國立金門大學 電機工程學系碩士班 課程規劃表

National Quemoy University Department of Electrical Engineeringl Master's Program Curriculum Plan

113 學年度入學新生適用

Applicable for students Admitted in Academic Year 2024

本學系碩士生畢業時至少應修滿 30 學分，包括

專業必修： 6 學分

專業選修： 24 學分

修訂歷程

113年3月07日112學年度第二學期第一次系課程規劃委員會訂定通過
Approved on March 7, 2024, during the 1st Departmental-level Curriculum Planning Committee Meeting of the 2nd Semester, Academic Year 2023

113年4月10日112學年度第二學期第一次院課程規劃委員會訂定通過
Approved on April 10, 2024, during the 1st college-level Curriculum Planning Committee Meeting of the 2nd Semester, Academic

		一年級 First Year	上學期 Semester		下學期 Semester		**二年級 Second Year**	上學期 Semester		下學期 Semester		**二年合計 Total**
			學分 Credits	時數 Hours	學分 Credits	時數 Hours		學分 Credits	時數 Hours	學分 Credits	時數 Hours	
共同必修 General Required Courses		校園學術倫理數位課程 Research Ethics Education Online Program	0	1								
總計			0		0			0		0		0
專業必修 Professional Required Courses		專題討論(一)(二)(三)(四) Seminar I-IV										
							學位論文 Thesis			6		
總計			0		0			0		6		6
	研究基礎領域	科學計算 Scientific computing	3	3			校外實習(一) Campus Internship I	0	1			
							校外實習(二) Campus Internship II			0	1	
	通訊與系統應用領域 Communication and System Application	數位影像處理 Digital Image Processing	3	3			展頻通訊 Spread Spectrum Communications	3	3			
		鎖相迴路設計與應用 Design and Application for Phase Locked Loop	3	3			高等計算機結構 Advanced Computer Structure	3	3			
		高等電力系統 Advanced Power System	3	3			嵌入式行動機器人 Enbedded Mobile Robot	3	3			
		深度學習概論 Introduction to Deep Learning	3	3								
		數位信號處理 Digital Signal Processing			3	3						
		行動通訊系統 Mobile Communication Systems			3	3						
		編碼理論 Coding Theorem			3	3						
		模糊系統 Fuzzy System			3	3						
		智慧型計算 Intelligent Computation			3	3						
		電力電子實務 Practice of Power Electronic			3	3						
		深度學習 Deep Learning			3	3						
		太陽能電力系統 Solar Power System			3	3						
專業選修 Professional Electives	固態與積體電路領域 Solid state and integrated circuit	薄膜工程 Thin Film Engineering	3	3			表面分析技術 Surface Analysis Techniques	3	3			
		能量轉換原理 Energy Conversion Principle	3	3			智慧控制 Intelligent Control	3	3			
		射頻積體電路與模擬 Simulation and Design of Radio Frequency Integrated Circuits	3	3			奈米工程 Nanotechnology			3	3	
		模式化通訊IC設計 Model-based Communication IC Design	3	3								
		半導體製程技術 Semiconductor Technology	3	3								
		新能源技術 New Energy Technologies	3	3								
		射頻無線系統與應用 Rf Wireless Systems and	3	3								
		超大型積體電路設計 VLSI Design			3	3						
		表面工程 Surface Engineering			3	3						
		半導體量測技術 Semiconductor Measurement Technology			3	3						
		太陽能技術 Technology of solar energy			3	3						
		通訊網路積體電路設計 Communications Network Integrated Circuit Design			3	3						
		高頻電路佈局與模擬 Layout and Simulation of High Frequency Circuits			3	3						
		類比積體電路設計與模擬 Analog Integrated Circuits: Design and Simulation			3	3						
		半導體元件及物理 Semiconductor Components and Physical			3	3						
總計			36		48			15		3		102
學期總計			36		48			15		9		

備註：

一、畢業總學分30學分，學位論文6學分，專業選修24學分(包含6學分可選修非本系所開設之課程)，必須滿足本學系修讀規定。
The total number of credits for graduation is 30 credits, 6 credits for dissertation, and 24 credits for Professional Electives (including up to 6 credits from outside the department), which must meet the requirements of the department.

二、「專題討論(一)~(四)」為在學其修業期間每學期必修0學分1小時之課程。
"Seminar (I) ~ (IV)" is a compulsory course of 0 credits and 1 hour per semester during the study period.

三、專業選修課程不分年級。
Professional Electives are not divided into grades.

四、碩班課程皆與學士班四年級合開。
The Master's courses is co-taught with the fourth year of the Bachelor's courses.

五、表列選修科目為預定科目，將視實際需要而調整。
Elective courses listed are tentative and may be adjusted according to actual circumstances.

六、專題討論(一)及(二)以指導教授參與的專長組別為主。
Seminar I and II focused on the expertise groups in which the supervising professor participated.

七、研究生須於申請學位考試當學期修得學位論文。
Students must complete their Master's Thesis during the semester they apply for the degree examination.