(Study Scheme - English)

Programme Title
Electronic Information Engineering

Study Scheme

Applicable to students admitted in 2016-17 and 2017-18

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, 3150, 3170, 3180, 4008, 4001, 4005, 4160, DDA2020, DME3004, 3007, 4004, 4006, ECO2011, ERG3001, 4001, EIE3201, 3202, 3280, 3510, 4002, 4003, 4004, 4005, 4006, 4007, 4020, 4180, 4190, 4213, 4512, MAT2002, 3350, 4220, PHY3002, STA4001, EIE4900	18
	Total:	**72**

Notes:

[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)

課程名稱

電子信息工程

修讀辦法

二〇一六至一七及二〇一七至一八年度入學學生適用

主修課程要求

學生須至少修畢以下科目共 72 學分：

		學分
1.	學院課程： BIO2001, CHM1001, CSC1001, 1002, MAT1001/1003, 1002/1004, 2040, PHY1001, STA2001	25
2.	必修科目： CSC3100, EIE1810, 2001, 2050, 2810, 3001, 3050, 3080, 3810, MAT3007, PHY1002, 2001	29
3.	選修科目： 從以下選修六科： BME4005, CSC3001, 3002, 3050, 3150, 3170, 3180, 4008, 4001, 4005, 4160, DDA2020, DME3004, 3007, 4004, 4006, ECO2011, ERG3001, 4001, EIE3201, 3202, 3280, 3510, 4002, 4003, 4004, 4005, 4006, 4007, 4020, 4180, 4190, 4213, 4512, MAT2002, 3350, 4220, PHY3002, STA4001, EIE4900	18
	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 Electronic Information Engineering	
	Recommended Course Pattern	**Units**
First Year of Attendance	1st term School Package: CHM1001, MAT1001/1003, PHY1001	9
	2nd term School Package: CSC1001, 1002, MAT1002/1004, STA2001	10
Second Year of Attendance	1st term School Package: MAT2040 Major Required: EIE1810, 2001, PHY1002	3 6
	2nd term School Package: BIO2001 Major Required: EIE2050, 2810, EIE3001	3 7
Third Year of Attendance	1st term Major Required: CSC3100, EIE3050 Major Elective(s): Any one elective course	6 3
	2nd term Major Required: EIE3080, 3810, PHY2001 Major Elective(s): Any one elective course	7 3
Fourth Year of Attendance	1st term Major Required: MAT3007 Major Elective(s): Any two elective courses	3 6
	2nd 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)信息科技一學分；(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）	3
	MAT1002	Calculus II	微積分（二）	3
Option B*	MAT1003	Mathematical Analysis I	數學分析（一）	3
	MAT1004	Mathematical Analysis II	數學分析（二）	3
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
CSC3150	Operating Systems	操作系統	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
CSC4160	Cloud Computing	雲端計算	3
DDA2020*	Machine Learning	機器學習	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
EIE3201	Introduction to Microelectronic Circuits	微電子電路導論	3
EIE3202	Analog Integrated Circuits	模拟集成电路	3
EIE3280	Networks: Technology, Economics and Society	网络：技术、经济和社会	3
EIE3510	Digital Signal Processing	數字信號處理	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
EIE4213	Radio Frequency Integrated Circuits	射頻集成電路	3
EIE4512	Digital Image Processing	數字圖像處理	3
EIE4900	Final Year Project	畢業設計	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
MAT2002	Ordinary Differential Equations	常微分方程	3
MAT3350	Selected Topics in Information Theory	信息論專題	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

* The course title of CSC4020 is Fundamental of Machine Learning for students who study the course before 2021-22 term 1. For students who study this course from 2021-22 term 1, the course code is DDA2020 and the course title is Machine Learning.
在 2021-22 學年第一学期前修讀 CSC4020，科目名稱為「機器學習之基礎課程」。在 2021-22 學年第一學期及以後修讀該科目，科目代碼及名稱分別為「DDA2020」及「機器學習」。