

THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

**Suggested Study Plan for Advanced Standing to FYFD Places
with Various Entrance Qualifications (2022-23)**

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|---|-----------|
| a) Recommended for those who have 23 units of exemption | Page 1-2 |
| b) Recommended for those who have 20 units of exemption, including an additional 3-unit General Education Foundation course | Page 3-4 |
| c) Recommended for those who have 20 units of exemption, including ELTU2014 | Page 5-6 |
| d) Recommended for those who have 17 units of exemption | Page 7-8 |
| e) Course List | Page 9-10 |

a) Recommended course pattern for those who have 23 units of exemption:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (8 units)	6 units	2 units
Chinese (5 units)	5 units	0 unit
UGE (13 units)	8 units	5 units
CGE (6 units)	No exemption	6 units
Understanding China (1 unit)	No exemption	1 unit
Hong Kong in the Wider Constitutional Order (1 unit)	No exemption	1 unit
Digital Literacy and Computational Thinking (3 units)	3 units	0 unit
PE (2 units)	1 unit	1 unit
Total: 39 units	Total: 23 units	Total: 16 units

	Recommended Course Pattern	Units
First Year of Attendance	1st term	
	Faculty Package: ENGG1110/ESTR1002	3
	Foundation: MATH1510 [a]	3
	Major Required:	
	- IERG1000	1
	College General Education: 1 course	3
	Foundation General Education: UGFH1000 or UGFN1000	3
	Free Elective(s): 1 course	3
	<i>Term total</i>	16
	2nd term	
Faculty Package:		
- ENGG1120/ESTR1005	3	
- ENGG1130/ESTR1006	3	
Major Required:		
- IERG1810	1	
- IERG2060/ESTR2304	3	
- IERG2080/ESTR2306	3	
Physical Education	1	
Free Elective(s): 1 course	3	
<i>Term total</i>	17	

Second Year of Attendance	1st term Foundation: - ENGG2440/ESTR2004 - ENGG2720/ESTR2014 - Select 1-2 course(s) from CSCI1120/ESTR1100, CSCI1130/ESTR1102, ENGG1310/ESTR1003, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, SEEM2460/ESTR2540 Major Required: - IERG2051/ESTR2302 - CSCI2100/ESTR2102 University General Education: UGEA	3 2 3-4 3 3 2-3
	<i>Term total</i>	16-18
	2nd term Major Required: - IERG2310/ESTR2300 - IERG2470/ESTR2308 - IERG3310/ESTR3310 - IERG3820 Major Elective(s): 2 courses Language: ELTU3014	3 3 3 1 5-6 2
<i>Term total</i>		17-18
Third Year of Attendance	1st term Major Required: - IERG3060 - IERG3080/ESTR3308 - IERG3800 - IERG3810 - IERG4998 Major Elective(s): 1 course College General Education: 1 course Understanding China	3 3 1 1 3 3 3 1
	<i>Term total</i>	18
	2nd term Major Required: - IERG3840/3842* - IERG4999 Major Elective(s): 3 courses Hong Kong in the Wider Constitutional Order Free Elective(s): 1 course	1 3 8-9 1 3
<i>Term total</i>		16-17
<i>Breakdown: Faculty Package + Foundation + Major Required</i>		59
<i>Major Electives</i>		16
<i>University Core Requirement</i>		16
<i>Free Electives</i>		9
<i>(Exempted Units)</i>		(23)
<i>Minimum unit requirement for graduation</i>		123

Explanatory Notes:

[a] Non-JUPAS and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.

* CSCI2720 is not for students who have taken IERG3840, while the former is a required course for Minor in Computer Science. Students pursuing Minor in Computer Science should take IERG3842 to fulfill the Major Programme Requirement of Information Engineering.

b) Recommended for those who have 20 units of exemption, including an additional 3-unit General Education Foundation course:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (8 units)	3 units	5 units
Chinese (5 units)	5 units	0 units
UGE (13 units)	8 units	5 units
CGE (6 units)	No exemption	6 units
Understanding China (1 unit)	No exemption	1 unit
Hong Kong in the Wider Constitutional Order (1 unit)	No exemption	1 unit
Digital Literacy and Computational Thinking (3 units)	3 units	0 unit
PE (2 units)	1 unit	1 unit
39 units	Total: 20 units	Total: 19 units

	Recommended Course Pattern	Units
First Year of Attendance	1st term Faculty Package: ENGG1110/ESTR1002 Foundation: MATH1510 [a] Major Required: - IERG1000 College General Education: 1 course Foundation General Education: UGFH1000 or UGFN1000 Free Elective(s): 1 course	3 3 1 3 3 3
	<i>Term total</i>	16
	2nd term Faculty Package: - ENGG1120/ESTR1005 - ENGG1130/ESTR1006 Major Required: - IERG1810 - IERG2060/ESTR2304 - IERG2080/ESTR2306 Language: ELTU2014 Physical Education	3 3 1 3 3 3 1
	<i>Term total</i>	17
Second Year of Attendance	1st term Foundation: - ENGG2440/ESTR2004 - ENGG2720/ESTR2014 - Select 1-2 course(s) from CSCI1120/ESTR1100, CSCI1130/ESTR1102, ENGG1310/ESTR1003, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, SEEM2460/ESTR2540 Major Required: - IERG2051/ESTR2302 - CSCI2100/ESTR2102 University General Education: UGEA	3 2 3-4 3 3 2-3
	<i>Term total</i>	16-18

	<u>2nd term</u> Major Required: - IERG2310/ESTR2300 - IERG2470/ESTR2308 - IERG3310/ESTR3310 - IERG3820 Major Elective(s): 2 courses Language: ELTU3014	3 3 3 1 5-6 2
	<i>Term total</i>	17-18
	<u>Summer term</u> Free Elective(s): 1 course	3
	<i>Term total</i>	3
Third Year of Attendance	<u>1st term</u> Major Required: - IERG3060 - IERG3080/ESTR3308 - IERG3800 - IERG3810 - IERG4998 Major Elective(s): 1 course College General Education: 1 course Understanding China	3 3 1 1 3 3 3 1
	<i>Term total</i>	18
	<u>2nd term</u> Major Required: - IERG3840/3842* - IERG4999 Major Elective(s): 3 courses Hong Kong in the Wider Constitutional Order Free Elective(s): 1 course	1 3 8-9 1 3
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<i>(Exempted Units)</i>		(20)
<i>Minimum unit requirement for graduation</i>		123

Explanatory Notes:

[a] Non-JUPAS and JUPAS admittees with HKDSE Mathematics Extended Modules I or II are required to attend a Mathematics Placement Test. Students who fail or are absent from the Placement Test will be required to take MATH1020 in the same term when they take MATH1510.

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c) Recommended for those who have 20 units of exemption, including ELTU2014:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (8 units)	6 units	2 units
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First Year of Attendance	1st term Faculty Package: ENGG1110/ESTR1002 Foundation: MATH1510 [a] Major Required: - IERG1000 College General Education: 1 course Foundation General Education: UGFH1000 or UGFN1000 Free Elective(s): 1 course	3 3 1 3 3 3
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	2nd term Faculty Package: - ENGG1120/ESTR1005 - ENGG1130/ESTR1006 Major Required: - IERG1810 - IERG2060/ESTR2304 - IERG2080/ESTR2306 Foundation General Education: UGFH1000 or UGFN1000 Physical Education	3 3 1 3 3 3 1
	<i>Term total</i>	17
Second Year of Attendance	1st term Foundation: - ENGG2440/ESTR2004 - ENGG2720/ESTR2014 - Select 1-2 course(s) from CSC1120/ESTR1100, CSC1130/ESTR1102, ENGG1310/ESTR1003, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, SEEM2460/ESTR2540 Major Required: - IERG2051/ESTR2302 - CSC12100/ESTR2102 University General Education: UGEA	3 2 3-4 3 3 2-3
	<i>Term total</i>	16-18

	<u>2nd term</u> Major Required: <ul style="list-style-type: none"> - IERG2310/ESTR2300 - IERG2470/ESTR2308 - IERG3310/ESTR3310 - IERG3820 Major Elective(s): 2 courses Language: ELTU3014	3 3 3 1 5-6 2
	<i>Term total</i>	17-18
	<u>Summer term</u> Free Elective(s): 1 course	3
	<i>Term total</i>	3
Third Year of Attendance	<u>1st term</u> Major Required: <ul style="list-style-type: none"> - IERG3060 - IERG3080/ESTR3308 - IERG3800 - IERG3810 - IERG4998 Major Elective(s): 1 course College General Education: 1 course Understanding China	3 3 1 1 3 3 3 1
	<i>Term total</i>	18
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<i>Breakdown: Faculty Package + Foundation + Major Required</i>		59
<i>Major Electives</i>		16
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Digital Literacy and Computational Thinking (3 units)	3 units	0 unit
PE (2 units)	1 unit	1 unit
39 units	Total: 17 units	Total: 22 units

	Recommended Course Pattern	Units
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	<i>Term total</i>	16-18

	<u>2nd term</u> Major Required: <ul style="list-style-type: none"> - IERG2310/ESTR2300 - IERG2470/ESTR2308 - IERG3310/ESTR3310 - IERG3820 Major Elective(s): 2 courses Language: ELTU3014	3 3 3 1 5-6 2
	<i>Term total</i>	17-18
	<u>Summer term</u> Foundation General Education: UGFH1000 or UGFN1000 Free Elective(s): 1 course	3 3
	<i>Term total</i>	6
Third Year of Attendance	<u>1st term</u> Major Required: <ul style="list-style-type: none"> - IERG3060 - IERG3080/ESTR3308 - IERG3800 - IERG3810 - IERG4998 Major Elective(s): 1 course College General Education: 1 course Understanding China	3 3 1 1 3 3 3 1
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Course List

(Note: For quick reference of the courses appeared on the study plan(s).
Please refer to CUSIS for course information)

Course Code	Course Title	Unit(s)
CHLT1100	University Chinese I	3
CHLT1200	University Chinese II	2
CSCI1120/ESTR1100	Introduction to Computing Using C++	3
CSCI1130/ESTR1102	Introduction to Computing Using Java	3
CSCI2100/ESTR2102	Data Structures	3
CSCI3150/ESTR3102	Introduction to Operating Systems	3
CSCI3160/ESTR3104	Design and Analysis of Algorithms	3
ELTU1001	Foundation English for University Studies	3
ELTU2014	English for Engineering I	3
ELTU3014	English for Engineering II	2
ENGG1110/ESTR1002	Problem Solving by Programming	3
ENGG1120/ESTR1005	Linear Algebra for Engineers	3
ENGG1130/ESTR1006	Multivariable Calculus for Engineers	3
ENGG1310/ESTR1003	Engineering Physics: Electromagnetics, Optics and Modern Physics	3
ENGG1820	Engineering Internship	1
ENGG2440/ESTR2004	Discrete Mathematics for Engineers	3
ENGG2720/ESTR2014	Complex Variables for Engineers	2
ENGG2740/ESTR2016	Differential Equations for Engineers	2
ENGG2780/ESTR2020	Statistics for Engineers	2
ENGG5301	Information Theory	3
ENGG5302	Random Processes	3
ENGG5303	Advanced Wireless Communications	3
ENGG5383	Applied Cryptography	3
ENGG5392	Lightwave System Technologies	3
FTEC2101/ESTR2520	Optimization Methods	3
IERG1000	Introduction to Information Engineering	1
IERG1810	Electronic Circuit Design Laboratory	1
IERG2051/ESTR2302	Signals and Systems	3
IERG2060/ESTR2304	Basic Analog and Digital Circuits	3
IERG2080/ESTR2306	Introduction to Systems Programming	3
IERG2310/ESTR2300	Principles of Communication Systems	3
IERG2470/ESTR2308	Probability Models and Applications	3
IERG3010/ESTR3300	Digital Communications	3
IERG3050	Simulation and Statistical Analysis	3
IERG3060	Microcontrollers and Embedded Systems	3
IERG3080/ESTR3308	Information and Software Engineering Practice	3
IERG3280/ESTR3302	Networks: Technology, Economics, and Social Interactions	3
IERG3300/ESTR3304	Introduction to Stochastic Processes	3
IERG3310/ESTR3310	Computer Networks	3
IERG3320/ESTR3306	Social Media and Human Information Interaction	3
IERG3800	Information Infrastructure Design Lab	1
IERG3810	Microcontrollers and Embedded System Laboratory	1
IERG3820	Communications Laboratory	1
IERG3830	Product Design and Development	3
IERG3840	Web Application Development Project	1
IERG3842	Mobile Network Application Development Project	1
IERG4004/FTEC4004	E-payment Systems and Cryptocurrency Technologies	3

<i>Course Code</i>	<i>Course Title</i>	<i>Unit(s)</i>
IERG4030/ESTR4320	Optical Communications	3
IERG4080/ESTR4312	Building Scalable Internet-based Services	3
IERG4090/ESTR4302	Networking Protocols and Systems	3
IERG4100/ESTR4304	Wireless Communication Systems	3
IERG4110/ESTR4314	Hands-on Wireless Communication	3
IERG4130/CSCI4130/ESTR4306	Introduction to Cyber Security	3
IERG4150/ESTR4322	Introduction to Cryptography	3
IERG4160	Image and Video Processing	3
IERG4180/ESTR4308	Network Software Design and Programming	3
IERG4190	Multimedia Coding and Processing	3
IERG4210	Web Programming and Security	3
IERG4220	Secure Software Engineering	3
IERG4230	Introduction to Internet of Things	3
IERG4300/ESTR4300	Web-scale Information Analytics	3
IERG4320	Data Science in Practice	3
IERG4330/ESTR4316	Programming Big Data Systems	3
IERG4340	Emerging Technologies in Information Engineering	3
IERG4350	Cloud Computing Security	3
IERG4831	Networking Laboratory I	2
IERG4841	Networking Laboratory II	2
IERG4998	Final Year Project I	3
IERG4999	Final Year Project II	3
IERG5020	Telecommunication Switching and Network Systems	3
IERG5040	Lightwave System Technologies	3
IERG5090	Advanced Networking Protocols and Systems	3
IERG5100	Advanced Wireless Communications	3
IERG5130	Probabilistic Models and Inference Algorithms for Machine Learning	3
IERG5140	Lightwave Networks	3
IERG5154	Information Theory	3
IERG5200	Channel Coding and Modulation	3
IERG5230	Algorithms and Realization of Internet of Things Systems	3
IERG5240	Applied Cryptography	3
IERG5280	Mobile Networking	3
IERG5290	Network Coding Theory	3
IERG5300	Random Processes	3
IERG5310	Security and Privacy in Cyber Systems	3
IERG5320	Digital Forensics	3
IERG5330	Network Economics	3
IERG5340	IT Innovation and Entrepreneurship	3
IERG5350	Reinforcement Learning	3
IERG5590	Advanced Topics in Blockchain	3
MATH1510	Calculus for Engineers	3
SEEM2460/ESTR2540	Introduction to Data Science	3
UGFH1000/ UGFN1000	University General Education Foundation Course	3