

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 Engineering Master's Program Curriculum Plan

115學年度入學新生適用

Applicable for students Admitted in Academic Year 2026

修訂歷程

Revision History

Approved on March 18, 2026, during the 1st Departmental-level Curriculum Planning Committee Meeting of the 2nd Semester, Academic Year 2025

115年4月15日116學年度第2學期第一次院課程規劃委員會訂定通過
Approved on April 15, 2026, during the 1st college-level Curriculum Planning Committee Meeting of the 2nd Semester, Academic Year 2025115年0X月XX日116學年度第X學期第X次校級課程規畫委員會訂定通過
Approved on June 5, 2026, during the 1st school-level Curriculum Planning Committee Meeting of the 2nd Semester, Academic Year 2025

專業必修： 6 學分

Professional Required : 6 Courses

專業選修： 24 學分

Professional Electives : 24 Courses

本學系碩士生畢業時至少應修滿 30 學分，包括

The Master's Program requires students to complete at least 30 credits for graduation, including:

		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	校園學術倫理數位課程 Research Ethics Education Online		0	1								
	總計 Total		0		0			0		0		0
專業必修 Professional Required Courses	專題討論(一) Seminar I		0	1			專題討論(三) Seminar III	0	1			
	專題討論(二) Seminar II				0	1	專題討論(四) Seminar IV			0	1	
							學位論文 Thesis			6		
	總計 Total		0		0			0		6		6
專業選修 Professional Electives	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								
		自旋電子材料學 Spintronics materials and devices	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						
		大型語言模型與智慧應用實務 Large Language Models and Practical Intelligent Applications			3	3						
		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								

固態與積體電路領域 Solid state and integrated circuit	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 Total		39		51			15	3	108
學期總計 Subtotal		39		51			15	9	

備註/Notes：

- 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
- 二、「專題討論(一)-(四)」為在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、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.
- 四、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.
- 五、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.
- 六、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.