# 國立彰化師範大學 工學院國際工程碩士學位學程碩士班畢業條件表暨課程架構表 (113學年度入學學生適用)

National Changhua University of Education

Graduation Requirements and Course Structure for Master's Program of Department of International Master Program in Engineering

(Applicable for students in 113 academic year)

列印日期(Print Date:2024/06/18)

### 一.系必修課程

### **I.Deparment's Required Course(s)**

課程名稱 Course Name	學分/學時 Credit(s)/ Hour(s)	年級 Grade	學期 Semester
書報討論(一) Seminar I	2/2	1	1
書報討論(二) Seminar II	2/2	1	2
論文指導(一) Thesis Supervision I	3/0	2	1
論文指導(二) Thesis Supervision II	3/0	2	2
論文 Thesis	0/0	2	2

## 二.系選修課程

# **II.Deparment's Elective Course(s)**

課程名稱 Course Name	學分/學時 Credit(s)/ Hour(s)	年級 Grade	學期 Semester
人工智慧物聯網系統設計 AIoT	3/3	1	1
光電半導體材料與物理 Optoelectronic Semiconductor Materials and Physics	3/3	1	1
光電子學 Optoelectronics and Photonics	3/3	1	1
半導體製程 Semiconductor Processes	3/3	1	1
平面顯示器導論(一) Introduction to Flat Panel Display (I)	3/3	1	1
無線通訊 Wireless Communications	3/3	1	1
高等電磁學 Advanced Electromagnetic Theory	3/3	1	1
智慧物聯網系統之電腦輔助電路設計 Computer Aided AIoT Circuit Design	3/3	1	1
數值分析 Applied Numerical Algorithms	3/3	1	1
散熱模組設計與應用 Thermal Module Design and Application	3/3	1	2
科技英文寫作			

Scientific & Technical English Writing	3/3	1	2
顯示元件物理	3/3	1	2
Display Device Physics	3/3	1	
數位訊號處理	3/3	1	2
Digital Signal Processing	3/3	1	
微波工程	3/3	2	1 1
Microwave Engineering	3/3		
快速雛型系統設計	3/3	2	1
Fast Prototype System Design	3/3		
智慧機械	3/3	2	1 1
Smart Machinery	3/3		1
模糊理論	3/3	2	1
Fuzzy Theory	3/3		1
超大型積體電路設計	3/3	2	1 1
VLSI design	3/3		1
人工智慧	3/3	2	1
Artificial Intelligence	3/3		1
計算智能	3/3	2	1
Computational Intelligence	3/3		1
可靠度工程(一)	3/3	2	1
Reliability Engineering (I)	3/3		1
光電半導體元件	3/3	2	1
Optoelectronic Semiconductor Devices	3/3		1
平面顯示器導論(二)	3/3	2	2
Introduction to Flat Panel Display (II)	3/3		2
光學微影與蝕刻	3/3	2	2
Photolithography and Etching	3/3		Δ
微波積體電路設計	3/3	2	2
Microwave Integrated Circuit Design	3/3		
積體電路測試方法	3/3	2	2
IC Testing Technologies	3/3	2	
類比積體電路設計	3/3	2	2
Analog Integrated Circuit Design	3/3 		
可靠度工程(二)	3/3	2	2
Reliability Engineering (II)	3/3		<u></u>

#### 三.先修科目

### **III.Prerequisite Courses**

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Prerequisite Course	Subsequent Course
1	1

#### 四.畢業條件

### **IV.Graduation Requirements**

- 1.A student must complete 24-hour course credits, exclusive of Seminar I, Seminar II, Thesis, Thesis Supervision I, Thesis Supervision II, and Teacher Education Program courses.
- 2.All credits earned from the courses offered by this program count toward required credits for graduation.
- 3.A maximum of six hours of course credits may be taken outside of this program or at other universities, while those courses must be approved by the thesis advisor. The approval must be submitted to the Office of International Master Program in Engineering before enrolling in those courses.
- 4. Each student must fulfill the following requirements before applying for the thesis oral examination:
- (1)All the course credits required for this program will be completed in the current semester.
- (2)At least one academic paper has been accepted or published by either a foreign/domestic journal or an

international/domestic conference. The student is the first author except the thesis advisor, and the thesis advisor must be listed as one of the authors.

- 5. Each student must pass the thesis oral examination.
- 6.Each student must pass the relevant regulations defined by the Center for Taiwan Academic Research Ethics Education (https://ethics.moe.edu.tw/) before applying for the degree examination.
- 1.最低畢業學分數:24學分(不含書報討論(I)、書報討論(II)、論文、論文指導(I)、論文指導(II)、教育學分)。 2.凡選修本學程開設科目,一律承認為本學程畢業學分。
- 3.修課經指導指導教授同意可選修外系或外校研究所開設科目,至多6學分。(選修前送教授同意表至學程 辦公室備査)。
- 4.口試前應完成下列要件始可提出學位考試申請:
- (一)該學期可修畢學程規定學分。
- (二)至少需發表或被接受一篇研究論文於國內外學術期刊或學術研討會論文集,作者排名為第一順位(指導 教授除外),指導教授必須列名。
- |5.通過學位論文口試。
- 6.【研究生應於申請學位考試前修習通過於「台灣學術倫理教育資源中心」(http://ethics.nctu.edu.tw/)網路教學平台之「學術研究倫理教育」課程】等相關規定。