國立暨南國際大學智慧半導體及綠色科技國際碩士學位學程必選修科目一覽表
International Master Degree Program in Intelligent Semiconductor and Green Technology,National Chi Nan University

本表(115)學年度入學新生適用 Effective for students admitted in Fall,2026

最低畢業學分：18學分，不含碩士論文之學分。
Master's program requirements: a minimum of 18 required credits, excluding the master's thesis.

課程代號 Course Code	課程名稱(中文及英文) Course Name (Chinese and English)	學分數 Credits	修別 Course type (required/elective)	開課年級 Course availability	備註 Notes
壹、必修科目(Required Courses)					
	專題討論（一）Seminar(Ⅰ)	1		一上 Master's degree 1st Semester	
	專題討論（二）Seminar(Ⅱ)	1		一下 Master's degree 2nd Semester	
	專題討論（三）Seminar(Ⅲ)	1		二上 Master's degree 3rd Semester	
	專題討論（四）Seminar(Ⅳ)	1		二下 Master's degree 4th Semester	
貳、選修科目 (Elective Coursess)					
前瞻半導體科技與應用領域					
235005	類比VLSI電路設計 Analog VLSI Circuits Design	3	選 elective	一上 Master 1st Semester	
235008	數位通訊 Digital Communications	3	選 elective	一上 Master 1st Semester	
235015	半導體元件特性與量測 Semiconductor Devices Characterization and Measurement	3	選 elective	一下 Master 2nd Semester	
235024	圖型識別 Pattern Recognition	3	選 elective	一下 Master 2nd Semester	
235029	固態物理 Solid-State Physics	3	選 elective	一下 Master 2nd Semester	

235047	微波元件 Microwave Devices	3	選 (E)	一下 Master's degree 2nd Semester	
235048	射頻積體電路設計 RF Integrated Circuit Design	3	選 elective	一下 Master 2nd Semester	
235083	固態電子實驗-半導體製程與量測 Solid-State Electronics Laboratory-Semiconductor Processing and Measurement	3	選 (E)	一下 Master's degree 2nd Semester	
235085	半導體感測 Semicondctor Sensors	3	選 (E)	一下 Master's degree 2nd Semester	
235094	微波工程 Microwave Engineering	3	選 (E)	一上 Master's degree 1st Semester	
235095	軟硬體協同設計 Hardware/Software Codesign	3	選 (E)	一下 Master's degree 2nd Semester	
235106	數值電磁方法 Numerical Methods in Electromagnetics	3	選 elective	一下 Master 2nd Semester	
235108	數位視訊技術 Digital Video Technology	3	選 elective	一上 Master 1st Semester	
235111	電磁相容 Electromagnetic Compatibility	3	選 elective	一上 Master 1st Semester	
235112	新世代無線通訊技術 New-Generation Wireless Communication Techniques	3	選 elective	一下 Master 2nd Semester	
235113	微波被動電路 Microwave Passive Circuits	3	選 elective	一上 Master 1st Semester	

235114	硬體描述語言與FPGA雛型 Hardware Description Language and FPGA Prototyping	3	選 elective	一下 Master 2nd Semester	
235117	無線通訊系統 Wireless Communication Systems	3	選 elective	一下 Master 2nd Semester	
235118	無線接收器模擬與製作 Wireless Receiver Simulation and Implementation	3	選 (E)	一下 Master's degree 2nd Semester	
235122	通訊系統模擬 Simulation of communication systems	3	選 elective	一下 Master 2nd Semester	
235123	深度學習與語音識別 Deep Learning and Speech Recognition	3	選 elective	一下 Master 2nd Semester	
235126	偵測與估計 Detection and Estimation	3	選 elective	一下 Master 2nd Semester	
235130	科技簡報 Technical Presentation	2	選 elective	一上 Master 1st Semester	
235131	前瞻類比積體電路設計 Advanced analog integrated circuit design	3	選 (E)	一上 Master's degree 1st Semester	
235132	非接觸式行動裝置充電導論 Introduction to Wireless Power Transfer (WPT) for Mobile Devices	3	選 elective	一上 Master 1st Semester	
235133	物聯網系統設計與實作 System Design and Development of Internet of Things	3	選 elective	一下 Master 2nd Semester	
235134	固態電子學 Physics for Solid-State Electronics	3	選 elective	一下 Master 2nd Semester	
235135	行動網路系統 Mobile Network Systems	3	選 elective	一下 Master 2nd Semester	

235138	生物感測器與換能器 Bio-Sensors and Transducers	3	選 elective	一上 Master 1nd Semester	
235140	半導體記憶體 Semiconductor Memories	3	選 elective	一下 Master 2nd Semester	