

國立高雄大學資訊工程學系大學部專業必選修科目表

The Required and Elective Courses of the Undergraduate Curriculum,

Department of Computer Science and Information Engineering, National University of Kaohsiung

115 學年度起入學新生適用 Applicable to students admitted in the 2026 academic year and thereafter.

中/英文科目名稱 Course Title			規定 學分 Credits	第一學年		第二學年		第三學年		第四學年	
				Year 4		Year 4		Year 4		Year 4	
				上 S1	下 S2	上 S1	下 S2	上 S1	下 S2	上 S1	下 S2
校定必修 University Requirements	英文會話與閱讀(上)(下)	English Conversation & Reading (I)(II)	4	✓	✓						
	中文(上)(下)	Chinese Literature(I)(II)	4	✓	✓						
	體育	Physical Education	0	✓	✓	✓	✓				
	倫理與永續素養課群	Ethics and Sustainability Course Group	3								
通識課程 General Education Courses	通識系列課程		21								
系定必修 Departmental Core Courses (26 門課 共 63 學分) 26 courses totaling 63 credits	計算機概論		2	✓							
	微積分 I		3	✓							
	離散數學		3	✓							
	程式設計與實習(一)		2	✓							
	微積分 II		3		✓						
	線性代數		3		✓						
	數位系統導論		3		✓						
	程式設計與實習(二)		2		✓						
	電腦網路		3			✓					
	機率學		3			✓					
	數位電路學		3			✓					
	物件導向程式設計		3			✓					
	數位系統實驗		1			✓					
	資料結構		3				✓				
	組合語言與系統程式		3				✓				
	人工智慧		3				✓				
	數位電路實驗		1				✓				
	演算法		3					✓			
	資料庫系統		3					✓			
	計算機組織		3					✓			
	軟體工程		3						✓		
	作業系統		3						✓		
	專題研究 I		1						✓		
	專題研究 II		1							✓	
	資訊專題講座 I		1							✓	
	資訊專題講座 II		1								✓
一般選修 General Elective (12 門課 共 46 學分) 12 courses totaling 46 credits	網頁程式設計		3			✓					
	JAVA 程式設計		3				✓				
	視窗程式設計		3				✓				
	程式語言		3					✓			
	網路程式設計		3					✓			
	文字與語音資料處理與應用		3					✓			
	Python 程式設計		3						✓		
	醫學資訊學導論		3							✓	
	*業界實習(一)		8							✓	
	量子計算		3							✓	
	醫學影像處理		3								✓
	*業界實習(二)		8								✓

領域選修 Field Electives (20 門課 共 60 學分) 20 courses totaling 60 credits	智慧型系統領域 Intelligent Systems Field	統計學 Statistics	3				✓				
		資訊檢索與生成式人工智慧 Information Retrieval and Generative Artificial Intelligence	3					✓			
		資料探勘與機器學習 Data Mining and Machine Learning	3						✓		
		人工智慧與金融科技 Artificial Intelligence and Financial Technology	3						✓		
		進階機器學習 Advanced Machine Learning	3							✓	
		智慧型系統 Intelligent Systems	3							✓	
		深度學習 Deep Learning	3								✓
		巨量資料分析 Big Data Analytics	3								✓
	嵌入式系統領域 Embedded Systems Track	嵌入式系統 Embedded Systems	3					✓			
		計算機結構 Computer Architecture	3						✓		
		即時計算機系統 Real-Time Systems	3							✓	
		嵌入式多核心系統與軟體 Embedded Multiple-Core Systems and Software	3								✓
		物聯網 Internet of Things	3								✓
	網路與多媒體領域 Networking and Multimedia Field	網路通訊協定 Communication Protocols	3					✓			
		網路安全 Network Security	3						✓		
		影像處理 Image Processing	3						✓		
		雲端運算 Cloud Computing	3							✓	
		無線網路 Wireless Network	3							✓	
		電腦視覺 Computer Vision	3							✓	
		擴增實境 Augmented Reality	3								✓

- ◎ 畢業總學分要求：128 學分
包含以下四大類別：
1. 基礎必修：63 學分。
 2. 選修：33 學分（含一般選修 12 學分、領域課程選修 21 學分）。
※ 領域選修規定：須選定一領域作為主修領域（至少需修畢該領域三門學科），且須跨領域修課（每領域至少修習一門學科）。
 3. 校定必修：11 學分。
 4. 通識選修：21 學分。
- ◎ Total Graduation Credits Required: 128 credits.
Includes the following four main categories:
1. Core Required Courses: 63 credits.
 2. Elective Courses: 33 credits (including 12 credits of General Electives and 21 credits of Domain Electives).
※ Domain Elective Requirements: Students must select one domain as their major domain (completing at least three courses within this domain), and cross-domain coursework is required (completing at least one course in each domain).
 3. University Required Courses: 11 credits.
 4. General Education Electives: 21 credits.
- ◎ 本系畢業門檻（大學程式能力檢定 CPE）：
單次應考通過兩題（含）以上，或每次通過一題且累計達四題。（除外條款：身心障礙學生若實務上無法應試，則不適用此畢業門檻）。
- ◎ Department Graduation Requirement (Collegiate Programming Examination - CPE) :
Pass two or more problems in a single exam, or accumulate a total of four problems by passing one problem per exam.
(Exception clause: Students with disabilities who are practically unable to take the exam are exempt from this graduation requirement.)
- ◎ 校定基本能力檢核（畢業前須通過）：
1. 英文能力畢業資格檢定（依本校相關實施辦法辦理）。
 2. 資訊基本能力畢業資格檢定（依本校相關實施辦法辦理）。
- ◎ University Basic Competency Requirements (Required before graduation):
1. English Proficiency Assessment (per university regulations).
 2. IT Competency Assessment (per university regulations).
- ◎ 專業應用型法律課程規定：
- 本系承認以下兩門課程（注意：最低畢業學分數不包含此課程之學分）：
1. 本系開設：「智慧財產權保護法制與實用」（2 學分）。
 2. 資管系開設：「法學素養」（3 學分）。
- ◎ Professional Applied Law Course Requirements:
The department recognizes the following two courses (Note: These credits are not included in the minimum graduation credits):
1. Offered by this department: "Intellectual Property Protection Law and Practice" (2 credits).
 2. Offered by the Dept. of Information Management: "Legal Literacy" (3 credits).

◎ 跨系選修學分抵免規定：

1. 抵免「一般選修」：修習本校外系課程，至多可抵免本系一般選修 **6** 學分。
2. 抵免「通識選修」：修習本校外系課程，至多可抵免本校通識課程 **6** 學分。

◎ Cross-Department Elective Credit Waiver Regulations:

1. General Elective Waivers: Up to **6** credits from courses taken in other departments within the university can be credited toward General Electives.
2. General Education Elective Waivers: Up to **6** credits from courses taken in other departments within the university can be credited toward General Education courses.

◎ 「中五學制學生」修業與畢業條件：

凡持國外或港澳學校學歷（相當於國內高級中等學校二年級生），以同等學力資格入學就讀本校日間學制大學部者，其最低畢業學分數為「一般生最低畢業學分數再加 **12** 學分」（即需達 **140** 學分）。

◎ Academic and Graduation Requirements for "Form 5 System" Students:

Students admitted to the daytime undergraduate program with equivalent qualifications from foreign, Hong Kong, or Macau schools (equivalent to the second year of a domestic senior high school) are required to complete "the minimum graduation credits for regular students plus an additional **12** credits" (i.e., a total of **140** credits).

◎ *業界實習(一)、*業界實習 (二)，本課程為校外實習課程，修課學生須於開學前完成實習單位媒合，並簽訂校外實習合約書及申請流程之申請表（含實習時數）規定審查。

課程實習根據〔國立高雄大學資訊工程學系學生業界實習實施要點〕，每學期需於機構內實習達 **432** 小時，核給 **8** 學分。

本課程需實體至實習機構進行實習，時間彈性依機構安排，此課程雖無固定教室與上課時間，仍屬正式課程，修課學生仍需於校內選課系統完成選課作業。

實習成績由校內指導老師與業師共同評核，學生應遵守實習機構規章與職場倫理。

◎ Industry Internship (I) & (II): Off-campus. Students must secure a placement, sign the agreement, and get application approval before the semester.

Per NUK CSIE guidelines, this requires 432 on-site hours per semester (8 credits).

Working hours are flexible, but official university course registration is strictly required.

Grades are jointly evaluated by faculty and industry mentors. Students must follow all company regulations.