# Department of Information Management
# Chaoyang University of Technology Graduate Course Requirement
# (for the students admitted in the 2019 academic year)

| Academic Year | First Year | | | | | | | Second Year | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Semester** | First Semester | | | Second Semester | | | | First Semester | | | Second Semester | | |
| | Subject | Hours | Credit | Subject | Hours | Credit | | Subject | Hours | Credit | Subject | Hours | Credit |
| **Required courses** | 資訊講座 Speeches in Information Technology | 1 | 0 | 資訊講座 Speeches in Information Technology | 1 | 0 | | | | | | | |
| | 資訊管理研究議題 Infomation Management Research Subject | 3 | 3 | | | | | | | | | | |
| | 研究方法 Research Methods | 3 | 3 | | | | | | | | | | |
| **Special Topics** | | | | 行動網路研究專題 Special Topics in Mobile Network | 2 | 2 | | 無線網路研究專題 Special Topics in Wireless Network | 2 | 2 | 知識管理研究專題 Special Topics in knowledge Management | 2 | 2 |
| | | | | 智慧型系統研究專題 Special Topics in Intelligent Systems | 2 | 2 | | 決策支援研究專題 Special Topics in Decision Support | 2 | 2 | 行動多媒體研究專題 Special Topics in Mobile Multimedia | 2 | 2 |
| | | | | 多媒體應用研究專題 Special Topics in Multimedia Application | 2 | 2 | | 多媒體安全研究專題 Special Topics in multimedia security | 2 | 2 | 多媒體資料庫研究專題 Special Topics in Multimedia Databases | 2 | 2 |
| | | | | 整合式商務系統研究專題 Special Topics in Integrated Information Systems | 2 | 2 | | 多媒體技術研究專題 Special Topics in multimedia technique | 2 | 2 | 跨平台商務系統研究專題 Special Topics in Cross-platform Business Systems | 2 | 2 |
| | | | | 資訊隱藏技術研究專題 Special Topics in Information Hiding Techniques | 2 | 2 | | 網際網路商務系統研究專題 Special Topics in Web-Based Information Systems | 2 | 2 | 資料壓縮與應用研究專題 Special Topics in Data Compression and Applications | 2 | 2 |
| **Elective courses** | 高等軟體工程 Advanced Software Engineering | 3 | 3 | 供應鏈管理 Supply Chain Management | 3 | 3 | | 流程改善方法 Process Improvement Methodologies | 3 | 3 | 管理心理學 Management Psychology | 3 | 3 |
| | 高等電子商務 Advanced Electronic Commerce | 3 | 3 | 多變量分析 Multivariate Analysis | 3 | 3 | | 企業資源規劃 Enterprise Resources Planning | 3 | 3 | 軟體品質管理 Software Quality Management | 3 | 3 |
| | 知識管理 Knowledge Management | 3 | 3 | 多準則決策 Multiple Criteria Decision Making | 3 | 3 | | 網路公民素養 Netizen Literacy | 3 | 3 | | | |
| | 協同式數位學習 Collaboration E-Learning | 3 | 3 | 管理資訊系統 Management Information Systems | 3 | 3 | | | | | | | |
| | 企業資訊管理實務 Practices in Business Information Management | 3 | 3 | 資訊科技管理 Information Science and Technology Management | 3 | 3 | | | | | | | |
| | 資訊管理研究專題 Special Topics in Infomation Management | 3 | 3 | | | | | | | | | | |
| | 高等演算法 Advanced Algorithm | 3 | 3 | 密碼學 Cryptography | 3 | 3 | | 資訊隱藏 Information Hiding | 3 | 3 | 網路安全 Networking Security | 3 | 3 |
| | 進階雲端運算 Advanced Cloud Computing | 3 | 3 | 作業系統 Operating System | 3 | 3 | | 平行計算 Parallel Computing | 3 | 3 | 數位學習系統 E-Learning Management System | 3 | 3 |

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| | Subject | Hours | Credit | Subject | Hours | Credit | Subject | Hours | Credit | Subject | Hours | Credit |
| Elective courses | 高等電腦網路 Advanced Computer Networks | 3 | 3 | 人工智慧與機器學習 Artificial Intelligence and Machine Learning | 3 | 3 | | | | 資訊安全管理 Information Security Management | 3 | 3 |
| | 資料探勘 Data Mining | 3 | 3 | 類神經網路 Neural Networks and Its Applications | 3 | 3 | | | | 多媒體資料庫 Multimedia Database | 3 | 3 |
| | 作業研究 Operations Research | 3 | 3 | 代理人系統 Agent Systems | 3 | 3 | | | | 多媒體壓縮技術 Multimedia Compression Technique | 3 | 3 |
| | 物聯網與大數據分析 Internet of Things and Big Data Analysis | 3 | 3 | 物件導向技術 Object Oriented Programming | 3 | 3 | | | | 產學實務研究 Industry Research Practice | 3 | 3 |
| | 高等資料庫系統 Advanced Database System | 3 | 3 | 企業應用程式開發 Enterprise Application Development | 3 | 3 | | | | | | |
| | 模糊理論與應用 Fuzzy Theory and Application | 3 | 3 | 資訊科技研究 Information technology in Infomation Management | 3 | 3 | | | | | | |
| | 數位學習發展與趨勢 The Evolution of E-Learning | 3 | 3 | 資訊融入教學設計 ICT in Teaching Design | 3 | 3 | | | | | | |
| Elective courses | 3D遊戲程式 3D Game Programming | 3 | 3 | 多人線上遊戲程式設計 Multi-player Online Game Programming | 3 | 3 | 影像處理 Image Processing | 3 | 3 | 圖形識別與機器學習 Pattern Recognition and Machine Learning | 3 | 3 |
| | | 3 | 3 | 數位視訊處理 Digital Video Processing | 3 | 3 | 數位藝術創作 Digital Arts Creative Project | 3 | 3 | 動畫研究與應用 Animation Research and Application | 3 | 3 |

| Core courses | 3 courses 6 credits |
|---|---|
| Elective courses | Minimum elective 18 credits |
| Total Requirement | 30 credits |