

長庚大學奈米工程及設計碩士學位學程必選修科目表(109學年度入學學生適用)
Master Program in Nano-Electronic Engineering and Design (For Y109 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 | |
| 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 | |
| | | VLSI測試設計 VLSI Testing and Testable Designs | 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 6 學分。(2) 選修 18 學分。(3) 論文 6 學分(學位考試通過後給予)。 2. 選修18 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。 | | | | | |
| | | 1. Graduation credit: 30. (1) Compulsory credit: 6. (2) Elective credit: 18. (3) Thesis credit: 6 (given after passing the oral defense) 2. For the 18 elective credits, students may select up to 3 credits from the graduate course(s) (taught in English) under the College of Engineering. | | | | | |

2020.04.15課程委員會會議通過