Structure and Flowchart for BEng in Microelectronics Engineering
2024/25 Entering Major ✠

Semester

1A
- MA1200 or MA1300 (3 CU) *
- EE1001 (3 CU) Foundations of Digital Techniques; and
- EE1002 (3 CU) Principles of Electrical Engineering; and
- EE1004 (3 CU) Foundations of Information Systems and Data Analysis; and
- GE1354 (3 CU) Introduction to Electronic Design; A or B @
- PHY1202 (3 CU) # General Physics II — A or B
- CS1302 (3 CU) # Introduction to Computer Programming — A or B
- EE1000 (0 CU) Programme Induction (for 4-year students)

1B
- MA1201 or MA1301 (3 CU) *

— 24CUs

2A
- MA2001 (3 CU) Multi-variable Calculus and Linear Algebra
- EE2000 (3 CU) Logic Circuit Design
- EE2005 (3 CU) Electronic Devices and Circuits
- CS2311 (3 CU) Computer Programming
- EE1000 (0 CU) Programme Induction (for AS students)

2B
- EE2800 (3 CU) Semiconductor Physics for Engineers
- EE3121 (3 CU) Differential Equations for Electrical Engineering
- EE3210 (3 CU) § Signals and Systems
- EE2104 (3 CU) Ω Introduction to Electromagnetics

— 24CUs

2S

3A
- EE3800 (3 CU) Semiconductor Materials and Devices
- EE3008 (3 CU) Principles of Communications
- EE3801 (3 CU) Microsystems and Nanotechnology
- EE2004 (3 CU) Microcomputer Systems
- EE4090 (0 CU) Δ Engineering Training — 2S or 3S (Priority will be given to Year 3 and thereafter)

3B
- 1 Technical Elective (3 CU)
- EE3115 (3 CU) Applied Opto-Electronic Devices
- EE3122 (3 CU) Analogue Circuit Fundamentals
- EE3220 (3 CU) System-on-Chip Design
- EE3070 (3 CU) Design Project

— 27CUs

3S

4A & B
- 5 Final Year Technical Electives (15 CU)
- EE4080 (6 CU) Project
- EE2066 (3 CU) £ * Engineers In Society

— 24CUs

→ Pre-requisite
⇢ Pre-cursor
↔ Co-requisite

§ (MA1201 or MA1301) or EE1002 is the pre-requisite for EE3210
Δ CS2311 & (EE2000 or EE2005) are the pre-requisite for EE4090
Ω MA1201 or MA1301 & EE1002 or PHY1202 are the pre-requisite for EE2104

\# College requirement   * College-specified GE courses   £ Major Requirement for ASI/II
@ Major Requirement (Level 1): applicable to Normative 4-year degree students only
✠ Excluding Gateway Education Requirements in English, Chinese Civilization and Area Requirements