Faculty of Engineering
The Chinese University of Hong Kong

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Welcome to
CUHK Engineering!

Presentation Outlines

- Introduction of the Faculty

- Highlights of Engineering Policies

- Language Exemption Policy

- Academic Advising

- Major Allocation (For Broad-based Engineering Students)

- ELITE Stream

- Academic Honesty

Introduction of the Faculty

CUHK Engineering

6 Academic Departments

- Biomedical Engineering (BME)
- Computer Science & Engineering (CSE)
- Electronic Engineering (EE)
- Information Engineering (IE)
- Mechanical & Automation Engineering (MAE)
- Systems Engineering & Engineering Management (SEEM)

11 Degree Programmes

Broad-based Engineering:

- Computer Engineering
- Computer Science
- Information Engineering
- Mathematics & Information Engineering
- Mechanical & Automation Engineering
- Systems Engineering & Engineering Management

Non Broad-based Engineering Programmes:

- Artificial Intelligence: Systems and Technologies
- Biomedical Engineering
- Electronic Engineering
- Energy and Environmental Engineering
- Financial Technology

CUHK Engineering

- Broad-based Engineering students are taken care of by the Faculty Office.

- Students admitted by non Broad-based Engineering programmes are taken care of by respective major departments.

4-year Curriculum

4-year Curriculum – Overview
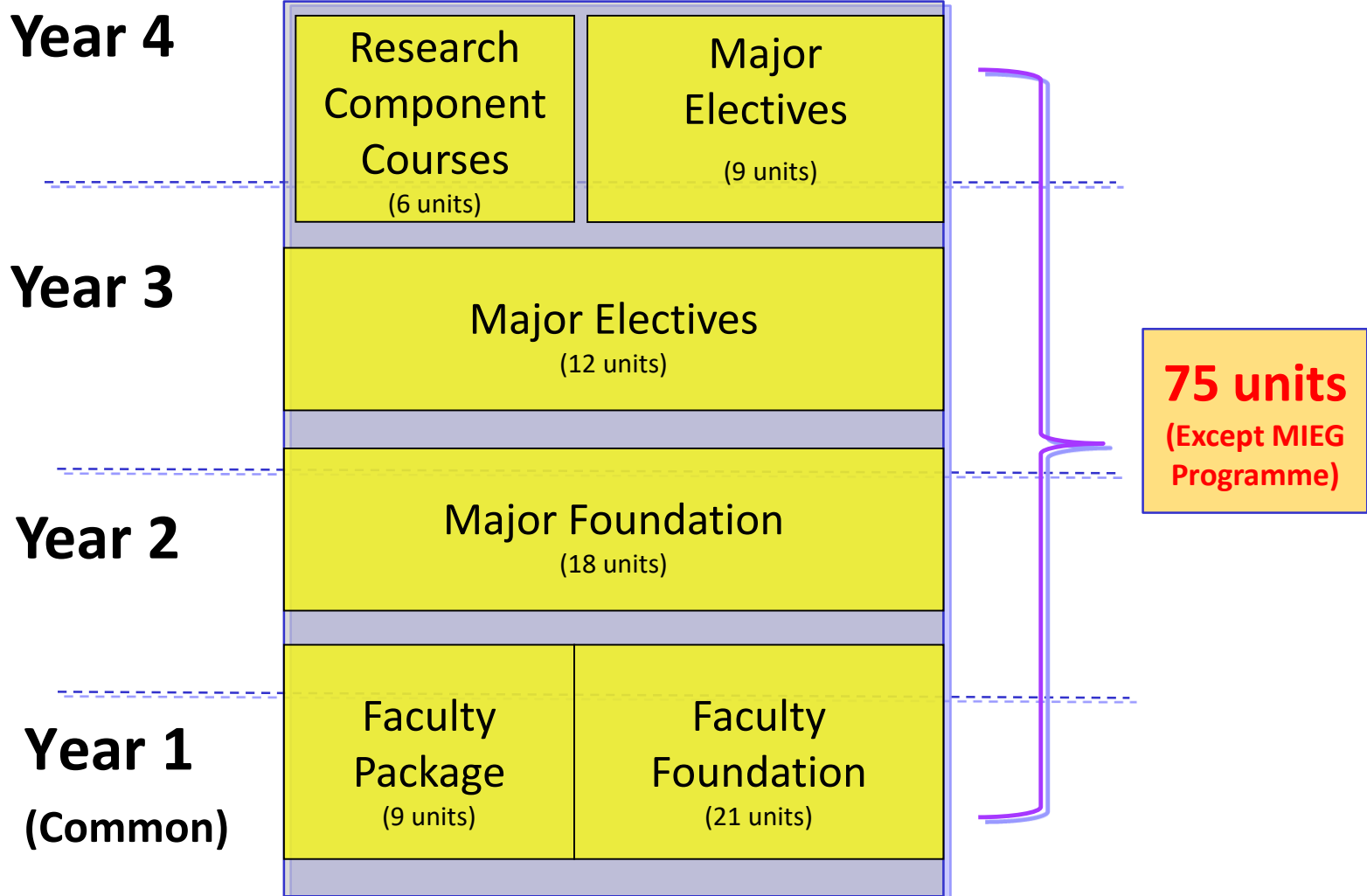
Free Electives: Remaining Units		
IT*		1 unit
Physical Education		2 units
Chinese >		6 units
English >		9 units
General Education		21 units
Major #		75 units (not for MIEG)

Total : 123 Units

4-year Curriculum – Major Requirements

Year 4

Research Component Courses (6 units)	Major Electives (9 units)

Year 3

Major Electives (12 units)

Year 2

Major Foundation (18 units)

Year 1 (Common)

Faculty Package (9 units)	Faculty Foundation (21 units)

75 units (Except MIEG Programme)

9

Faculty Package	Units
1) Faculty Package: •ENGG1110 Problem Solving by Programming (3 units) •ENGG1120 Linear Algebra for Engineers (3 units) •ENGG1130 Multivariable Calculus for Engineers (3 units)	Yr. 1 courses 9

Major Requirements –
Faculty Package & Faculty Foundation Courses

Foundation Courses	Units
2) Foundation Courses: • AIST1110 Introduction to Computing using Python (3 units) • CHEM1280 Introduction to Organic Chemistry and Biomolecules (3 units) • CHEM1380 Basic Chemistry for Engineers (3 units) • CSCI1120 Introduction to Computing Using C++ (3 units) • CSCI1130 Introduction to Computing Using Java (3 units) • ELEG2700 Introduction to Electronic System Design (3 units) • ENGG1310 Engineering Physics: Electromagnetics, Optics and Modern Physics (3 units) • ENGG2440 Discrete Mathematics for Engineers (3 units) • ENGG2720 Complex Variables for Engineers (2 units) • ENGG2740 Differential Equations for Engineers (2 units) • ENGG2760 Probability for Engineers (2 units) • ENGG2780 Statistics for Engineers (2 units) • FTEC2101 Optimization Methods (3 units) • IERG2060 Basic Analog and Digital Circuits (3 units) • LSCI1001 Basic Concepts in Biological Sciences (3 units) • LSCI1003 Life Sciences for Engineers (3 units) • MAEG1020 Computational Design and Fabrication (3 units) • MATH1510 Calculus for Engineers (3 units) • PHYS1003 General Physics for Engineers (3 units) • PHYS1110 Engineering Physics: Mechanics and Thermodynamics (3 units) • SEEM2440 Engineering Economics (3 units) • SEEM2460 Introduction to Data Science (3 units)	Minimum 11

Faculty Foundation Courses Selection & Recommended Study Pattern

- Students from Broad-based Engineering can refer to Pg. 12-13 of the Guidebook.

- Students from non Broad-based Engineering programmes can consult their respective departments (consultation sessions held at the end).

Faculty of Engineering

Course Load

- A student shall take **at least 9 units** of courses and **no more than 18 units** of courses in any term within the normative study period except when s/he is on first or extended academic probation

Note: Approval has been sought for broad-based engineering students to take 19 units per term during the first year.

- A student shall take no more than 6 units of courses in each summer session, and **no student shall be allowed to take more than 39 units in an academic year**

Highlights of Engineering Policies

Engineering Policies

1. Mathematics Placement Test
2. Physics Placement Test
3. Teaching Medium

Mathematics Placement Test

Date: 13 August 2019 (Tuesday)

Time: 11:30 am – 12:30 pm

(Please arrive at <u>10:30am</u> for test registration)

Venue: Lecture Theatres 1, Yasumoto
           International Academic Park

Mathematics Placement Test

- All MUST attend! Unless you are JUPAS admittees without HKDSE Math M1/M2.

- JUPAS admitees without HKDSE Math M1/M2 will be assigned to take

  MATH 1020 + MATH1510 by default.

  No test will be arranged.

Mathematics Placement Test

- Results are used to determine eligibility for enrollment in MATH1510

- Any student who is absent from the test or fails the test must take both MATH1020 and MATH1510 in Term 1, 2019-20

- Any student who passes the test can take MATH1510 alone

Mathematics Placement Test

- Duration: 60 minutes

- 30 MC Questions, 3 marks each

- Calculators are <u>NOT</u> permitted

- **Bring your Hong Kong Identity Card or Passport for identity verification**

- **Please get your JUPAS / Non-JUPAS application number ready as you may be asked by the Mathematics Department to put down such number on your test paper**

Mathematics Placement Test

Make-up test will only be provided when full and valid **documents** are provided in connection with:

- Hospitalization of the student
- Major illness of the student
- Death of immediate family members

Mathematics Placement Test

Application for make-up test:

- Send email to

    math1510@math.cuhk.edu.hk

  with a written explanation of your absence (with full documents) **on or before 14 August 2019 (Wednesday).**

- No late request or request without explanation/supporting documents will be considered

Mathematics Placement Test

Content:

- Functions

- Trigonometry

- Sequence, Series and Power Series

- Vectors

- Probability

For details of the scopes, please refer to the information sheets given to you. Same information has been posted in the Faculty website.

Physics Placement Test

- Students admitted WITH HKDSE results (regardless of admission channel and programme of admission)
    - ➢ Pre-assigned to take PHYS1110 according to the following HKDSE attainments:
        - ✓ Mathematics (Compulsory Part) Level 4; AND
        - ✓ Physics (Full Subject) Level 4 OR Combined Science (with Physics Component) Level 5
    - ➢ For the rest, students will be pre-assigned to take PHYS1003

Physics Placement Test

- Students admitted WITHOUT HKDSE results (regardless of admission channel and programme of admission)
  - Attend the Physics Placement Test
    - Date: 3 September 2019 (Tue)
    - Time: 8:30am – 9:15am
    - Venue: To be announced
  - Fail or Absent from the test will be pre-assigned to PHYS1003
  - Pass in the test will be pre-assigned to PHYS1110

Physics Placement Test

- Before release of test results, students will be pre-assigned to PHYS1110 first

- Students who need to take the test will receive email from the Faculty Office

Teaching Medium

- All courses offered by the Faculty of Engineering will be taught in English

Language Exemption

Language Exemption by Attainment

- Students have to complete University Core Requirements including Chinese and English language courses in order to graduate

- Students who have already obtained a certain qualifications specified by the University **prior to their study at CUHK** shall **apply for exemption on their own in their first term of study**.

- Please visit Registration and Examinations Section website

http://www.res.cuhk.edu.hk/en-gb/undergraduate-students/information-for-year-1-students/information-on-university-core-requirements-and-exemption/university-core-course-exemption-by-attainment

- **Application Period: From 15 August to 31 December 2019**

- When exemption from a particular course is granted, students can only be exempted from the course but not the units.

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