

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

(113學年度入學學生適用)

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				
	科技論文討論 (2) Technical Literature Survey (2)		1			
	人工智慧及機器學習導論 Introduction to Artificial Intelligence and Machine Learning	3				
專業選修(1)_先修課程 Professional Elective (1)_Prerequisite Courses	智慧運算方法概論 Survey of Intelligent Technologies	3				
專業選修(2)_人工智慧基礎 Professional Elective Courses(2)_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(3)_生物與醫學 應用 Professional Elective Courses(3)_Biological and Medical Applications	智慧醫療工程 Intelligence Medicine Engineering	3				
	臨床影像分析 Clinical Image Analysis		3			
	數位醫學影像處理 Digital Image Processing for Medical Applications		3			
選修課程 Elective Courses	生成式人工智慧 Generative AI Technologies	3		專題研究(1)(2) Independent Study (1) (2)	2	2
	資安結構 Introduction to Cybersecurity	3		科技論文討論 (3) Technical Literature Survey (3)	1	
	智慧物聯網 Artificial Intelligence & Internet of Things		3	科技論文討論(4) Technical Literature Survey (4)		1
	區塊鏈技術基礎與應用 Blockchain Technologies: Foundation and Application		3			
	AI晶片設計 AI IC Design		3			
備註 Remark	<p>1. 畢業學分26學分 Graduation Requirement: 26 credits</p> <p>(1) 必修5學分: Required courses 5 credits</p> <p>(2) 選修15學分:</p> <p>(a) 若已在碩士班修習過「深度學習」、「電腦視覺」和「自然語言處理」課程,即可申請免修專業選修(1)_先修課程。(免修條件請參考學系辦法),若未曾修習者,應修畢專業選修(1)_先修課程3學分。</p> <p>(b) 專業選修(2)(3)中至少通過各一門,且成績達 A 或 A+。</p> <p>(2) Elective Courses: 15 credits.</p> <p>(a) If all three courses: "Deep Learning," "Computer Vision," and "Natural Language Processing" have been taken in his/her master's program, a student can be exempted from taking the Professional Elective (1) course. (Please refer to the department regulation on exemption conditions). Otherwise, students must take Professional Elective (1) for 3 credits.</p> <p>(b) At least one course from each area of Professional Electives (2)(3) must be passed with a grade of A or A+.</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>(4) 跨所選修博士班課程者須於選課前提交「跨所選修申請書」,經核准後方可計入畢業學分。跨所選修之課程須與研究相關,以6學分為上限。</p> <p>(4) Doctoral students taking courses from other departments must submit a "Cross-Departmental Course Application" before course selection. Upon approval, these courses can be counted towards graduation credits. Cross-departmental courses must be related to the student's research, with a maximum of 6 credits allowed.</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>					

