

美國德州大學達拉斯分校電機與電腦工程學系碩士先修課程表

電機工程碩士 Master's in Electrical Engineering (30學分)

於就讀國立中興大學四年期間修畢下表任三門研究所課程（共9學分），後續可轉入美國德州大學達拉斯分校研究所碩士學分。剩餘七門研究所課程（共21學分）在德州大學達拉斯分校修讀，應遵循以下網址所列的指引，從五個領域選擇一門專攻領域：<https://catalog.utdallas.edu/2026/graduate/programs/ecs/electrical-engineering#master-of-science-in-electrical-engineering>

NCHU course	Equivalent UT-Dallas Course
EE 6951 System Theory 系統理論	EECE 6331 Linear Systems
EE 6840 Device Physics 元件物理	EEMF 6321 Active Semiconductor Devices
EE 6803 Adaptive Signal Processing 適應性訊號處理	EESC 6365 Adaptive Signal Processing
EE 6806 Random Processes 隨機程序	EESC 6349 Probability, Random Variables, and Statistics
EE 6801 Digital Image Processing 影像處理	EESC 6363 Digital Image Processing
EE 6953 Digital Communication 數位通訊	EESC 6352 Digital Communication Systems
EE 6862 Detection and Estimation 偵測與預估	EESC 6343 Detection and Estimation Theory
EE 7922 Pattern Recognition 圖形識別	EESC 6364 Machine Learning and Pattern Recognition
EE 7921 Error Control Coding 錯誤更正碼	EESC 6344 Coding Theory
EE 6777 Protocol Engineering 通訊協定工程	EESC 6340 Introduction to Telecommunications Networks
EE 6771 Embedded Real-Time Operating System for System-on-Chip 系統晶片之嵌入式即時作業系統	EEDG 6302 Embedded Systems
EE 6807 MIMO Communications MIMO 通訊系統	EESC 6353 Broadband Digital Communications
EE 6819 Introduction to Convex Optimization 凸最佳化導論	EEGR 6397 Convex Optimization
EE 6806 Semiconductor Manufacturing Technology 半導體製程技術	EEMF 6322 Semiconductor Processing Technology
EE 6785 Microwave Circuit 微波電路	EERF 6311 RF and Microwave Circuits
EE 6805 Radio Frequency Integrated Circuits 射頻積體電路	EERF 6330 RF Integrated Circuit Design
EE 6803 Design of Analog Integrated Circuits 類比積體電路設計	EECT 6326 Analog Integrated Circuit Design
EE 6812 Design of Computer Aided VLSI Circuit 電腦輔助超大型積體電路設計	EECT 6325 VLSI Design

電機工程碩士各領域課程介紹：

- Circuits : <https://catalog.utdallas.edu/2026/graduate/courses/eect>
- Computing : <https://catalog.utdallas.edu/2026/graduate/courses/eedg>
- Devices : <https://catalog.utdallas.edu/2026/graduate/courses/eemf>
- Power : <https://catalog.utdallas.edu/2026/graduate/courses/eepe>
- Signals & Systems : <https://catalog.utdallas.edu/2026/graduate/courses/eesc>

電腦工程碩士 Master's in Computer Engineering (30學分)

於就讀國立中興大學四年期間修畢下表任三門研究所課程（共9學分），後續可轉入美國德州大學達拉斯分校研究所碩士學分。剩餘七門研究所課程（共21學分）在德州大學達拉斯分校修讀，應遵循以下網址所列的指引：
<https://catalog.utdallas.edu/2026/graduate/programs/ecs/computer-engineering#master-of-science-in-computer-engineering>

NCHU Course	Equivalent UT-Dallas Course
CSE 6651 Advanced VLSI Design 高等超大型積體電路設計	CE 6325 VLSI Design
CSE 6654 Cryptography 密碼學	CE 6330 Applied Cryptography
CSE 6656 Embedded System Design and Implementation 嵌入式系統設計與實作	CE 6302 Embedded Systems
CSE 6654 Pattern Recognition 圖形識別	EESC 6364 Machine Learning and Pattern Recognition
CSE 6666 Digital Testing 數位系統測試	CE 6303 Testing and Testable Design
CSE 6657 Image Processing 影像處理	EESC 6363 Digital Image Processing

電腦工程碩士課程介紹：<https://catalog.utdallas.edu/2026/graduate/courses/ce>