

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 |
| CSC4001 | Software Engineering | 軟件工程 | 3 |
| CSC4005* | Distributed and Parallel Computing | 分佈式及並行式計算 | 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 |
| 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 | Tele-traffic Engineering | 電信交通工程 | 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 |
| PHY3002 | Electrodynamics | 電動力學 | 3 |
| STA4001 | Stochastic Process | 隨機過程 | 3 |

*Approval pending