# HUNGKUANG UNIVERSITY
# Department of Computer Science and Information Engineering

*Academic Year 2021, Four-Year Program* (*Day Division*)

| Credits required for graduation by the Department: 128 credits Include: | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| General Education Courses | 28 credits / 30 hours | | | | | | | | |
| Professional Compulsory Courses | 47 credits / 50 hours | | | | | | | | |
| Elective Courses | 53 credits / 55 hours | | | | | | | | |

| General Education Courses: 28 credits | | first year | | second year | | third year | | fourth year | | note |
|---|---|---|---|---|---|---|---|---|---|---|
| | | S.1 | S.2 | S.1 | S.2 | S.1 | S.2 | S.1 | S.2 | |
| core | Human Spirit(I) 人文精神(一) | | 2/2 | | | | | | | |
| | Human Spirit(II) 人文精神(二) | | | | 2/2 | | | | | |
| | Service Learning(I) 服務學習(一) | | 0/1 | | | | | | | |
| | Service Learning(II) 服務學習(二) | | | | 0/1 | | | | | |
| basic | Chinese reading and writing(I) 中文閱讀與書寫(一) | 2/2 | | | | | | | | Language Education |
| | Chinese reading and writing(II) 中文閱讀與書寫(二) | | 2/2 | | | | | | | |
| | English(I) 英文(一) | 2/2 | | | | | | | | |
| | English(II) 英文(二) | | 2/2 | | | | | | | |
| | History and Civilization 歷史與文明 | | | | | | 2/2 | | | Civic Education |
| | Democracy and the Rule of Law 民主與法治 | 2/2 | | | | | | | | |
| | Esthetics 美學 | 2/2 | | | | | | | | Aesthetic Education |
| | Introduction to Creativity 創意概論 | | | 2/2 | | | | | | Creative Education |
| | Innovation: Thinking and Application 創新思維與應用 | | | | | 2/2 | | | | |
| | Physical Education 體育 | 2/2 | | | | | | | | Physical Education |
| classification | Social Science Category 社會科學類 | | | 2/2 | | | | | | |
| | Liberal Arts 人文藝術類 | | | | | 2/2 | | | | |
| Subtotal | | 10/10 | 6/7 | 4/4 | 2/3 | 4/4 | 2/2 | 0/0 | 0/0 | |

| Professional Compulsory Courses: 47 credits | first year | | second year | | third year | | fourth year | | note |
|---|---|---|---|---|---|---|---|---|---|
| | S.1 | S.2 | S.1 | S.2 | S.1 | S.2 | S.1 | S.2 | |
| Introduction to Computer Science 計算機概論 | 3/3 | | | | | | | | |
| Practice of Unmanned Vehicle Operation 無人載具操作應用實務 | 3/3 | | | | | | | | |
| Python programming practice Python 程式設計實務 | 3/4 | | | | | | | | |
| Information Ethics and Regulations 資訊倫理與規範 | | 2/2 | | | | | | | |
| Introduction to Artificial Intelligence 人工智慧導論 | | 3/3 | | | | | | | |
| Introduction to Computer Network 電腦網路概論 | | 3/3 | | | | | | | |
| Mobile Application Development 行動應用程式設計 | | 3/3 | | | | | | | Core courses of College of Engineering |
| The Design, Assembly and Maintenance of Drone 無人機設計組裝與維修保養 | | | 3/3 | | | | | | |
| Artificial Intelligence Mathematics 人工智慧應用數學 | | | 3/3 | | | | | | |
| Data Structures and Algorithms 資料結構與演算法 | | | 3/3 | | | | | | |
| Database Systems 資料庫系統 | | | | 3/3 | | | | | |
| Computer-aided 3D modeling 電腦輔助 3D 建模實務 | | | | | 3/3 | | | | Core courses of College of Engineering |
| Applications of Sensors 感測器實務 | | | | | 3/3 | | | | |
| Project(I) 專題(一) | | | | | | 1/2 | | | |
| Project(II) 專題(二) | | | | | | | 1/2 | | |
| Industry of Internship 業界實習 | | | | | | | | 7/7 | |
| Subtotal | 9/10 | 11/11 | 9/9 | 3/3 | 6/6 | 1/2 | 1/2 | 7/7 | |

Elective Courses: 53 credits

1. According to the「Guidelines for Students of the Department of Intelligent Technology and Application of HungKuang University」, students need to choose one of the "Smart System Development Module" or "Digital Service Application Module" as an elective module from the next semester of the first year. And complete 21 credits of this module.

2. The department offers 20 credits of electives from other departments, including a maximum of 6 credits for elective courses offered by the General Education Center (including a maximum of 4 credits for physical education courses).

| 智慧系統開發模組 | | 數位服務應用模組 | |
|---|---|---|---|
| 模組專業選修 | 學分/時數 | 模組專業選修 | 學分/時數 |
| Microprocessor Systems and Laboratory (I) 微處理機系統與實習(一) | 3/3 | Introduction to Digital Technology 數位科技概論 | 3/3 |
| C Programming Language and Programming Practices C 程式設計實務 | 3/4 | R Programming Practice R 程式設計實務 | 3/4 |
| Windows Programming 視窗程式設計 | 3/3 | Internet Applications 網際網路應用 | 3/3 |
| Android Programming Android 行動裝置程式設計 | 3/3 | Practice of Windows Programming 視窗軟體應用實務 | 3/3 |
| Flight Sensing system of Drone 無人載具飛行感測系統 | 3/3 | Mobile Commerce 行動商務 | 3/3 |
| Machine learning 機器學習 | 3/3 | Aerial Photography application of Drone 無人載具航拍應用 | 3/3 |
| Deep learning practice 深度學習實務 | 3/4 | Practice of Social Media Content Production 社群媒體製作實務 | 3/4 |

3. National defense education and military training courses are not included in graduation credits