長庚大學奈米工程及設計碩士學位學程必選修科目表(111學年度入學學生適用)

Master Program in Nano-Electronic Engineering and Design (For Y111 enrolled students)

必選修 E/C	領域 Field	科目名稱 Subject	學分 Crt.	開課年級 Grade	上學期 Fall	下學期 Spring
必修 Compul.		超大型積體電路設計導論 Introduction to VLSI: Technology and Design	3	1	3	
		積體電路技術可靠性工程 Reliability Engineering for Integrated Circuit Technology	3	1		3
		專題研究(I)(II) Research on Special Topics (I)(II)	6	1	3	3
選修 Elect.	學院共構課程 College co-construction courses	英語口說與報告(1) English Speaking and Presentation(I)	2	1	2	
		英語口說與報告(2) English Speaking and Presentation (II)	2	1		2
		科技英文寫作(1) English Technical Writing (I)	1	1	1	
		科技英文寫作(2) English Technical Writing (II)	1	1		1
選修 Elect.	共同 Common	人工智慧應用 Applied Artificial Intelligence	3	1	3	
		品質工程 Design for Quality	3	1	3	
		高等超大型積體電路設計的電晶體模型 VLSI Modelling & Design	3	1		3
		生醫電子學 Biomedical Electronics Design	3	1		3
	奈米先進製程 Advanced Manufacturing Track	奈米材料和元件 Nanoscale Design	3	1	3	
		超大積體電路的失效分析 VLSI Forensics	3	1	3	
		超大積體電路中的失效機制 VLSI Designing for Success	3	1		3
		場效半導體電子元件 Field-Effect Semiconductor Devices	3	1		3
	積體電路設計 IC Design Track	數位電子 Computing Electronics Design	3	1	3	
		類比積體電路設計 Analogue Integrated Circuit Design	3	1	3	
		射頻積體電路設計 RF Systems Design	3	1		3
		超大型積體電路測試設計 VLSI Testing and Testable Design	3	1		3
		混合信號積體電路設計 Mixed Signal Systems by Design	3	1		3
備註欄 Note	1. 畢業學分：30學分。 (1) 必修 12 學分。(2) 選修 12 學分。(3)論文6學分（通過學位考試並繳交通過審核論文後給予）。 2. 選修12 學分中，學生可選修工學院內各研究所開設以英文授課之課程，至多採認3學分為畢業學分。 3. 學院共構選修課程列入他系選修。					
	1. Graduation credit: 30. (1) Compulsory credit: 12. (2) Elective credit: 12. (3) Thesis credit: 6 (Granted after passing the degree examination and submitting the approved thesis.) 2. For the 12 elective credits, students may select up to 3 credits from the graduate course(s) (taught in English) under the College of Engineering. 3. The elective courses jointly constructed by the college are included in the electives of other departments.					

系主任簽章：_____ 2022.04.22