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

Contract Law Course

Required to be completed by Year 3 Fall Semester

| | Credits |
|---|---------|
| Contract Law offered by the University of Exeter in Fall semester – | 6 |
| required for seeking admission to the HKUST-Exeter Engineering and Law Program [#] | 0 |

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

Year 1 (HKUST)

Fall Semester (15-16 credits)

| | | | | Credits |
|---|-------------|---|---|---------|
| [take one | course from | m 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 | |
| University Common Core | | | | 3 |

Spring Semester (18-19 credits)

| | | | | Credits |
|--|-------------|-------------------------------------|---|---------|
| [take one | course fror | m MATH1014 or MATH1024] | | 3 |
| MATH | 1014 | Calculus II | 3 | |
| MATH | 1024 | Honors Calculus II | 3 | |
| | | | | |
| [take one | course fror | n PHYS1114 or PHYS1314] | | 3 |
| PHYS | 1114 | General Physics II | 3 | |
| PHYS | 1314 | Honors General Physics II | 3 | |
| | | | | |
| [take one course from COMP1021 or COMP1022P] | | | 3 | |
| COMP | 1021 | Introduction to Computer Science | 3 | |
| COMP | 1022P | Introduction to Computing with Java | 3 | |

Year 1 (HKUST)

| Spring Semester | (18-19 credits) | (Cont'd) |
|------------------------|-----------------|----------|
|------------------------|-----------------|----------|

| | | | Credits |
|------------------------|------|--|---------|
| SENG | | Engineering Introduction Course | 3-4 |
| ENGG | 1010 | Academic Orientation | 0 |
| LANG | 1003 | English for University Studies II (U Core) | 3 |
| University Common Core | | | 3 |

Year 2 (HKUST)

Fall Semester (21-22 credits)

| | | | | Credits |
|------------------------|-------------|--|--------|---------|
| [take one | course froi | m ELEC2600 or ELEC2600H or MATH2011 or MATH2111 or MA | TH2350 | 3-1 |
| or MATH2 | 351] | | | 5-4 |
| ELEC | 2600 | Probability and Random Processes in Engineering | 4 | |
| ELEC | 2600H | Honors Probability and Random Processes in Engineering | 4 | |
| MATH | 2011 | Introduction to Multivariable Calculus | 3 | |
| MATH | 2111 | Matrix Algebra and Applications | 3 | |
| MATH | 2350 | Applied Linear Algebra and Differential Equations | 3 | |
| MATH | 2351 | Introduction to Differential Equations | 3 | |
| COMP | 2011 | Programming with C++ | | 4 |
| ELEC | 1100 | Introduction to Electro-Robot Design | | 4 |
| ELEC | 1200 | A System View of Communications: from Signals to Packets | | 4 |
| ELEC | 2910 | Academic and Professional Development I | | 0 |
| ENGG | 2010 | Engineering Seminar Series | | 0 |
| University Common Core | | | 3 | |
| University Common Core | | | | 3 |

Spring Semester (17-18 credits)

| | | | | Credits |
|------------|-------------|---|----------|---------|
| [take one | course froi | m ELEC2600 or ELEC2600H or MATH2011 or MATH2111 or N | IATH2350 | 3-1 |
| or MATH2 | 351] | | | 5-4 |
| ELEC | 2600 | Probability and Random Processes in Engineering | 4 | |
| ELEC | 2600H | Honors Probability and Random Processes in Engineering | 4 | |
| MATH | 2011 | Introduction to Multivariable Calculus | 3 | |
| MATH | 2111 | Matrix Algebra and Applications | 3 | |
| MATH | 2350 | Applied Linear Algebra and Differential Equations | 3 | |
| MATH | 2351 | Introduction to Differential Equations | 3 | |
| ELEC | 2991 | Industrial Experience (Electronic Engineering) [^] | | 0 |
| ELEC | 2350 | Introduction to Computer Organization and Design | | 4 |
| ELEC | 2400 | Electronic Circuits | | 4 |
| ELEC | 2910 | Academic and Professional Development I | | 0 |
| LANG | 2030 | Technical Communication I | | 3 |
| ENGG | 2010 | Engineering Seminar Series | | 0 |
| University | Common (| Core | | 3 |

Year 3 (HKUST)

Fall Semester (18-19 credits)

| | | | | Credits |
|--|-----------|---|-----------------|---------|
| [take one c | ourse fro | om ELEC2600 or ELEC2600H or MATH2011 or MATH2111 or I | MATH2350 | 3-4 |
| or MATH23 | 51] | | | |
| ELEC | 2600 | Probability and Random Processes in Engineering | 4 | |
| ELEC | 2600H | Honors Probability and Random Processes in Engineering | 4 | |
| MATH | 2011 | Introduction to Multivariable Calculus | 3 | |
| MATH | 2111 | Matrix Algebra and Applications | 3 | |
| MATH | 2350 | Applied Linear Algebra and Differential Equations | 3 | |
| MATH | 2351 | Introduction to Differential Equations | 3 | |
| | | | | |
| [take one c | ourse fro | om ELEC2100 or ELEC2100H] | | 4 |
| ELEC | 2100 | Signals and Systems | 4 | |
| ELEC | 2100H | Honors Signals and Systems | 4 | |
| ELEC | 2991 | Industrial Experience (Electronic Engineering) [^] | | 0 |
| ELEC | 3910 | Academic and Professional Development II | | 0 |
| | | | | |
| [take TWO courses from 3000-level or 4000-level ELEC courses]@ | | | 8 | |
| ENGG | 2010 | Engineering Seminar Series | | 0 |
| University Common Core | | | | 3 |

Spring Semester (18-20 credits)

| | | | Credits |
|------------------------|-----------|---|---------|
| [take TW0 | O courses | from 3000-level or 4000-level ELEC courses] @ | 6-8 |
| | | | |
| LANG | 4031 | Technical Communication II | 3 |
| ELEC | 2991 | Industrial Experience (Electronic Engineering) [^] | 0 |
| ELEC | 3910 | Academic and Professional Development II | 0 |
| | | | |
| ENGG | 2010 | Engineering Seminar Series | 0 |
| University Common Core | | | 3 |
| University Common Core | | | 3 |
| University Common Core | | | 3 |

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

- ^ Students should complete safety training + internship/industrial training by Year 3 Summer to satisfy the requirement of ELEC2991.
- [@] Students should take at least 21 credits of electives. The electives must be at least 3000 level or above. Courses of the subject and level as specified, out of which at least 2 courses must be at 4000-level. ELEC4940 cannot be used to count towards this elective requirement.

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

| | | Equivalent course at HKUST |
|-------------------|---|---------------------------------|
| Course required | to be taken | |
| ECM3175 | Individual Project | ELEC4900 (Final Year Project) |
| Select 2 courses | from the list of courses offered by the University of | of Exeter below to fulfill ELEC |
| elective requirem | nents [@] | |
| ECM3165/ | Digital Signal Processing/ | ELEC3100 |
| ECM3166 | Communications Engineering | |
| ENG3018 | Control Engineering | ELEC3200 |
| ENG2008 | Microcontroller Engineering | ELEC3300 |
| ENG3004 | Engineering Electromagnetics | ELEC3600 |
| ECM2117 | Communication and Networking Technologies | ELEC3120 |
| ECM2118 | Analogue and Digital Electronics Design | ELEC3400 |

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 correspond 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(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 <u>Credit Transfer Database</u> 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 <u>Credit Transfer System for Undergraduate Students</u> and seek advice from their major Departments on equivalent HKUST courses <u>BEFORE</u> departure.