

Asia University (亞洲大學)

2023 Academic Year program for International Doctoral Students

(112 學年度博士班國際生全英語課程規劃表)

學程名稱(中文)：資訊工程學系博士班(國際博士學生)

學程名稱(英文)：Doctoral program in Department of Computer Science & Information Engineering
(International Doctoral Students)

畢業總學分：27 學分

112.04.26 校課程委員會通過

Credits for Graduation: 27

Approved by the University Curriculum Committee on 26/04/2023

Category	Course Title(中,英文)	Year of the program	Semester	Credits	Note
(6 credits) University Required Credits	Ph.D. Dissertation 博士論文	2 nd	1 st	3	
	Ph.D. Dissertation 博士論文	2 nd	2 nd	3	
(3 credits) Program Required Credits	Seminar (I) 專題講座(一)	1 st	1 st	1	
	Seminar (II) 專題講座(二)	1 st	2 nd	1	
	Seminar (III) 專題講座(三)	2 nd	1 st	1	
(18 credits) Program of Elective Credits	Algorithms 演算法	1 st or 2 nd	1 st or 2 nd	3	At least take 4 Compulsory Courses for Qualifying Examinations
	Database Systems 資料庫系統	1 st or 2 nd	1 st or 2 nd	3	
	Operating Systems 作業系統	1 st or 2 nd	1 st or 2 nd	3	
	Computer Networks 計算機網路	1 st or 2 nd	1 st or 2 nd	3	
	Image Processing 影像處理	1 st or 2 nd	1 st or 2 nd	3	
	Artificial Intelligence 人工智慧	1 st or 2 nd	1 st or 2 nd	3	
	Project Management 專案管理	1 st or 2 nd	1 st or 2 nd	3	
	Semiconductor Device Physics 半導體物理及元件	1 st or 2 nd	1 st or 2 nd	3	
	Microelectronics 電子電路	1 st or 2 nd	1 st or 2 nd	3	
	Integrated Circuits 積體電路	1 st or 2 nd	1 st or 2 nd	3	
	Semiconductor Process Engineering 半導體製程	1 st or 2 nd	1 st or 2 nd	3	
	Data Mining 資料探勘	1 st or 2 nd	1 st or 2 nd	3	
	Machine Learning 機器學習	1 st or 2 nd	1 st or 2 nd	3	
	Software Engineering 軟體工程	1 st or 2 nd	1 st or 2 nd	3	
	Knowledge Management 智識管理	1 st or 2 nd	1 st or 2 nd	3	
Grey System and Its Applications 灰色系統應用	1 st or 2 nd	1 st or 2 nd	3		

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	Fuzzy Theory 模糊理論	1 st or 2 nd	1 st or 2 nd	3	
	Computer Vision 電腦視覺	1 st or 2 nd	1 st or 2 nd	3	
	Information Security 資訊安全	1 st or 2 nd	1 st or 2 nd	3	
	Information Systems Management 資訊科技管理	1 st or 2 nd	1 st or 2 nd	3	
	Pattern Recognition 圖形識別	1 st or 2 nd	1 st or 2 nd	3	
	Cryptography and Its Applications 密碼學應用	1 st or 2 nd	1 st or 2 nd	3	
	Quantum Cryptography 量子密碼學	1 st or 2 nd	1 st or 2 nd	3	
	Wireless Networking 無線網路	1 st or 2 nd	1 st or 2 nd	3	
	High Speed Networking 高速電腦網路	1 st or 2 nd	1 st or 2 nd	3	
	Big Data Technologies and Applications 巨量資料技術與應用	1 st or 2 nd	1 st or 2 nd	3	
	Cloud Computing Practices 雲端運算實務	1 st or 2 nd	1 st or 2 nd	3	
	Design of SCADA System 監控系統設計	1 st or 2 nd	1 st or 2 nd	3	
	Artificial Intelligence & Internet of Things (AIoT) 智慧物聯網 (AIoT)	1 st or 2 nd	1 st or 2 nd	3	
	Blockchain Technology and Its Application 區塊鏈技術與應用	1 st or 2 nd	1 st or 2 nd	3	
	Security and Privacy Technologies Based on Blockchain Networks 基於區塊鏈網路的安全與隱私技術	1 st or 2 nd	1 st or 2 nd	3	
	Material Engineering 材料分析	1 st or 2 nd	1 st or 2 nd	3	
	Semiconductor Manufacturing Technology 積體電路製造實務	1 st or 2 nd	1 st or 2 nd	3	
	VLSI Design and Process Technology 超大型積體電路設計實務	1 st or 2 nd	1 st or 2 nd	3	
	Advanced Microelectronics 電子電路(二)	1 st or 2 nd	1 st or 2 nd	3	
	Analog Circuits 類比電路	1 st or 2 nd	1 st or 2 nd	3	
	Integrated Circuits Testing 積體電路測試導論	1 st or 2 nd	1 st or 2 nd	3	
	Semiconductor Failure Analysis 半導體故障分析	1 st or 2 nd	1 st or 2 nd	3	
	SOI Technology SOI 技術	1 st or 2 nd	1 st or 2 nd	3	
	Product Design and Development 產品工程	1 st or 2 nd	1 st or 2 nd	3	
	Text Mining 文件探勘	1 st or 2 nd	1 st or 2 nd	3	
	Big Data Management 大數據資料處理	1 st or 2 nd	1 st or 2 nd	3	
	Data Science	1 st or 2 nd	1 st or 2 nd	3	

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	資料科學				

Note(註)：

1. Must pass four qualifying examinations. Please select four subjects from the six subjects below. The six subjects are Algorithm, Database System, Operating System, Computer Network, Artificial Intelligence, and Imaging Processing, which the students should take the at least three courses.(必須通過四項資格考試，學生應至少學習三門課程)
2. Graduation requirement:27 credits including 9 credits of Required Courses and 18 credits of Elective Courses including 12 credits Program of Compulsory Credits Courses.(總畢業學分數為 27 學分，含校、系定必修核心課程 9 學分與系定選修課程 18 學分，包含 12 個學分的必選課程。)