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 Elevtive Courses(2)_Artficial 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 Elevtive 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	1. 畢業學分26學分 Graduation Requirement: 26 credits (1) 必修5學分: Required courses 5 credits (2)選修15學分: (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。 (b)專業選修(2)(3)中至少通過各一門,且成績達 A 或 A+ 。 (2)Elective Courses: 15 credits. (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. (b) At least one course from each area of Professional Electives (2)(3) must be passed with a grade of A or A+. (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). (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。 (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. 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.					