

(Study Scheme - English)

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| Programme Title Electronic Information Engineering | |
| Study Scheme Applicable to students admitted in 2015-16 | |
| Major Programme Requirement | |
| Students are required to complete a minimum of 72 units of courses as follows: | |
| | Units |
| 1. School Package: BIO2001, CHM1001, CSC1001, 1002, MAT1001/1003, 1002/1004, 2040, PHY1001, STA2001 | 25 |
| 2. Required Courses: CSC3100, EIE1810, 2001, 2050, 2810, 3001, 3050, 3080, 3810, MAT3007, PHY1002, 2001 | 29 |
| 3. Elective Courses: Six courses selected from the following: BME4005, CSC3001, 3002, 3050, 3170, 3180, 4008, 4001, 4005, DME3004, 3007, 4004,4006, ECO2011, ERG3001, 4001, EIE3202,4002, 4003, 4004, 4005, 4006, 4007, 4020, 4180, 4190, 4512, MAT2002, 4220, PHY3002, STA4001 | 18 |
| Total: | 72 |
| Note: [1] All major required and major elective courses at 2000 level and above will be included in the calculation of Major GPA for honours classification. | |

(Study Scheme - Chinese)

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| 課程名稱 電子信息工程 | |
| 修讀辦法 二〇一五至一六年度入學學生適用 | |
| 主修課程要求 | |
| 學生須至少修畢以下科目共 72 學分： | |
| 1. 學院課程： BIO2001, CHM1001, CSC1001, 1002, MAT1001/1003, 1002/1004, 2040, PHY1001, STA2001 | 學分 25 |
| 2. 必修科目： CSC3100, EIE1810, 2001, 2050, 2810, 3001, 3050, 3080, 3810, MAT3007, PHY1002, 2001 | 29 |
| 3. 選修科目： 從以下選修6科： BME4005, CSC3001, 3002, 3050,3170, 3180,4008, 4001, 4005, DME3004, 3007, 4004,4006, ECO2011, ERG3001, 4001, EIE3202,4002, 4003, 4004, 4005, 4006, 4007, 4020, 4180, 4190, 4512, MAT2002, 4220, PHY3002, STA4001 | 18 |
| | <hr/> |
| | 共: 72 |
| 註： [1] 所有2000 及以上程度的主修必修和主修选修科目將會計入主修科目 之平均績點，并用以釐定學位等級。 | |

(Recommended Course Pattern - English)

Recommended Course Pattern

1. Sufficient units should be allowed in each term for students to fulfill the University Core Requirements, which include: (i) 3 units of Chinese; (ii) 12 units of English; (iii) 1 unit of IT; (iv) 18 units of General Education; and (v) 2 units of Physical Education and Health.

2. Programmes with different streams/concentrations are required to provide the recommended pattern for each stream/concentration.

| | Major Programme Requirement of <u>Electronic Information Engineering</u> | |
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| | Recommended Course Pattern | Units |
| First Year of Attendance | 1 st term School Package: CHM1001, MAT1001/1003, PHY1001 | 9 |
| | 2 nd term School Package: CSC1001, 1002, MAT1002/1004, STA2001 | 10 |
| Second Year of Attendance | 1 st term School Package: MAT2040 Major Required: EIE1810, 2001, PHY1002 | 3 6 |
| | 2 nd term School Package: BIO2001 Major Required: EIE2050, 2810, EIE3001 | 3 7 |
| Third Year of Attendance | 1 st term Major Required: CSC3100, EIE3050 Major Elective(s): Any one elective course | 6 3 |
| | 2 nd term Major Required: EIE3080, 3810, PHY2001 Major Elective(s): Any one elective course | 7 3 |
| Fourth Year of Attendance | 1 st term Major Required: MAT3007 Major Elective(s): Any two elective courses | 3 6 |
| | 2 nd term Major Elective(s): Any two elective courses | 6 |
| Total (Major Requirement including School Package): | | 72 |

(Recommended Course Pattern - Chinese)

修課推介

1. 每學期均須預留足夠學分讓同學符合大學核心課程要求，包括：(一) 中文三學分；(二) 英文十二學分；(三) 資訊科技一學分；(四) 通識教育十八學分及(五) 體育與健康兩學分。
2. 有不同專修範圍的課程須為每項專修範圍提供修課推介。

| 電子信息工程主修課程要求 | | |
|-------------------------|--|-----------|
| | 修課推介 | 學分 |
| 第一修業學年 | 第一學期 學院課程: CHM1001, MAT1001/1003, PHY1001 | 9 |
| | 第二學期 學院課程: CSC1001, 1002, MAT1002/1004, STA2001 | 10 |
| 第二修業學年 | 第一學期 學院課程: MAT2040 主修必修科目: EIE1810, 2001, PHY1002 | 3 6 |
| | 第二學期 學院課程: BIO2001 主修必修科目: EIE2050, 2810, EIE3001 | 3 7 |
| 第三修業學年 | 第一學期 主修必修科目: CSC3100, EIE3050 主修選修科目: 一科選修科目 | 6 3 |
| | 第二學期 主修必修科目: EIE3080, 3810, PHY2001 主修選修科目: 一科選修科目 | 7 3 |
| 第四修業學年 | 第一學期 主修必修科目: MAT3007 主修選修科目: 兩科選修科目 | 3 6 |
| | 第二學期 主修選修科目: 兩科選修科目 | 6 |
| 合共 (主修要求包括學院課程): | | 72 |

Course List

I. School Package for the School of Science and Engineering

| Course Code | Course Title (English) | Course Title (Chinese) | Unit(s) |
|-------------|---|--------------------------|---------|
| BIO2001 | General Biology | 普通生物 | 3 |
| CHM1001 | General Chemistry | 普通化學 | 3 |
| CSC1001 | Introduction to Computer Science: Programming Methodology | 計算機科學導論：程序設計方法 | 3 |
| CSC1002 | Computational Laboratory | 計算機實驗 | 1 |
| Option A* | MAT1001 | Calculus I | 微積分（一） |
| | MAT1002 | Calculus II | 微積分（二） |
| Option B* | MAT1003 | Mathematical Analysis I | 數學分析（一） |
| | MAT1004 | Mathematical Analysis II | 數學分析（二） |
| MAT2040 | Linear Algebra | 線性代數 | 3 |
| PHY1001 | Mechanics | 力學 | 3 |
| STA2001 | Probability and Statistics I | 概率及統計（一） | 3 |

*Students must complete either Option A or Option B.

II. Major Required Courses

| Course Code | Course Title (English) | Course Title (Chinese) | Unit(s) |
|-------------|---|------------------------|---------|
| CSC3100 | Data Structures | 數據結構 | 3 |
| EIE1810 | Electronic Circuit Design Laboratory | 電子線路設計實驗 | 1 |
| EIE2001 | Basic Circuit Theory | 基本電路理論 | 3 |
| EIE2050 | Digital Logic and Systems | 數字邏輯與系統 | 3 |
| EIE2810 | Digital Systems Design Laboratory | 數字系統設計實驗 | 1 |
| EIE3001 | Signals and Systems | 信號與系統 | 3 |
| EIE3050 | Principles of Communication Systems | 通信系統原理 | 3 |
| EIE3080 | Microprocessors and Computer Systems | 微型處理與計算機系統 | 3 |
| EIE3810 | Microprocessor System Design Laboratory | 微型處理系統設計實驗 | 1 |
| MAT3007 | Optimization | 最優化 | 3 |
| PHY1002 | Physics Laboratory | 物理實驗 | 2 |
| PHY2001 | Electricity and Magnetism | 電磁學 | 3 |

III. Major Elective Courses

| Course Code | Course Title (English) | Course Title (Chinese) | Unit(s) |
|-------------|--|------------------------|---------|
| BME4005 | Bioinformatics | 生物信息學 | 3 |
| CSC3001 | Discrete Mathematics | 離散數學 | 3 |
| CSC3002 | Introduction to Computer Science: Programming Paradigms | 計算機科學導論：程序設計範式 | 3 |
| CSC3050 | Computer Architecture | 計算機體系結構 | 3 |
| CSC3170 | Database System | 數據庫系統 | 3 |
| CSC3180 | Fundamentals of Artificial Intelligence | 人工智能之基本原理 | 3 |
| CSC4001 | Software Engineering | 軟件工程 | 3 |
| CSC4005 | Distributed and Parallel Computing | 分佈式及並行式計算 | 3 |
| CSC4008 | Techniques for Data Mining | 數據挖掘技術 | 3 |
| DME3004 | Aesthetic and Human Values in Engineering Product Design | 工程產品設計審美與人類價值 | 3 |
| DME3007 | Simulation | 仿真 | 3 |
| DME4004 | Production Planning and Project Management | 生產策劃與項目管理 | 3 |
| DME4006 | Organizational Behaviour | 組織行為學 | 3 |
| ECO2011 | Basic Microeconomics | 基本個體經濟學 | 3 |
| ERG3001 | Engineering Ethics, Safety and Practice | 工程倫理、安全及實務 | 3 |
| ERG4001 | Principles of Entrepreneurship | 創業原則 | 3 |
| EIE3202 | Analog Integrated Circuits | 模擬集成電路 | 3 |
| EIE4002 | Digital Communications | 數字通信 | 3 |
| EIE4003 | Wireless Communication Systems | 無線通信系統 | 3 |
| EIE4004 | Introduction to Optical Communications | 初級光通信學 | 3 |
| EIE4005 | Introduction to Coding and Cryptography | 編碼及密碼學導論 | 3 |
| EIE4006 | Performance Evaluation of Communication Networks | 通信網絡性能分析 | 3 |
| EIE4007 | Computer and Network Security | 計算機及網絡安全 | 3 |
| EIE4020 | Telecommunication Switching and Network Systems | 電信交換與網絡系統 | 3 |
| EIE4180 | Network Software Design and Programming | 網絡軟件之程序設計 | 3 |
| EIE4190 | Multimedia Coding and Processing | 多媒體編碼和處理 | 3 |
| EIE4512 | Digital Image Processing | 數字圖像處理 | 3 |
| MAT2002 | Ordinary Differential Equations | 常微分方程 | 3 |
| MAT4220 | Partial Differential Equations | 偏微分方程 | 3 |
| PHY3002 | Electrodynamics | 電動力學 | 3 |
| STA4001 | Stochastic Process | 隨機過程 | 3 |