

**Course List of GIAI PhD Program 醫學院臨床醫學研究所博士班人工智慧組必選修科目表**

(112學年度入學學生適用) 1105

必選修 Required/Elective	科目名稱 Course Title	1st		科目名稱	2nd	
		上	下		上	下
必修課程 Required Courses	科技論文討論 (1) Technical Literature Survey (1)	1		專題研究(1)(2) Independent Study (1) (2)	2	2
	科技論文討論 (2) Technical Literature Survey (2)		1	科技論文討論(3) Technical Literature Survey (3)	1	
				科技論文討論 (4) Technical Literature Survey (4)		1
專業選修(1)_人工智慧基礎 Professional Elevantive Courses(1)_Artificial Intelligence Foundation	自然語言處理 Natural Language Processing		3			
	深度學習 Deep Learning		3			
	電腦視覺 Computer Vision	3				
專業選修(2)_生物與醫學應用 Professional Elevantive Courses(2)_Biological and Medical Applications	臨床資訊工程 Clinical Informatics		3			
	生物資訊分析 Bioinformatic Analysis	3				
	數位醫學影像處理 Digital Image Processing for Medical Applications		3			
專業選修(3)_智慧工程技術 Professional Elevantive Courses(3)_Intelligence Engineering Technology	智慧物聯網 Artificial Intelligence & Internet of Things		3			
	智慧醫療工程 Intelligence Medicine Engineering	3				
	機器人學習 Robot Learning		3			
選修課程 Elective Courses	區塊鏈技術基礎與應用 Blockchain Technologies: Foundation and Application		3			
	量子機器學習 Quantum Machine Learning	3				
	AI晶片設計 AI IC Design		3			
	人工智慧與音樂導論 Introduction to AI and Musics	3				
	多代理人系統 Multiagent Systems	3				
	人工智慧與文學導論 Introduction to AI and Literature		3			
	資安結構 Introduction to Cybersecurity	3				
	地理資訊系統 Geospatial Information System	3				
備註 Remark	<p>1. 畢業學分29學分 Graduation Requirement: 29 credits</p> <p>(1) 必修8學分 8 required credits</p> <p>(2) 選修15學分。自專業選修(1)(2)(3)中至少通過三門(每領域最少一門) Elective Courses: 15 credits. Choose a minimum of three courses from the professional electives (1)(2)(3), with at least one course from each domain.</p> <p>(3) 博士論文6學分(通過學位口試通過後給予) Doctoral Dissertation: 6 credits (awarded upon passing the thesis defense).</p> <p>2、須達英文畢業門檻方可畢業。詳細規定請依據本校語文中心「英文畢業門檻實施辦法」。 Graduation is contingent upon meeting the English graduation threshold. For detailed regulations, please refer to the "Implementation Measures for English Graduation Threshold" provided by the Language Center of our university.</p>					