

## Electronic Information Engineering 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
<b>CSC3180*</b>	<b>Fundamentals of Artificial Intelligence</b>	<b>人工智能之基本原理</b>	<b>3</b>
CSC4001	Software Engineering	軟件工程	3
CSC4005	Distributed and Parallel Computing	分佈式及並行式計算	3
<b>CSC4008*</b>	<b>Techniques for Data Mining</b>	<b>數據挖掘技術</b>	<b>3</b>
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
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
<b>MAT2002*</b>	<b>Ordinary Differential Equations</b>	<b>常微分方程</b>	<b>3</b>
PHY3002	Electrodynamics	電動力學	3
STA4001	Stochastic Process	隨機過程	3