**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**

**（113學年度入學新生適用For students admitted in academic year 2024）**

113.05.01 一一二學年度第八次教務會議通過

Approved by the 8th Academic Affairs Meeting, Academic Year 2023, on May 1, 2024

113.06.05 一一二學年度第九次教務會議修訂通過

Amended by the 9th Academic Affairs Meeting, Academic Year 2023, on June 5, 2024

113.12.25 一一三學年度第三次教務會議修訂通過

Amended by the 3rd Academic Affairs Meeting, Academic Year 2024, on December 25, 2024

| 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 ProgrammingCS380(3) | 網站程式設計實務Website Programming PracticeCS151(3) | 視窗程式設計Windows ProgrammingCS249(3) | Ｊａｖａ概論Introduction to JavaCS303(3) | 生物學概論Introduction to BiologyCS341(3) | 專業實習（一）Practical Training(I)CS400(3) | 專業實習（三）Practical Training(III)CS426(3) | 網路實習（二）Network Lab(II)CS424(3) |
| \*普通物理General PhysicsCS152(3) | \*普通物理學（下）General Physics(II)CS145(3) | \*組合數學Combinatory MathematicsCS421(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 ServicesCS304(3) | 專業實習（二）Practical Training(II)CS415(3) | 專業實習（四）Practical Training(IV)CS427(3) | \*數值方法Numerical MethodsCS353(3) |
| 醫學工程概論（一）Introduction to Medical Engineering(I)CS154(2) | 醫學工程概論（二）Introduction to Medical Engineering(II)CS155(2) | \*電子電路（二）Electronic Circuits(II)CS235(3) | 程式語言Programming LanguagesCS222(3) | 超大型積體電路設計導論Introduction to VLSI DesignCS378(3) | 專題製作（一）Special Project(I)CS416(3) | 專題製作（二）Special Project(II)CS417(3) | \*無線通訊與行動計算概論Introduction to Wireless Communications and Mobile ComputingCS422(3) |
|  | 醫療資訊學概論Introduction to Medical InformaticsCS156(2) | \*科技英文Technical EnglishCS419(2) | \*高等程式設計Advanced ProgrammingCS257(2) | 內嵌式系統設計與實習Embedded System Design and PracticeCS379(3) | 生物資訊概論Introduction to BioinformaticsCS340(3) | 網路實習（一）Network Lab(I)CS423(3) | 影像處理概論Introduction to Image ProcessingCS362(3) |
|  | 競技程式設計（一）Competitive Programming(I)CS157(3) | \*網路程式設計Network ProgrammingCS256(3) | 無線網路概論Introduction to Wireless InternetCS335(3) | 計算機網路概論Introduction to Computer NetworksCS311(3) | ＵＮＩＸ系統概論Introduction to UNIX SystemCS312(3) | \*３Ｄ動畫程式設計3D Animation ProgrammingCS317(3) | \*晶片設計自動化實習IC Design Automation Lab.CS409(3) |
|  |  | \*工程數學Engineering MathematicsCS205(3) | 智慧醫療概論Introduction to Smart HealthcareCS260(2) | 計算機圖學概論Introduction to Computer GraphicsCS314(3) | \*數位電視概論Introduction to Digital TelevisionCS315(3) | 資料庫系統概論Introduction to Database SystemCS352(3) | \*資料探勘實務Data Mining PracticeCS406(3) |
|  |  | 資料通訊概論Introduction to Data CommunicationsCS229(3) |  | \*電子商務概論Electronic CommerceCS329(3) | 軟體工程Software EngineeringCS377(3) | 電腦與網路安全概論Introduction to Computer and Network SecurityCS354(3) | \*智慧型科技應用Information and Communication Technology for Intelligent ApplicationsCS410(3) |
|  |  | 醫用放射治療概論Introduction to Therapeutic RadiologyCS258(2) |  | \*自動機理論概論Introduction to Automata TheoryCS319(3) | 積體電路設計自動化導論Introduction to IC Design AutomationCS338(3) | 人機互動設計概論Introduction to Human-Computer Interaction DesignCS313(3) | 浸潤式資訊課程-國際經驗Immersive Program in Computer Science: International ExperienceCS460(1) |
|  |  | 精準醫療概論Introduction to Precision MedicineCS259(2) |  | 微型應用程式設計實務Mobile Application ProgrammingCS322(3) | 開放平台軟體Open Platform SoftwareCS381(3) | \*晶片設計與驗證實習IC Design and Verification Lab.CS408(3) |  |
|  |  | 競技程式設計（二）Competitive Programming(II)CS261(3) |  | \*R軟體與資料探勘R Software and Data MiningCS333(3) | 多媒體系統概論Introduction to Multimedia SystemCS401(3) | 專題製作（三）Special Project(III)CS428(4) |  |
|  |  |  |  | 雲端運算與服務Cloud Computing and ServicesCS337(3) | \*作業系統（二）Introduction Operation System(II)CS302(3) | 資料探勘Data MiningCS412(3) |  |
|  |  |  |  | 編譯程式概論Introduction to CompilerCS321(3) | \*連網型系統晶片之嵌入式軟體Networked SOC Embedded SoftwareCS301(3) |  |  |
|  |  |  |  | 智慧物聯網Artificial Intelligence of ThingsCS349(3) | 敏捷軟體開發Agile Software DevelopmentCS382(3) |  |  |
|  |  |  |  | 醫學影像概論（一）Introduction to Medical Imaging(I)CS383(2) | 醫學概論Introduction to Clinical MedicineCS346(3) |  |  |
|  |  |  |  |  | \*新型態網路Next Generation NetworkingCS328(3) |  |  |
|  |  |  |  |  | \*遊戲引擎理論與實務Theory and Practice of Game EngineCS330(3) |  |  |
|  |  |  |  |  | 大數據科學導論Big Data ScienceCS332(3) |  |  |
|  |  |  |  |  | \*智慧聯網Internet of ThingsCS339(3) |  |  |
|  |  |  |  |  | 大數據創新應用專題Special Projects of Innovative Big DataCS343(3) |  |  |
|  |  |  |  |  | 人工智慧概論Introduction to Artificial Intelligence CS310(3) |  |  |
|  |  |  |  |  | 醫學影像概論（二）Introduction to Medical Imaging(II)CS384(2) |  |  |
| 備註Remarks | 1. 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 \*.
2. 為增進學生英文能力，鼓勵選修英語授課課程(含英專班)，其修習之課程科目及學分數之認抵需依學系規定辦理。To improve students’ English, students are encouraged to take the courses in English offered by any departments. However, recognition of these courses and their credits is determined by the rules of each adopting department.
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