**元智大學 資訊工程學系 選修科目表**

**Department of Computer Science and Engineering**

**Yuan Ze University**

**List of Elective Courses**

**（107學年度入學新生適用For students admitted in academic year 2018）**

107.05.02 一○六學年度第五次教務會議通過

Approved by the 5th Academic Affairs Meeting, Academic Year 2017, on May 2, 2018

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| 學年Year  學期Semester  科目Course | 第一學年1st Academic Year | | 第二學年2nd Academic Year | | 第三學年3rd Academic Year | | 第四學年4th Academic Year | |
| 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring | 上Fall | 下Spring |
| 系選修科目  Elective Courses | Ｗｅｂ程式設計  Web Programming  CS380(3) | 網站程式設計實務  Website Programming Practice  CS151(3) | 視窗程式設計  Windows Programming  CS249(3) | \*Ｊａｖａ概論  Introduction to Java  CS303(3) | 生物學概論  Introduction to Biology  CS341(3) | 專業實習（二）  Practical Training(II)  CS415(3) | 專業實習（四）  Practical Training(IV)  CS427(3) | 網路實習（二）  Network Lab(II)  CS424(3) |
|  | 普通物理學（下）  General Physics(II)  CS145(3) | \*組合數學  Combinatory Mathematics  CS421(3) | \*視窗程式設計（二）  Windows Programming(II)  CS324(3) | 車載資料分析與服務  Mobile Data Analysis and Services  CS304(3) | 生物資訊概論  Introduction to Bioinformatics  CS340(3) | 網路實習（一）  Network Lab(I)  CS423(3) | \*數值方法  Numerical Methods  CS353(3) |
|  |  | \*電子電路（二）  Electronic Circuits(II)  CS235(3) | 程式語言  Programming Languages  CS222(3) | 超大型積體電路設計導論  Introduction to VLSI Design  CS378(3) | ＵＮＩＸ系統概論  Introduction to UNIX System  CS312(3) | \*３Ｄ動畫程式設計  3D Animation Programming  CS317(3) | \*無線通訊與行動計算概論  Introduction to Wireless Communications and Mobile Computing  CS422(3) |
|  |  | 科技英文  Technical English  CS419(2) | 高等程式設計  Advanced Programming  CS257(2) | 內嵌式系統設計與實習  Embedded System Design and Practice  CS379(3) | \*數位電視概論  Introduction to Digital Television  CS315(3) | 資料庫系統概論  Introduction to Database System  CS352(3) | 影像處理概論  Introduction to Image Processing  CS362(3) |
|  |  | 網路程式設計  Network Programming  CS256(3) |  | 計算機網路概論  Introduction to Computer Networks  CS311(3) | 軟體工程  Software Engineering  CS377(3) | 電腦與網路安全概論  Introduction to Computer and Network Security  CS354(3) | 晶片設計自動化實習  IC Design Automation Lab.  CS409(3) |
|  |  | 工程數學  Engineering Mathematics  CS205(3) |  | 計算機圖學概論  Introduction to Computer Graphics  CS314(3) | 積體電路設計自動化導論  Introduction to IC Design Automation  CS338(3) | 人機互動設計概論  Introduction to Human-Computer Interaction Design  CS313(3) | 資料探勘實務  Data Mining Practice  CS406(3) |
|  |  |  |  | \*電子商務概論  Electronic Commerce  CS329(3) | 開放平台軟體  Open Platform Software  CS381(3) | 晶片設計與驗證實習  IC Design and Verification Lab.  CS408(3) | 智慧型科技應用  Information and Communication Technology for Intelligent Applications  CS410(3) |
|  |  |  |  | \*自動機理論概論  Introduction to Automata Theory  CS319(3) | 無線網路概論  Introduction to Wireless Internet  CS335(3) | 專題製作（三）  Special Project(III)  CS428(4) | 浸潤式資訊課程-國際經驗  Immersive Program in Computer Science: International Experience  CS460(1) |
|  |  |  |  | 微型應用程式設計實務  Mobile Application Programming  CS322(3) | 多媒體系統概論  Introduction to Multimedia System  CS401(3) | 網路攻防  Network Security: Attacks and Defenses  CS355(3) |  |
|  |  |  |  | R軟體與資料探勘  R Software and Data Mining  CS333(3) | \*作業系統（二）  Introduction Operation System(II)  CS302(3) | 資料探勘  Data Mining  CS412(3) |  |
|  |  |  |  | 雲端運算與服務  Cloud Computing and Services  CS337(3) | \*連網型系統晶片之嵌入式軟體  Networked SOC Embedded Software  CS301(3) |  |  |
|  |  |  |  | 編譯程式概論  Introduction to Compiler  CS321(3) | 敏捷軟體開發  Agile Software Development  CS382(3) |  |  |
|  |  |  |  |  | 醫學概論  Introduction to Clinical Medicine  CS346(3) |  |  |
|  |  |  |  |  | 新型態網路  Next Generation Networking  CS328(3) |  |  |
|  |  |  |  |  | 遊戲引擎理論與實務  Theory and Practice of Game Engine  CS330(3) |  |  |
|  |  |  |  |  | 大數據科學導論  Big Data Science  CS332(3) |  |  |
|  |  |  |  |  | 智慧聯網  Internet of Things  CS339(3) |  |  |
|  |  |  |  |  | 大數據創新應用專題  Special Projects of Innovative Big Data  CS343(3) |  |  |
|  |  |  |  |  | 人工智慧概論  Introduction to Artificial Intelligence  CS310(3) |  |  |
| 備註  Remarks | 考量師資因素，未來可能有部份課程無法正常開課。目前未能正常開課課程以\*表示。  Courses not regularly available are marked with \*. | | | | | | | |

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