BEng (CPEG)

<p style="text-align:center">

Recommended Study Pathway for
HKUST-Exeter Engineering and Law Program
(For student cohorts of 2021-22 and before)

</p>

Contract Law Course
Required to be completed by Year 3 Fall Semester

	Credits
Contract Law offered by the University of Exeter in Fall semester – *required for seeking admission to the HKUST-Exeter Engineering and Law Program*#	*6*

Students may receive 6 transfer credits from the Contract Law course on condition that they obtain a passing grade in the course.

Year 1
Fall Semester (15-16 credits)

				Credits
[take one course from COMP1021 or COMP1022P]				3
COMP	1021	Introduction to Computer Science	3	
COMP	1022P	Introduction to Computing with Java	3	
[take one course from MATH1012 or MATH1013 or MATH1020 or MATH1023]				3-4
MATH	1012	Calculus 1A	4	
MATH	1013	Calculus IB	3	
MATH	1020	Accelerated Calculus	4	
MATH	1023	Honors Calculus I	3	
[take one course from PHYS1112 or PHYS1312]				3
PHYS	1112	General Physics I with Calculus	3	
PHYS	1312	Honors General Physics I	3	
ENGG	1010	Academic Orientation		0
LANG	1002	English for University Studies I (U Core)		3
University Common Core				3

Spring Semester (18-19 credits)

				Credits
SENG		Engineering Introduction course		3-4
[take one course from MATH1014 or MATH1024]				3
MATH	1014	Calculus II	3	
MATH	1024	Honors Calculus II	3	

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Year 1
Spring Semester (18-19 credits) (Cont'd)

				Credits
[take one course from PHYS1114 or PHYS1314]				3
PHYS	1114	General Physics II	3	
PHYS	1314	Honors General Physics II	3	
ENGG	1010	Academic Orientation		0
LANG	1003	English for University Studies II (U Core)		3
University Common Core				3
University Common Core				3

Year 2
Fall Semester (17 credits)

				Credits
COMP	2011	Programming with C++		4
ELEC	1100	Introduction to Electro-Robot Design		4
MATH	2111	Matrix Algebra and Applications		3
CPEG	2930	Academic and Professional Development I		0
ENGG	2010	Engineering Seminar Series		0
University Common Core				3
University Common Core				3

Spring Semester (18 credits)

				Credits
[take one course from COMP 2611 or ELEC 2350]				4
COMP	2611	Computer Organization	4	
ELEC	2350	Introduction to Computer Organization and Design	4	
[take two courses from ELEC1200 or ELEC 2100 or ELEC 2400]				8
ELEC	1200	A System View of Communications: from Signals to Packets	4	
ELEC	2100	Signals and Systems	4	
ELEC	2400	Electronic Circuits	4	
LANG	2030	Technical Communication I		3
CPEG	1971	Industrial Experience^		0
CPEG	2930	Academic and Professional Development I		0
ENGG	2010	Engineering Seminar Series		0
University Common Core				3

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Year 3

Fall Semester (17 credits)

				Credits
COMP	2012	Object-Oriented Programming and Data Structures		4
[take one course from COMP 2711 or COMP 2711H or ELEC 2600]				4
COMP	2711	Discrete Mathematical Tools for Computer Science	4	
COMP	2711H	Honors Discrete Mathematical Tools for Computer Science	4	
ELEC	2600	Probability and Random Processes in Engineering	4	
MATH	2011	Introduction to Multivariable Calculus		3
CPEG	1971	Industrial Experience^		0
CPEG	3930	Academic and Professional Development II		0
ENGG	2010	Engineering Seminar Series		0
University Common Core				3
University Common Core				3

Spring Semester (21-22 credits)

				Credits
COMP	3511	Operating Systems		3
ELEC	3300	Introduction to Embedded Systems		4
[take one course from COMP 4521 OR COMP 4611 OR ELEC 4310 OR ELEC4320 OR ELEC4330]				3-4
COMP	4521	Mobile Application Development	3	
COMP	4611	Design and Analysis of Computer Architectures	3	
ELEC	4310	Embedded System Design	4	
ELEC	4320	FPGA-based Design: From Theory to Practice	3	
ELEC	4330	Mobile Embedded Systems: Hardware Platform, Software Development, and Applications	3	
[take one of LANG 4030 OR LANG 4031]				3
LANG	4030	Technical Communication II for CSE & CPEG	3	
LANG	4031	Technical Communication II for ECE & CPEG	3	
CPEG	1971	Industrial Experience^		0
CPEG	3930	Academic and Professional Development II		0
ENGG	2010	Engineering Seminar Series		0
COMP/ELEC elective				4
COMP/ELEC elective				4

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To ensure adequate preparation for taking Exeter engineering courses, students should check the course details (including offering term and pre-requisite) from the [University of Exeter's website](#) before choosing electives at HKUST.

^ Students should complete internship/industrial training by Year 3 Summer to satisfy the requirement of CPEG 1971.

Year 4 (Study at University of Exeter)
Fall and Spring (12 credits)

BEng (CPEG) students have to complete a total of 15 credits of elective. They should take at least 2 courses from one single elective area and at least 2 courses outside that area for graduation. Please refer to the [elective area list of CPEG program](#) for the details.

Course code	Course title	Equivalent course at HKUST
Course required to be taken		
ECM3175	Individual Project	CPEG4901 / CPEG4911 (Final Year Project)
Select 2 courses offered by the University of Exeter to fulfill CPEG elective requirements. For Computer Science Module, please refer to the courses offered by the University of Exeter (https://intranet.exeter.ac.uk/emps/studentinfo/subjects/computerscience/modules/2022/) For Engineering Module, please refer to the list of courses offered by the University of Exeter below.		
ENG3018	Control Engineering	ELEC3200 System Modeling, Analysis and Control
ECM2117	Communication and Networking Technologies	ELEC3120 Computer Communication Networks
ECM2118	Analogue and Digital Electronics Design	ELEC3400 Introduction to Integrated Circuits and Systems
ENG3004	Engineering Electromagnetics	ELEC3600 Electromagnetics: From Wireless to Photonic Applications
ECM3165/3166	Digital Signal Processing/ Communications Engineering	ELEC3100 Signal Processing and Communications

Note:
1. Students are allowed to take engineering courses at the University of Exeter in Term 1 & Term 2 during their first year of study there. Term 1 and 2 at the University of Exeter corrrespond to the Fall term and Spring term at HKUST respectively.
2. For Exeter engineering courses, please note that the course offerings are subject to change

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and some courses may have pre-requisite(s). Students should check the course details (including offering term and pre-requisite) from the University of Exeter's website prior to arrival at Exeter. The final enrollment of Exeter engineering courses is subject to the approval of the University of Exeter. To play safe, students are expected to be very flexible with course selection and try to identify more courses as far as practicable.

3. The above recommended courses are for students' reference only and do not imply automatic approval for credit transfer. Before taking any Exeter courses, to ensure smooth credit transfer process, students should check ARO's Credit Transfer Database for the term they will study at the University of Exeter. Should no approved mapping be found, students should raise mapping requests via ARO's Credit Transfer System for Undergraduate Students and seek advice from their major Departments on equivalent HKUST courses **BEFORE** departure.

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