

長庚大學奈米工程及設計碩士學位學程必選修科目表(113學年度入學學生適用)

Master Program in Nano-Electronic Engineering and Design (For Y113 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.		品質工程 Design for Quality	3	1	3	
		專題研究(I)(II) Research on Special Topics (I)(II)	4	1	2	2
		學報討論(I)(II) Seminar (I)(II)	2	1	1	1
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	
		積體電路技術可靠性工程 Reliability Engineering for Integrated Circuit Technology	3	1		3
		超大型積體電路設計導論 Introduction to VLSI: Technology and Design	3	1	3	
		生醫電子學 Biomedical Electronics Design	3	1		3
	奈米先進製 程 Advanced Manufacturing	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	
		場效半導體電子元件 Field-Effect Semiconductor Devices	3	1		3
	積體電路設 計 IC Design	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	
		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
	半導體元件 與製造 Semiconductor Device Manufacturing	半導體元件物理及特性 Physics and Characterization of Semiconductor Devices	3	1		3
		半導體製造技術 Semiconductor Manufacturing	3	1		3
		半導體元件製造與開發實作 Semiconductor Device Fabrication and Development Practice	3	1		3
	備註 欄 Note	1. 畢業學分：30學分。 (1) 必修9學分。(2) 選修15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15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。 4. 外籍學生修習「英語口說與報告」及「科技英文寫作」課程，學分不計入畢業學分。				
1. Graduation credit: 30. (1) Compulsory credit: 9. (2) Elective credit: 15. (3) Thesis credit: 6 (Granted after passing the degree examination and submitting the approved thesis.) 2. For the 15 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. 4. For international students who take the courses of "English Speaking and Representation" and "English Technical Writing", the credits are not counted for the graduation credit.						