

## 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
		品質工程 Design for Quality	3	1	3	
	必修 Compul.	專題研究(1)(2) Research on Special Topics (1)(2)	4	1	2	2
	-	學報討論(1)(2) Seminar (1)(2)	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(1)	2	1	2	
		英語口說與報告(2) English Speaking and Presentation (2)	2	1		2
		科技英文寫作(1) English Technical Writing (1)	1	1	1	
		科技英文寫作(2) English Technical Writing (2)	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 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	
		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	
		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
	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

- (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
- 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.