

分類	分類序	課程	英文名稱	學分
1Theory	1_01	CS 529100網路之隨機程序	Stochastic Processes for Networking	3
1Theory	1_02	CS 531200圖形理論	Graph Theory	3
1Theory	1_03	CS 531400隨機演算法	Randomized Algorithms	3
1Theory	1_04	CS 532100數值最佳化	Numerical Optimization	3
1Theory	1_05	CS 533100排隊理論	Queuing Theory	3
1Theory	1_06	CS 537100計算理論	Theory of Computation	3
1Theory	1_07	CS 538100應用數理邏輯	Applied Mathematical Logic	3
1Theory	1_08	CS 631200平行計算方法設計	Parallel Algorithm Design	3
1Theory	1_09	ISA 536200賽局理論及應用	Game theory and its Applications	3
1Theory	1_10	CS 531900高等離散結構	Advanced Discrete Structure	3
1Theory	1_11	CS 534100高等賽局理論與應用	Advanced game Theory and its applications	3
1Theory	1_12	CS 565600深度學習	Deep Learning	3
1Theory	1_13	CS 631100計算幾何	Computational Geometry	3
1Theory	1_14	CS 565700深度增強式學習	Deep Reinforcement Learning	3
1Theory	1_15	CS 539100量子計算概論	Introduction to Quantum Computing	3
1Theory	1_16	CS 561200演化計算	Evolutionary Computation	3

2 System	2_01	CS 514000高等數位電路設計與驗證	Advanced Digital Design and Verification	3
2 System	2_02	CS 516000FPGA結構及設計自動化	FPGA Architecture & CAD	3
2 System	2_03	CS 524000無線網路	Wireless Network	3
2 System	2_04	CS 526200多媒體網路與系統	Multimedia Networking and Systems	3
2 System	2_05	CS 540400高等編譯器	Advanced Compiler	3
2 System	2_06	CS 542200平行程式	Parallel Programming	3
2 System	2_07	CS 542300高等作業系統	Advanced Operating Systems	3
2 System	2_08	CS 613500VLSI實體設計自動化	VLSI Physical Design Automation	3
2 System	2_09	ISA 612000高等資料庫	Advanced Database Systems	3
2 System	2_10	CS 542000雲端程式設計	Cloud Programming	3
2 System	2_11	CS 542100雲端計算	Cloud Computing	3
2 System	2_12	CS 512000超大型積體電路系統設計	VLSI System Design	3
2 System	2_13	CS 613200高等邏輯合成	Advanced Logic Synthesis	3
2 System	2_14	CS 540300高等程式語言	Advanced Programming Languages	3

3 Application	3_01	CS 515100晶片應用系統簡介	Introduction to System-on-Chip and its Applications	3
3 Application	3_02	CS 530600社群網路	Social Networks	3
3 Application	3_03	CS 531300計算生物學	Computing Biology	3
3 Application	3_04	CS 546000軟體專案管理	Software Project Management	3
3 Application	3_05	CS 554000圖形識別	Pattern Recognition	3
3 Application	3_06	CS 570100資料科學	Data Science	3
3 Application	3_07	CS 655000計算機視覺理論	Computer Vision	3
3 Application	3_08	ISA 525700電腦視覺特效	Computer Vision for Visual Effects	3
3 Application	3_09	ISA 581000資料探勘與應用	Data Mining :Concepts, Techniques, and Applications	3
3 Application	3_10	CS 524500寬頻行動通訊	Broadband Mobile Communications	3
3 Application	3_11	CS 550000計算機圖學	Computer Graphics	3
3 Application	3_12	CS 550300遊戲程式設計	Introduction to Game Programming	3
3 Application	3_13	CS 550700繪圖程式設計與應用	Introduction to Graphics Programming and Applications	3
3 Application	3_14	ISA 532000金融科技創新與應用	Fintech- Innovation and Applications	3
3 Application	3_15	ISA 562100自然語言處理實作	Natural Language Processing Lab.	3
3 Application	3_16	CS 512200超大型積體電路量產可行	VLSI Design for Manufacturability	3
3 Application	3_17	CS 536300區塊鏈的技術與應用	Blockchain Technologies and Applications	3
3 Application	3_18	CS 562000機器導航與探索	Robotic Navigation and Exploration	3
3 Application	3_19	CS 542500即時系統設計	Real-Time System Designs	3
3 Application	3_20	CS 522100計算機網路	Computer Networks	3
3 Application	3_21	CS 563100自然語言處理	Natural Language Processing	3
3 Application	3_22	CS 650100幾何建模	Geometric Modeling	3