

## BEng (COMP)

### Recommended Study Pathway for HKUST-Exeter Engineering and Law Double Degree Program

#### Year 1

##### Fall Semester (15-16 credits)

			Credits
<b>[Take one course from MATH1012 OR MATH1013 OR MATH1020 OR MATH1023]</b>			3-4
MATH	1012	Calculus 1A	4
MATH	1013	Calculus 1B	3
MATH	1020	Accelerated Calculus	4
MATH	1023	Honors Calculus I	3
<b>[Take one course from COMP1021 OR COMP1022P OR COMP1022Q]</b>			3
COMP	1021	Introduction to Computer Science	3
COMP	1022P	Introduction to Computing with Java	3
COMP	1022Q	Introduction to Computing with Excel VBA	3
ENGG	1010	Academic Orientation	0
LANG	1002	English for University Studies I (U Core)	3
University Common Core			3
University Common Core			3

##### Spring Semester (14-15 credits)

			Credits
<b>[Take one course from MATH 1014 OR MATH 1024]</b>			3
MATH	1014	Calculus II	3
MATH	1024	Honors Calculus II	3
<b>[Take one course from CHEM1004 OR CHEM1010 OR CHEM1020 OR LIFS1901 OR PHYS1001 OR PHYS1112 OR PHYS1312]</b>			3
CHEM	1004	Chemistry in Everyday Life	3
CHEM	1010	General Chemistry IA	3
CHEM	1020	General Chemistry IB	3
LIFS	1901	General Biology I	3
PHYS	1001	Physics and the Modern Society	3
PHYS	1112	General Physics I with Calculus	3
PHYS	1312	Honors General Physics I	3
ENGG	1010	Academic Orientation	0
LANG	1003	English for University Studies II (U Core)	3
University Common Core			3
Free Elective			3

## Year 2

### Fall Semester (17 credits)

			Credits
COMP	2011	Programming with C++	4
COMP	2711	Discrete Mathematical Tools for Computer Science	4
COMP	4900	Academic and Professional Development	0
MATH	2111	Matrix Algebra and Applications	3
LANG	2030	Technical Communication I	3
ENGG	2010	Engineering Seminar Series	0
University Common Core			3

### Spring Semester (17-18 credits)

			Credits
<b>[Take one course from MATH2411 OR MATH 2421 OR ELEC2600 OR IEDA2520 or IEDA2540]</b>			3-4
MATH	2411	Applied Statistics	4
MATH	2421	Probability	4
ELEC	2600	Probability and Random Processes in Engineering	4
IEDA	2520	Probability for Engineers	3
IEDA	2540	Statistics for Engineers	3
COMP	1991	Industrial Experience^	0
COMP	2012	Object-Oriented Programming and Data Structures	4
COMP	2611	Computer Organization	4
COMP	4900	Academic and Professional Development	0
ENGG	2010	Engineering Seminar Series	0
University Common Core			3
Free Elective			3

### Summer Semester (6 credits)

	Credits
<i>Contract Law offered at HKUST by University of Exeter – required for seeking admission to the HKUST-Exeter Engineering and Law Program^</i>	6

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

## Year 3

### Fall Semester (16 credits)

			Credits
COMP	1991	Industrial Experience^	0
COMP	3111	Software Engineering	4
COMP	3511	Operating Systems	3
COMP	3711	Design and Analysis of Algorithms	3
COMP	4900	Academic and Professional Development	0
LANG	4030	Technical Communication II	3
ENGG	2010	Engineering Seminar Series	0
University Common Core			3

### Spring Semester (18 credits)

			Credits
COMP Elective		Any 1 course offered under COMP	3
COMP Area Elective			3
COMP Area Elective			3
COMP	4900	Academic and Professional Development	0
ENGG	2010	Engineering Seminar Series	0
University Common Core			3
University Common Core			3
Free Elective			3

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

### Summer Semester (0 credits)

			Credits
<i>Legal Foundations – Offered by the University of Exeter through an on-line mode of study.</i>			0

<sup>^</sup> Students should complete the internship/industrial training by year 3 Summer to satisfy the requirement of COMP1991.

## Year 4 (Study at University of Exeter)

### Fall (9 Credits)

BEng(COMP) students will take 9 credits of electives from the following list to fulfill the program requirements. Please note that students need to ensure they have taken at least 3 courses from 1 area and at least 2 courses outside that area throughout their study.

Course Code	Course Title	Equivalent course at HKUST	Elective Area in COMP curriculum
ECM2117	Communication and Networking Technologies	COMP4621	Systems/Networking
ECM2419	Database Theory and Design	COMP3311	Software/Database
ECM2425	Mobile and Ubiquitous Computing	COMP4521	Systems/Networking
ECM2433	The C Family	COMP elective	Software/Database
ECM3420	Learning from Data	COMP4211	Artificial Intelligence/Theory
ECM3426	High-performance Computing and Distributed Systems	COMP elective	Systems/Networking
ECM3423	Computer Graphics	COMP4411	Graphic/Multimedia
ECM3422	Computability and Complexity	COMP3721	Artificial Intelligence/Theory
ECM3408	Enterprise Computing	COMP elective	Systems/Networking
ECMM422	Machine Learning	COMP4211 or COMP4331	Artificial Intelligence/Theory
ECMM424	Computer Modelling and Simulation	COMP elective	Systems/Networking

#### Note:

1. Students will only be allowed to take engineering courses in Exeter in Term 1. In Term 2, students will be fully engaged in the law modules. Term 1 and 2 at the University of Exeter is equivalent 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 and some courses may have pre-requisite. Students should check the course details (including offering term and pre-requisite) from the Exeter's website prior arrival to Exeter.

## Year 4 (HKUST)

### Summer (6 Credits)

For students who have yet to complete Final Year Project/Final Year Thesis only	Credits
<b>COMP 4981 OR COMP 4981H (Students taking the Research Option must take COMP 4981H)</b>	
COMP 4981 Final Year Project* 6 COMP 4981H Final Year Thesis* 6	

\* Students carry out their FYP/FYT in the University of Exeter during Year 4 under remote supervision of HKUST supervisor. They then register for COMP4981/4981H at HKUST in the following Summer when they do the FYP presentation at HKUST in person in Summer.