真理大學 資訊工程學系 一一三學年度入學生四年課程規劃表

Aletheia University Department of Information Engineering Daytime Course Schedule for Students Entering the 2024 Academic Year

114年5月22日院課程委員會議通過　115年11月3日系課程委員會議審議通過

First year/第 一 學 年 (113)					Second year/第 二 學 年 (114)					Third year/第 三 學 年 (115)					Fourth year/第 四 學 年 (116)				
課程名稱/Course Name	必選修 Subject Category	學分 credit	時數 Hours 上 Last	時數 Hours 下 Next	課程名稱/Course Name	必選修 Subject Category	學分 credit	時數 Hours 上 Last	時數 Hours 下 Next	課程名稱/Course Name	必選修 Subject Category	學分 credit	時數 Hours 上 Last	時數 Hours 下 Next	課程名稱/Course Name	必選修 Subject Category	學分 credit	時數 Hours 上 Last	時數 Hours 下 Next
外國語文-英語語訓(一) Foreign Language--English Lab.	校必 Compulsory course	2	2	0	外國語文-英語讀本(一) Foreign Language--English Reading I	校必 Compulsory course	2	2	0	資訊專業服務（一） Computer Technique Services I	校必 Compulsory course	1	1	0	校訂共同選修 School-determined General Electives	校選 General Elective	2	2	0
外國語文-英語語訓(二) Foreign Language--English Lab. Drills II	校必 Compulsory course	2	0	2	外國語文-英語讀本(二) Foreign Language--English Reading II	校必 Compulsory course	2	0	2	資訊專業服務（二） Computer Technique Services II	校必 Compulsory course	1	0	1	資訊專題(三) Information Project III	專必 Required major	3	3	0
本國語文 Study of Chinese Language	校必 Compulsory course	2	2	0	體育(三)/Physical Education III	校必 Compulsory course	1	2	0	資訊倫理/Information Ethics	校必 Compulsory course	2	2	0	Matlab程式設計 Matlab Programming	專選 Professional electives	3	3	0
資訊素養/Information Literacy	校必 Compulsory course	2	0	2	體育(四)/Physical EducationIV	校必 Compulsory course	1	0	2	校訂共同選修 School-determined General Electives	校選 General Elective	4	2	2	影像處理/Image Processing	專選 Professional electives	3	0	3
電腦應用與運算思維 Computer application and Computational	校必 Compulsory course	2	2	0	校訂共同選修 School-determined General Electives	校選 General Elective	4	2	2	思維方法/Thought Method	通必 Required Courses	2	2	0	虛擬實境/Virtual Reality	專選 Professional electives	3	0	3
體育(一)/Physical Education I	校必 Compulsory course	1	2	0	自然永續概論-環境篇 Introduction to Natural Sustainability - Environment	通必 Required Courses	2	0	2	社會關懷/Social Caring	通必 Required Courses	2	2	0	虛擬化導論 Introduction to Virtualization	專選 Professional electives	3	3	0
體育(二)/Physical Education II	校必 Compulsory course	1	0	2	通識分類選修 Elective General Education Courses	通選General Education Course	4	2	2	通識分類選修 Elective General Education Courses	通選General Education Course	4	2	2	專案管理 Project Management	專選 Professional electives	3	0	3
程式設計（一）/Programming I	專必 Required major	3	3	0	物件導向程式設計 Object-Oriented Programming	專必 Required major	6	3	3	資訊專題(一) Information Project I	專必 Required major	3	3	0	機器學習 Machine Learning	專選 Professional electives	3	0	3
程式設計（二）/Programming II	專必 Required major	3	0	3	離散數學/Discrete Mathematics	專必 Required major	3	0	3	資訊專題(二) Information Project II	專必 Required major	3	0	3	專案研究 Project Research	專選 Professional electives	3	0	3
資訊工程導論/Introduction to Computer Science and Information Engineering	專必 Required major	3	3	0	計算機網路 Computer Networks	專選 Professional electives	3	0	3	作業系統 Computer Operating Systems	專必 Required major	3	3	0	大數據分析Big data analysis	專選 Professional electives	3	0	3
數位邏輯設計/Digital Logic Design	專必 Required major	3	0	3	資料結構 Data Structures	專必 Required major	3	3	0	計算機結構 Computer Architecture	專選 Professional electives	3	0	3	資料視覺化 Data Visualization	專選 Professional electives	3	3	0
團隊學習/Team Learning	專必 Required major	2	2	0	資料庫管理系統 Database Management System	專必 Required major	3	0	3	演算法/Algorithms	專必 Required major	3	3	0	圖形辨別 Pattern Recognition	專選 Professional electives	3	3	0
網頁程式設計/Home Page Design	專選 Professional electives	3	3	0	資訊專題實務 Practice of Information Project	專必 Required major	2	0	2	線性代數/Linear Algebra	專必 Required major	3	0	3	成果包裝與展示 Results packaging and display	專選 Professional electives	3	0	3
遊戲企劃概論 An introduction to game planning	專選 Professional electives	3	0	3	微處理機系統 Microprocessor Systems	專選 Professional electives	3	3	0	微積分/Calculus	專必 Required major	3	3	0	進階線性代數 Applied Linear Algebra	專選 Professional electives	3	3	0
3D模型設計/3D Modeling Design	專選 Professional electives	3	0	3	資訊講座(一) Computer Science Lectures (I)	專選 Professional electives	1	1	0	深度學習應用 Deep Learning Application	專選 Professional electives	3	3	0					
多媒體概論/Introduction to Multimedia	專選 Professional electives	3	3	0	資訊講座(二) Computer Science Lectures (II)	專選 Professional electives	1	0	1	無線網路概論 Introduction to Wireless Networks	專選 Professional electives	3	3	0					
行動APP設計入門/Introduction to mobile APP design	專選 Professional electives	3	3	0	資訊安全導論Introduction to Malware and Information Security	專選 Professional electives	3	0	3	手機程式設計 Mobile Phone Programming	專選 Professional electives	3	3	0					
資料工程/Data Engineering	專選 Professional electives	3	0	3	物聯網概論 Introduction to Internet of Things	專選 Professional electives	3	3	0	影像處理與程式實作 Image processing and programming	專選 Professional electives	3	0	3					
					python程式設計/Python Programming	專選 Professional electives	3	3	0	網路伺服器開發與設計 Programming Languages on Websites	專選 Professional electives	3	0	3					
					遊戲程式設計 Beginning game Programming	專選 Professional electives	3	3	0	網路管理實務 Management Practice of Network	專選 Professional electives	3	3	0					
					人工智慧概論 Introduction to Artificial Intelligence	專選 Professional electives	3	0	3	網路安全/Network Security	專選 Professional electives	3	3	0					
					感測器應用/Sensor Application	專選 Professional electives	3	0	3	系統程式 System Programming	專選 Professional electives	3	0	3					
					密碼學概論/Introduction to Cryptography	專選 Professional electives	3	3	0	資料探勘 Data Mining	專選 Professional electives	3	3	0					
					Web後端程式設計與應用 Web Backend Programming and Applications	專選 Professional electives	3	0	3	自造應用開發 Self-created Application Development	專選 Professional electives	3	3	0					
					電子商務開發實作 E-Commerce Implementation	專選 Professional electives	3	3	0	設計思考 Design Thinking	專選 Professional electives	3	0	3					
										雲端計算 Cloud Computing	專選 Professional electives	3	3	0					
										專案管理實務 Project Management Implementation	專選 Professional electives	3	3	0					
										區塊鏈技術與應用 Blockchain Technology and its Applications	專選 Professional electives	3	0	3					
										應用密碼學 Applied Cryptography	專選 Professional electives	3	0	3					
										R語言 R Language	專選 Professional electives	3	0	3					
										智慧軟體工程 Intelligent software engineering	專選 Professional electives	3	0	3					
										開源硬體與互動科技創新應用 Innovative Applications of Open-Source Hardware and Interactive Technology	專選 Professional electives	3	0	3					
校訂必修合計	校必 Compulsory course	12	8	6	校訂必修合計	校必 Compulsory course	6	4	4	校訂必修合計	校必 Compulsory course	4	3	1	校訂必修合計	校必 Compulsory course	0	0	0
校訂選修合計	校選 General Elective	0	0	0	校訂選修合計	校選 General Elective	4	2	2	校訂選修合計	校選 General Elective	4	2	2	校訂選修合計	校選 General Elective	2	2	0
通識必修合計	通必 Required Courses	0	0	0	通識必修合計	通必 Required Courses	2	0	2	通識必修合計	通必 Required Courses	4	4	0	通識必修合計	通必 Required Courses	0	0	0
通識選修合計	通選General Education Course	0	0	0	通識選修合計	通選General Education Course	4	2	2	通識選修合計	通選General Education Course	4	2	2	通識選修合計	通選General Education Course	0	0	0
專業必修合計	專必 Required major	14	8	6	專業必修合計	專必 Required major	17	6	11	專業必修合計	專必 Required major	18	12	6	專業必修合計	專必 Required major	3	3	0
專業選修合計	專選 Professional electives	18	9	9	專業選修合計	專選 Professional electives	32	19	16	專業選修合計	專選 Professional electives	57	27	30	專業選修合計	專選 Professional electives	36	15	21
總　計 total		44	25	21	總　計 total		65	33	37	總　計 total		91	50	41	總　計 total		41	20	21

註：1. 畢業總學分130學分，含校訂共同必修16學分、校訂共同選修10學分、通識課程14學分及專業課程 90學分。

Note: 1. The total graduation credits are 130 credits, including 16 credits of school-mandated compulsory courses, 10 credits of school-mandated elective courses, 14 credits of general education courses and 90 credits of professional courses.

(1) 校訂共同必修16學分(其中「體育」4學分、「新生專題」2學分，不計入畢業學分數。「電腦應用與運算思維」與「AI與資訊素養」修課時間請依所屬班級配課時間修習。)

(1) A total of 16 credits of common compulsory courses are required (of which "Physical Education" is 4 credits and "Freshman Project" is 2 credits, which are not counted towards graduation credits. The course schedule for "Computer Applications and Computational Thinking" and "AI and Information Literacy" should be arranged according to the class schedule of your class.)

(2) 校訂共同選修10學分(即全校自由選修；得在全校所有課程中任意選讀10學分，惟國防教育課程及體育興趣選項課程最多各核計2學分)。

(2) The school stipulates 10 credits of common elective courses (i.e., free elective courses for all students; students may choose any 10 credits from all courses in the school, but the National Defense Education Course and the Sports Interest Elective Course shall each be counted as a maximum of 2 credits).

(3) 通識課程14學分包括通識核心必修6學分(「思維方法」、「自然永續概論」、「社會關懷」) 及通識分類選修8學分(至少需修1科人文科學類、1科社會科學類，其餘 2科則可於四大類（人文科學/自然科學/社會科學/生活技能）任選。

(3) The 14 credits of general education courses include 6 credits of core compulsory general education courses ("Thinking Methods", "Introduction to Natural Sustainability", "Social Concern") and 8 credits of elective general education courses (at least 1 humanities course and 1 social science course must be taken, and the remaining 2 courses can be chosen from the four categories (humanities/natural sciences/social sciences/life skills).

(4) 專業課程90學分：專業必修52學分、專業選修38學分。 (4) 90 credits of professional courses: 58 credits of required professional courses and 32 credits of elective professional courses.

(4) 90 credits of professional courses: 52 credits of required professional courses and 38 credits of elective professional courses.

(5)「課程：微處理機系統、計算機結構、計算機網路」未修畢該課程者，可任修一門資工專選課程(3學分以上)抵免。

(5)「Course Name：Team management、Microprocessor Systems、Computer Networks、Computer Architecture」Those who do not complete this course can take a computer science elective course (3 credits or more) to offset the course fee.

2. 畢業生授予資訊工程學士學位。/ 2. Graduates are awarded a Bachelor of Science degree in Computer Science and Technology.