

國立中山大學積體電路設計研究所課程結構圖

Course Structure

Institute of Integrated Circuit Design, National Sun Yat-sen University

必修課程 Required Course	書報討論 (每學期 1 學分，共需 4 學分) Seminar (1 credit for each semester, total 4 credits)	
選修課程 Elective Courses	系統晶片設計【核心】 [Core] System-on-chip Design 高等類比積體電路設計【核心】 [Core] Advanced Analog Integrated Circuit Design 電源管理積體電路設計【核心】 [Core] Power Management Integrated Circuit Design 計算機結構【核心】 [Core] Computer Architecture 系統晶片測試【核心】 [Core] System-on-chip Testing	低功率系統設計 Low-power System Design 超大型積體電路數位訊號處理 VLSI Digital Signal Processing 數位通訊電路設計 Digital Communication IC Design 類比積體電路設計 Analog Integrated Circuit Design 通訊介面 IC 設計 IC Design for Communication Interfaces 系統晶片測試技術實務 System-on-chip Testing Practice 開源式離型系統與應用 Open Source Prototype Systems and Applications 高可靠度系統之設計、測試與應用 Design, Test, and Applications of Highly Reliable Systems 資訊理論與實務應用 Information Theory and Practical Applications 數位信號處理

		Digital Signal Processing EDA 設計流程整合 EDA Design Flow Integration 嵌入式系統實務 Embedded Systems Practice 數位電路設計與驗證 Digital Circuit Design and Verification 電子設計自動化（一） Electronic Design Automation (I) 生物大數據的先進架構與系統 Advanced Architectures and Systems for Biological Big Data 資料密集系統的軟硬體協同設計 Software-hardware Co-design for Data-intensive Systems 高等數位電路設計專題 Independent Studies In Advanced Digital Circuit Design Unix/Linux 作業系統專題 Independent Studies in Unix/Linux Operating Systems 積體電路佈局專題 Independent Studies in IC Layout 積體電路系統測試專題 Independent Studies in VLSI Testing 類比與混合訊號積體電路設計專題 Independent Studies in the Analog and
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		Mixed-signal Integrated Circuit Design 數位通訊電路設計專題 Independent Studies in Digital Communication IC Design 混合訊號積體電路設計專題 Independent Studies in Mixed-signal Integrated Circuit Design 低功率積體電路專題 Independent Studies in Low Power IC Design 高等類比與混合訊號積體電路設計專題 Independent Studies in the Advanced Analog and Mixed-signal Integrated Circuit Design CMOS 射頻電路設計專題 Independent Studies in CMOS RF Circuit Design 高效能 AI 加速器設計專題 Independent Studies in High-Performance AI Accelerator Design 視訊傳輸專題 Independent Studies in Video Communication
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*最低畢業學分數中，至少需有兩門基礎科學核心課程

*Among the minimum graduation credit requirements, students must complete at least two core courses.