System Fundamentals	Choose any <u>two</u> subjects out of these three subjects
ELC3508 English for Effective Workplace Communication	EIE329 Integrated Project
EIE320 Object-oriented Design and Programming OR EIE306 IC Technology and Processes	EIE338 Applied Electromagnetics
Semester 3	EIE413 Digital Signal Processing
	IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)
Year 3I (0-6 Credits) *	
Semester 1	Semester 2
EIE388 Industrial Training	EIE388 Industrial Training
Optional – Students may take 1 subject	Optional – Students may take 1 subject
Year 4 (29-35 Credits) *	
Semester 1 (14-20 credits)	Semester 2 (9-15 credits)
EIE433 Honours Project	EIE433 Honours Project (cont'd)
AF2617 Economics for Engineers	ENG306 Engineering Management OR MM2021 Management and Organisation
CBS2080 Fundamentals of Chinese Communication	ENG307 Society and The Engineer
GEC "Broadening" subject	
Electives – Choose 3 to 5 electives	

* Total credits accumulated in Year 3I and Year 4 must be equal to 35 credits.

5.3 Cooperative Education Scheme mode - Track 1

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3 IC2111 IC Training I (5 training credits)	
Year 2 (35 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
AMA305 Probability and Engineering Statistics	EIE305 Integrated Analogue and Digital Circuits
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE331 Communication Fundamentals	EIE333 Data and Computer Communications
EIE311 Computer System Fundamentals	Choose any <u>two</u> subjects out of these three subjects
ELC3508 English for Effective Workplace Communication	EIE329 Integrated Project
EIE320 Object-oriented Design and Programming OR EIE306 IC Technology and Processes	EIE338 Applied Electromagnetics
Semester 3 (3 credits)	
EIE387 Cooperative Education	
IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Choose 1 subject under the guidance of the Programme Leader	
Year 3 (24 credits)	
Semester 1 (9 credits)	Semester 2 (12 credits)
EIE387 Cooperative Education (continued)	
CBS2080 Fundamentals of Chinese Communication	EIE433 Honours Project
Choose 2 subjects under the guidance of the Programme Leader	Choose 2 subjects under the guidance of the Programme Leader
Semester 3 (3 credits)	
EIE387 Cooperative Education (continued)	
Choose 1 subject under the guidance of the Programme Leader.	
Year 4 (8 credits)	
Semester 1	
EIE387 Cooperative Education (continued)	
GEC "Broadening" subject	
Choose 2 subjects under the guidance of the Programme Leader	
EIE433 Honours Project (continued)	

5.4 Cooperative Education Scheme mode – Track 2

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3	IC2111 IC Training I (5 training credits)
Year 2 (35 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
AMA305 Probability and Engineering Statistics	EIE305 Integrated Analogue and Digital Circuits
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE331 Communication Fundamentals	EIE333 Data and Computer Communications
EIE311 Computer System Fundamentals	Choose any <u>two</u> subjects out of these three subjects
ELC3508 English for Effective Workplace Communication	EIE329 Integrated Project
EIE320 Object-oriented Design and Programming OR EIE306 IC Technology and Processes	EIE338 Applied Electromagnetics
	EIE413 Digital Signal Processing
Semester 3 (3 credits)	
EIE387 Cooperative Education	
IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Choose 1 subject under the guidance of the Programme Leader	
Year 3 (21 credits)	
Semester 1 (9 credits)	Semester 2 (9 credits)
EIE387 Cooperative Education (continued)	
CBS2080 Fundamentals of Chinese Communication	Choose 3 subjects under the guidance of the Programme Leader
Choose 2 subjects under the guidance of the Programme Leader	
Semester 3 (3 credits)	
EIE387 Cooperative Education (continued)	
Choose 1 subject under the guidance of the Programme Leader	
Year 4 (11 credits)	
Semester 1 (11 credits)	Semester 2
EIE387 Cooperative Education (continued)	EIE433 Honours Project (continued)
EIE433 Honours Project	
GEC "Broadening" subject	
Choose 1 subject under the guidance of the Programme Leader	

5.5 Double Degree mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3 IC2111 IC Training I (5 training credits)	
Year 2 (38 Credits)	
Semester 1 (20 credits)	Semester 2 (18 credits)
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE306 IC Technology and Processes	EIE329 Integrated Project
EIE311 Computer System Fundamentals	EIE338 Applied Electromagnetics
AMA305 Probability and Engineering Statistics	AP351 Modern Physics II
AP200 Mechanics	EIE413 Digital Signal Processing
AP301 Modern Physics I	AP Elective
ELC3508 English for Effective Workplace Communication	
Semester 3 IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Year 3 (37 Credits)	
Semester 1 (19 credits)	Semester 2 (18 credits)
EIE433 Honours Project	EIE433 Honours Project (continued)
EIE305 Integrated Analogue and Digital Circuits	ENG307 Society and The Engineer
EIE331 Communication Fundamentals	AP260 Metals and Ceramics
AF2617 Economics for Engineers	AP3211 Measurement and Experimental Techniques
AP3612 Materials Science Laboratory I	AP3613 Materials Science Laboratory II
AP2211 Physics Laboratory	ENG306 Engineering Management OR MM2021 Management and Organisation
CBS2080 Fundamentals of Chinese Communication	GEC "Broadening" subject
Year 4 (30 Credits)	
Semester 1 (15 credits)	Semester 2 (15 credits)
AP201 Wave and Optics	AP401 Modern Optics
AP210 Materials Science	AP451 Condensed Matter Physics
AP352 Thermal and Statistical Physics	AP3531 Electromagnetic Fields
AP4111 Electronic Materials	AP4611 Reliability and Failure Analysis
EIE Technical Elective	EIE Technical Elective

5.6 Double Degree Sandwich mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GEC2801 China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3 IC2111 IC Training I (5 training credits)	
Year 2 (38 Credits)	
Semester 1 (20 credits)	Semester 2 (18 credits)
EIE304 Electronic Circuits	EIE322 Interface and Embedded Systems
EIE306 IC Technology and Processes	EIE329 Integrated Project
EIE311 Computer System Fundamentals	EIE338 Applied Electromagnetics
AMA305 Probability and Engineering Statistics	AP351 Modern Physics II
AP200 Mechanics	EIE413 Digital Signal Processing
AP301 Modern Physics I	AP Elective
ELC3508 English for Effective Workplace Communication	
Semester 3 IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Year 3I (0-6 Credits) *	
Semester 1	Semester 2
EIE388 Industrial Training	EIE388 Industrial Training
Optional – Students may take 1 subject	Optional – Students may take 1 subject
Year 4 (31-37 Credits) *	
Semester 1 (13-19 credits) *	Semester 2 (12-18 credits) *
EIE433 Honours Project	EIE433 Honours Project (continued)
EIE305 Integrated Analogue and Digital Circuits	ENG307 Society and The Engineer
EIE331 Communication Fundamentals	AP260 Metals and Ceramics
AF2617 Economics for Engineers	AP3211 Measurement and Experimental Techniques
AP3612 Materials Science Laboratory I	AP3613 Materials Science Laboratory II
AP2211 Physics Laboratory	ENG306 Engineering Management OR MM2021 Management and Organisation
CBS2080 Fundamentals of Chinese Communication	GEC “Broadening” subject
Year 5 (24-30 Credits) *	
Semester 1 (9-15 credits)	Semester 2 (9-15 credits)
AP201 Wave and Optics	AP401 Modern Optics
AP210 Materials Science	AP451 Condensed Matter Physics
AP352 Thermal and Statistical Physics	AP3531 Electromagnetic Fields
AP4111 Electronic Materials	AP4611 Reliability and Failure Analysis
EIE Technical Elective	EIE Technical Elective

* Total credits accumulated in Year 3I, Year 4 and Year 5 must be equal to 67 credits.

5.7 Major in EIE – Full-time mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GE – China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3 IC2111 IC Training I (5 training credits)	
Year 2 (32 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
EIE311 Computer System Fundamentals	EIE329 Integrated Project
ELC3508 English for Effective Workplace Communication	2 EIE Electives
2 EIE Electives	2 Minor Electives
2 Minor Electives	-
Semester 3 IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Year 3 (35 Credits)	
Semester 1 (18 credits)	Semester 2 (17 credits)
CBS2080 Fundamentals of Chinese Communication	4 EIE Electives
3 EIE Electives	1 Minor Elective
1 Minor Elective	GE – Broadening
Any 1 subject (level 1 to level 4, 3 credits)	-

5.8 Major in EIE – Sandwich mode

Year 1 (33 Credits)	
Semester 1 (15.5 credits)	Semester 2 (17.5 credits)
AMA201 Mathematics I	AMA202 Mathematics II
ENG237 Basic Electricity and Electronics I	ENG238 Basic Electricity and Electronics II
ENG232 Engineering Science	EIE211 Logic Design
ENG224 Information Technology	EIE312 Linear Systems
ENG236 Computer Programming	ENG236 Computer Programming (continued)
ELC2501 University English I	ELC2502 University English II
-	GE – China Studies
IC2131 Freshman Seminar for Engineering (2 training credits)	IC2131 Freshman Seminar for Engineering (continued)
IC2132 Engineering Drawing and Industrial Safety (2 training credits)	IC2132 Engineering Drawing and Industrial Safety (continued)
Semester 3 IC2111 IC Training I (5 training credits)	
Year 2 (32 Credits)	
Semester 1 (17 credits)	Semester 2 (15 credits)
EIE311 Computer System Fundamentals	EIE329 Integrated Project
ELC3508 English for Effective Workplace Communication	2 EIE Electives
2 EIE Electives	2 Minor Electives
2 Minor Electives	-
Semester 3 IC367 IC Training II or EIE389 Industrial Attachment (4 training credits)	
Year 3I (0-6 Credits)*	
Semester 1	Semester 2
EIE388 Industrial Training	EIE388 Industrial Training continued
Optional – Students may take 1 subject	Optional – Students may take 1 subject
Year 4 (29-35 Credits)*	
Semester 1 (15-18 credits)	Semester 2 (14-17 credits)
CBS2080 Fundamentals of Chinese Communication	4 EIE Electives
3 EIE Electives	1 Minor Elective
1 Minor Elective	GE – Broadening
Any 1 subject (level 1 to level 4, 3 credits)	-

*Total credits accumulated in Year 3I and Year 4 must be equal to 35 credits.