THE CHINESE UNIVERSITY OF HONG KONG
Department of Information Engineering

Suggested Study Plan for Advanced Standing to FYFD Places with Various Entrance Qualifications (2019)

a) Recommended course pattern for those who have 24 units of exemption:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (9 units)	7 units	2 units
Chinese (6 units)	6 units	0 units
UGE (15 units)	9 units	6 units
CGE (6 units)	No exemption	6 units
IT (1 unit)	1 unit	0 units
PE (2 units)	1 unit	1 unit
39 units	**Total: 24 units**	**Total: 15 units**

	Recommended Course Pattern	Units
First Year of Attendance	**1st term**	
	Faculty Package:	
	ENGG1110/ESTR1002	3
	Major Required:	
	MATH1510*	3
	IERG2080/ESTR2306	3
	College General Education: 1 course	3
	Free Elective(s): 1 course	3
	Term total	**15**
	2nd term	
	Faculty Package:	
	ENGG1120/ESTR1005, ENGG1130/ESTR1006	6
	IERG2602	1
	Major Required:	
	CSCI2100/ESTR2102	3
	Any one from AIST1110, CHEM1280, 1380, CSCI1120/ESTR1100, CSCI1130/ESTR1102, ELEG2700, ENGG1310/ESTR1003, ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, LSCI1001, 1003, MAEG1020, PHYS1003[a], 1110[a], SEEM2440/ESTR2500, SEEM2460/ESTR2540	2-3
	General Education: UGFH1000 or UGFN1000	3
	Physical Education	1
	Term total	**16-17**

Second Year of Attendance	**1st term**	
	Major Required:	
	ENGG2440/ESTR2004	3
	IERG1810	1
	IERG2051/ESTR2302	3
	IERG2060/ESTR2304	3
	General Education: UGEA	3
	Major Elective(s): 1 elective	3
	Term total	**16**
	2nd term	
	Major Required:	
	IERG2310/ESTR2300	3
	IERG2470/ESTR2308	3
	IERG3820	1
	Language: ELTU3014	2
	Major Elective(s): 2 electives	6
	Free Elective(s): 1 course	3
	Term total	**18**
Third Year of Attendance	**1st term**	
	Major Required:	
	IERG3080/ESTR3308	3
	IERG3310/ESTR3310	3
	IERG3800	1
	IERG4998/ESTR4998	3
	Major Elective(s): 2 electives	5
	College General Education: 1 course	3
	Term total	**18**
	2nd term	
	Major Required:	
	IERG3060	3
	IERG3810	1
	IERG4999/ESTR4999	3
	Major Elective(s): 2 electives	6
	Free Elective(s): 1 course	3
	Term total	**16**
	Breakdown: Faculty Package + Major Required	*55-56*
	Major Electives	*20 ^*
	University Core Requirement	*15*
	Free Electives	*9*
	(Exempted Units)	*(24)*
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Explanatory Notes:

* 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.

[a] The optional Physics course shall be taken in accordance with students' HKDSE results or placement test results:

i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) AND Level 4 or above in Physics or Level 5 or above in Combined Science with Physics Component shall take ENGG1310/ESTR1003 or PHYS1110.

ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003.

iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take ENGG1310/ESTR1003 or PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003.

^ Out of the 20 Elective Course units, at least 15 units should be from major electives. (Please refer to the programme information for details.) The remaining units, if any, can be fulfilled by any AIST / BMEG / CENG / CSCI / EEEN / ELEG / ENER / ENGG / ESTR / FTEC / MAEG / SEEM course(s) at 3000 and above level.

b) Recommended for those who have 21 units of exemption, including an additional 3-unit General Education Foundation course:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (9 units)	4 units	5 units
Chinese (6 units)	6 units	0 units
UGE (15 units)	9 units	6 units
CGE (6 units)	No exemption	6 units
IT (1 unit)	1 unit	0 units
PE (2 units)	1 unit	1 unit
39 units	**Total: 21 units**	**Total: 18 units**

	Recommended Course Pattern	Units
First Year of Attendance	**1st term**	
	Faculty Package:	
	ENGG1110/ESTR1002	3
	Major Required:	
	MATH1510*	3
	IERG2080/ESTR2306	3
	College General Education: 1 course	3
	Free Elective(s): 1 course	3
	Term total	**15**
	2nd term	
	Faculty Package:	
	ENGG1120/ESTR1005, ENGG1130/ESTR1006	6
	IERG2602	1
	Major Required:	
	CSCI2100/ESTR2102	3
	Any one from AIST1110, CHEM1280, 1380, CSCI1120/ESTR1100, CSCI1130/ESTR1102, ELEG2700, ENGG1310/ESTR1003, ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, LSCI1001, 1003, MAEG1020, PHYS1003[a], 1110[a], SEEM2440/ESTR2500, SEEM2460/ESTR2540	2-3
	Language: ELTU2014	3
	Physical Education	1
	Term total	**16-17**
Second Year of Attendance	**1st term**	
	Major Required:	
	ENGG2440/ESTR2004	3
	IERG1810	1
	IERG2051/ESTR2302	3
	IERG2060/ESTR2304	3
	General Education: UGEA	3
	Major Elective(s): 1 elective	3
	Term total	**16**
	2nd term	
	Major Required:	
	IERG2310/ESTR2300	3
	IERG2470/ESTR2308	3
	IERG3820	1
	Language: ELTU3014	2
	Major Elective(s): 2 electives	6
	Free Elective(s): 1 course	3
	Term total	**18**

	Summer term General Education: UGFH1000 or UGFN1000	 3
	Term total	**3**
Third Year of Attendance	**1st term** Major Required: IERG3080/ESTR3308 IERG3310/ESTR3310 IERG3800 IERG4998/ESTR4998 Major Elective(s): 2 electives College General Education: 1 course	 3 3 1 3 5 3
	Term total	**18**
	2nd term Major Required: IERG3060 IERG3810 IERG4999/ESTR4999 Major Elective(s): 2 electives Free Elective: 1 course	 3 1 3 6 3
	Term total	**16**
	Breakdown: Faculty Package + Major Required *Major Electives* *University Core Requirement* *Free Electives* *(Exempted Units)*	*55-56* *20 ^* *18* *9* *(21)*
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Explanatory Notes:

* 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.

[a] The optional Physics course shall be taken in accordance with students' HKDSE results or placement test results:

i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) AND Level 4 or above in Physics or Level 5 or above in Combined Science with Physics Component shall take ENGG1310/ESTR1003 or PHYS1110.

ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003.

iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take ENGG1310/ESTR1003 or PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003.

^ Out of the 20 Elective Course units, at least 15 units should be from major electives. The remaining units, if any, can be fulfilled by any AIST / BMEG / CENG / CSCI / EEEN / ELEG / ENER / ENGG / ESTR / FTEC / MAEG / SEEM course(s) at 3000 and above level.

c) Recommended for those who have 21 units of exemption, including ELTU2014:

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (9 units)	7 units	2 units
Chinese (6 units)	6 units	0 units
UGE (15 units)	6 units	9 units
CGE (6 units)	No exemption	6 units
IT (1 unit)	1 unit	0 units
PE (2 units)	1 unit	1 unit
39 units	**Total: 21 units**	**Total: 18 units**

	Recommended Course Pattern	Units
First Year of Attendance	**1st term**	
	Faculty Package:	
	ENGG1110/ESTR1002	3
	Major Required:	
	MATH1510*	3
	IERG2080/ESTR2306	3
	College General Education: 1 course	3
	Free Elective(s): 1 course	3
	Term total	**15**
	2nd term	
	Faculty Package:	
	ENGG1120/ESTR1005, ENGG1130/ESTR1006	6
	IERG2602	1
	Major Required:	
	CSCI2100/ESTR2102	3
	Any one from AIST1110, CHEM1280, 1380, CSCI1120/ESTR1100, CSCI1130/ESTR1102, ELEG2700, ENGG1310/ESTR1003, ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, LSCI1001, 1003, MAEG1020, PHYS1003[a], 1110[a], SEEM2440/ESTR2500, SEEM2460/ESTR2540	2-3
	General Education: UGFH1000 or UGFN1000	3
	Physical Education	1
	Term total	**16-17**
Second Year of Attendance	**1st term**	
	Major Required:	
	ENGG2440/ESTR2004	3
	IERG1810	1
	IERG2051/ESTR2302	3
	IERG2060/ESTR2304	3
	General Education: UGEA	3
	Major Elective(s): 1 elective	3
	Term total	**16**
	2nd term	
	Major Required:	
	IERG2310/ESTR2300	3
	IERG2470/ESTR2308	3
	IERG3820	1
	Language: ELTU3014	2
	Major Elective(s): 2 electives	6
	Free Elective(s): 1 course	3
	Term total	**18**

	Summer term General Education: 1 course	 3
	Term total	**3**
Third Year of Attendance	**1st term** Major Required: IERG3080/ESTR3308 IERG3310/ESTR3310 IERG3800 IERG4998/ESTR4998 Major Elective(s): 2 electives College General Education: 1 course	 3 3 1 3 5 3
	Term total	**17**
	2nd term Major Required: IERG3060 IERG3810 IERG4999/ESTR4999 Major Elective(s): 2 electives Free Elective(s): 1 course	 3 1 3 6 3
	Term total	**16**
	Breakdown: Faculty Package + Major Required *Major Electives* *University Core Requirement* *Free Electives* *(Exempted Units)*	*55-56* *20 ^* *18* *9* *(21)*
		123

Explanatory Notes:

* 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.

[a] The optional Physics course shall be taken in accordance with students' HKDSE results or placement test results:

i) Students who have attained Level 4 or above in HKDSE Mathematics (Compulsory Part) AND Level 4 or above in Physics or Level 5 or above in Combined Science with Physics Component shall take ENGG1310/ESTR1003 or PHYS1110.

ii) Students with HKDSE results but did not attain the academic levels as stated in (i) shall take PHYS1003.

iii) Students without HKDSE results shall sit for the placement test arranged by the Department of Physics. Students who pass the placement test shall take ENGG1310/ESTR1003 or PHYS1110. Students who fail or are absent from the placement test shall take PHYS1003.

^ Out of the 20 Elective Course units, at least 15 units should be from major electives. The remaining units, if any, can be fulfilled by any AIST / BMEG / CENG / CSCI / EEEN / ELEG / ENER / ENGG / ESTR / FTEC / MAEG / SEEM course(s) at 3000 and above level.

d) Recommended for those who have 18 units of exemption

University Core Requirements	Unit Exemption	Units need to be fulfilled
English (9 units)	4 units	5 units
Chinese (6 units)	6 units	0 units
UGE (15 units)	6 units	9 units
CGE (6 units)	No exemption	6 units
IT (1 unit)	1 unit	0 units
PE (2 units)	1 unit	1 unit
39 units	**Total: 18 units**	**Total: 21 units**

	Recommended Course Pattern	Units
First Year of Attendance	**1st term**	
	Faculty Package:	
	ENGG1110/ESTR1002	3
	Major Required:	
	MATH1510*	3
	IERG2080/ESTR2306	3
	College General Education: 1 course	3
	Free Elective(s): 1 course	3
	Term total	**15**
	2nd term	
	Faculty Package:	
	ENGG1120/ESTR1005, ENGG1130/ESTR1006	6
	IERG2602	1
	Major Required:	
	CSCI2100/ESTR2102	3
	Any one from AIST1110, CHEM1280, 1380, CSCI1120/ESTR1100, CSCI1130/ESTR1102, ELEG2700, ENGG1310/ESTR1003, ENGG2720/ESTR2014, ENGG2740/ESTR2016, ENGG2780/ESTR2020, FTEC2101/ESTR2520, LSCI1001, 1003, MAEG1020, PHYS1003[a], 1110[a], SEEM2440/ESTR2500, SEEM2460/ESTR2540	2-3
	Language: ELTU2014	3
	Physical Education	1
	Term total	**16-17**
Second Year of Attendance	**1st term**	
	Major Required:	
	ENGG2440/ESTR2004	3
	IERG1810	1
	IERG2051/ESTR2302	3
	IERG2060/ESTR2304	3
	General Education: UGEA	3
	Major Elective(s): 1 elective	3
	Term total	**16**
	2nd term	
	Major Required:	
	IERG2310/ESTR2300	3
	IERG2470/ESTR2308	3
	IERG3820	1
	Language: ELTU3014	2
	Major Elective(s): 2 electives	6
	Free Elective(s): 1 course	3
	Term total	**18**

	Summer term General Education: UGFH1000 or UGFN1000 Free Elective(s): 1 course	 3 3
		6
Third Year of Attendance	**1st term** Major Required: IERG3080/ESTR3308 IERG3310/ESTR3310 IERG3800 IERG4998/ESTR4998 Major Elective(s): 1 elective College General Education: 1 course General Education: 1 course	 3 3 1 3 2 3 3
	Term total	**18**
	2nd term Major Required: IERG3060 IERG3810 IERG4999/ESTR4999 Major Elective(s): 3 electives	 3 1 3 9
	Term total	**16**
	Breakdown: Faculty Package + Major Required *Major Electives* *University Core Requirement* *Free Electives* *(Exempted Units)*	*55-56* *20 ^* *21* *9* *(18)*
		123

Explanatory Notes:

* 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.

[a] The optional Physics course shall be taken in accordance with students' HKDSE results or placement test results:

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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)*
AIST1110	Introduction to Computing using Python	3
CHEM1280	Introduction to Organic Chemistry and Biomolecules	3
CHEM1380	Basic Chemistry for Engineers	3
CHLT1100	University Chinese I	3
CHLT1200	University Chinese II	3
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
ELEG2700	Introduction to Electronic System Design	3
ELTU1001	Foundation English for University Studies	4
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
ENGG2470/ESTR2012	Probability 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
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
IERG2602	Engineering Practicum	1
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

Course Code	*Course Title*	*Unit(s)*
IERG4004	E-payment Systems and Cryptocurrency Technologies	3
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/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
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/ESTR4998	Final Year Project I	3
IERG4999/ESTR4999	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
IERG5590	Advanced Topics in Blockchain	3
LSCI1001	Basic Concepts in Biological Sciences	3
LSCI1003	Life Sciences for Engineers	3
MAEG1020	Computational Design and Fabrication	3
MATH1510	Calculus for Engineers	3
PHYS1003	General Physics for Engineers	3
PHYS1110	Engineering Physics: Mechanics and Thermodynamics	3
SEEM2440/ESTR2500	Engineering Economics	3
SEEM2460/ESTR2540	Introduction to Data Science	3
UGFH1000/ UGFN1000	University General Education Foundation Course	3