

國立虎尾科技大學 資訊工程系 碩士班課程科目表

(104 學年入學適用)

Curriculum Table (Since 2015 Academic Year)

Graduate Class

Department of Computer Science and Information Engineering

National Formosa University

104 年 3 月 24 日 103 學年第 3 次課程協調會議通過

104 年 6 月 16 日 103 學年第 4 次教務會議通過

104 年 9 月 24 日 104 學年第 2 次課程協調會議通過

104 年 10 月 17 日 104 學年第 1 次工程及科技教育認證諮詢委員會議通過

Academic Year	First Year						
Semester	First			Second			
Required Courses	Subject	Credit	Hours	Subject	Credit	Hours	
	(I)	專題研討(一) Project Discussion (1)	0	2	(III)	專題研討(二) Project Discussion(2)	0
	書報討論(一) Seminar(1)	0	2		書報討論(二) Seminar(2)	0	2
(II)	產業研發實習(一) Industrial Research and Development Lab(1)	0	2	(IV)	產業研發實習(三) Industrial Research and Development Lab(3)	0	2
	產業研發實習(二) Industrial Research and Development Lab(2)	0	2		產業研發實習(四) Industrial Research and Development Lab(4)	0	2
	科技論文寫作 Scientific Writing	3	3		碩士論文(二) Master's Thesis(2)	3	0
	碩士論文(一) Master's Thesis(1)	3	0				
Elective Courses	物聯網 Internet of Things	3	3		新一代 web 技術 New Generation Web Technology	3	3
	圖形識別 Pattern Recognition	3	3		軟硬體協同設計與應用 Software and Hardware Co-design and Applications	3	3
	電腦視覺處理 Computer Vision Processing	3	3		數位視訊處理 Digital Video Processing	3	3
	感測網路 Sensor Network	3	3		資料隱藏 Data Hiding	3	3
	感測網路實驗 Sensor Network Experiments	3	3		高等演算法 Advanced Algorithms	3	3
	生物計算 Computational Biology	3	3		智慧型機器人系統應用專 題 Intelligent Robot System Application Project	3	3
	可編程系統單晶片設計實務 SOPC Design	3	3		雲端作業系統 Cloud Operating Systems	3	3
	行動商務安全	3	3		行動計算與應用	3	3

	M-Commerce Security			Mobile Computing and Applications		
				數值方法 Numerical Methods	3	3
				生物資訊學 Bioinformatics	3	3
				嵌入式車載通訊電子網路 系統設計 Embedded Telematics Electronic Network System Design	3	3
				數論 Number Theory	3	3
				無線網路協定 Wireless Network Protocols	3	3
Academic Year	Second Year					
Semester	First			Second		
	Subject	Credit	Hours	Subject	Credit	Hours
Elective Courses	多媒體通訊 Multimedia Communications	3	3	影像擷取裝置設計與應用 Image Capturing Device Design and Application	3	3
	高等隱藏學 Advanced Steganography	3	3	高等人工智慧 Advanced Artificial Intelligence	3	3
	資料壓縮 Data Compression	3	3	網路協定工程 Networks Protocol Engineering	3	3
	多代理人系統 Multiagent System	3	3	平行演算法 Parallel Algorithm	3	3
	演化式基因演算法 Evolutionary Genetic Algorithm	3	3	密碼學 Cryptography	3	3
	機器學習 Machine Learning	3	3	智慧型最佳化演算法 Intelligent Algorithm of Optimization	3	3
	高等數位系統設計 Advanced Digital Design	3	3	巨量資料分析 Big Data Analysis	3	3
	資通訊安全專論 Information & Communication Security	3	3	產業研發實習(六) Industrial Research and Development Lab(6)	3	3
	產業研發實習(五) Industrial Research and Development Lab(5)	3	3			

備註：

1. 本系碩士班研究生最低畢業總學分數為 30 學分，其中必修包含論文 6 學分、科技論文寫作 3 學分及二學期之專題研討及書報討論，專業選修至少須修滿 21 學分，其中 6 學分可選修外系課程，唯須經指導教授同意。
 2. 外國學生可修讀華語教學課程來抵免書報討論課程。外國學生開放選修外系全英文授課課程，唯須經指導教授同意，不受上述 6 學分限制。
 3. (I)組課程和 (II)組課程須擇一組修習；(III)組課程和 (IV)組課程須擇一組修習。
1. The minimum requirement for students who enrolled in the CSIE department should complete at least 30 credits

in total for their masters' degrees. These required credits for graduation should consist of the compulsory subjects (6 credits for master's thesis; 3 credits for scientific research writing; two-consecutive semesters for projects discussions and seminars) and specialized elective subjects (at least 21 credits) .

2. Overseas students who enroll in the CSIE department allow taking Mandarin subjects upon completion to waive their seminars courses. The only exclusive permission granted to them by this department is that they allow taking any English instructed courses in other departments ,supposed that these subjects were not offered in students' own department; they can take more than 6 credits set in Rule 1 above if they have their principal supervisors' prior consents.
3. Students need to choose first group of courses from Group I and Group II and second group of courses from Group III and Group IV for their postgraduate studying.