

## 物聯網工程與應用學士學位學程 四技日間部課程規劃表

Bachelor Degree Program of IOT Engineering and Applications Logo Bachelor Degree Program of IOT Engineering and Applications Curriculum of 4-year Bachelor's Program

113 學年實施

Effective from : 2024 Academic Year

113 年 3 月 27 日 1122 學期第 1 次課程委員會公布

校訂必修類 General Education Required Course								
課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total
40001041	一般體育	Physical Education	1	●		2	2	22
40001041	一般體育	Physical Education	1		●	2	2	
40001215	中文口語表達	Chinese Oral Expression	1	●		2	2	
40001216	中文閱讀與寫作	Chinese Reading and Writing	1		●	2	2	
40001293	基礎英文表達(一)	Basic English Expression (I)	1	●		2	2	
40001313	基礎英文表達(二)	Basic English Expression (II)	1		●	2	2	
40001426	新一代服務人才	New Generation of Service Talent	1		●	2	2	
40001427	永續發展與社會責任	Sustainable Development and Social Responsibility	1	●		2	2	
40002293	職場英文表達(一)	Workplace English Expression (I)	2	●		2	2	
40002313	職場英文表達(二)	Workplace English Expression (II)	2		●	2	2	
40002465	新時代公民素養	Citizen Literacy in the New Era	2	●		2	2	
40000010	學術倫理	Academic Integrity	1		●	0	0	
40004280	英文檢定	English Proficiency Test	2		●	0	0	
分類通識 Classified general Education								
課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total
--	分類通識-人文藝術類	Classified general Education	--	--	--	2	2	8
--	分類通識-社會科學類	Classified general Education	--	--	--	2	2	
--	分類通識-生命樂活類	Classified general Education	--	--	--	2	2	
--	分類通識-自然應用類	Classified general Education	--	--	--	2	2	
院訂必修類 School Required Course								
課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total
40491005	程式設計	Programming	1	●		2	2	10
40491007	智慧科技應用	Smart Technology Applications	1		●	2	2	
40491001	科技管理	Technology Management	2	●		2	2	
40491002	創新創業	Innovation and Entrepreneurship	2		●	2	2	
40493001	行動商務	Mobile Business	3	●		2	2	
院訂選修類 School Elective Course								
課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total

40491401	興趣探索	Interest Exploration	1	●		1	1	0
40491402	職能探索	Career Exploration	1	●		2	2	

### 系訂必修類

### Department Required Course

課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total
40291003	感測網路及應用	Sensing Networks and Applications	1		●	3	3	40
40291005	物聯網概論	Introduction to Internet of Things	1	●		3	3	
40291014	基礎 APP 程式設計	Fundamental APP Design	1		●	2	2	
40291408	電腦與網路概論	Introduction to Computer and Network	1	●		3	3	
40291015	進階 APP 程式設計	Advanced APP programming	2	●		3	3	
40292006	環境偵測實務	Environmental detection practice	2	●		3	3	
40292008	物聯網規劃與設計	Internet of Things Planning and Design	2		●	3	3	
40292009	雲端資料庫管理	Cloud database management	2		●	3	3	
40292010	工業 4.0 應用	Industry 4.0 application	3		●	3	3	
40293006	物聯網實務專題(一)	Internet of Things Practice(一)	3	●		1	1	
40293007	物聯網實務專題(二)	Internet of Things Practice(二)	3		●	1	1	
40293008	伺服器管理與建置	Server management and implementation	3	●		3	3	
40294008	校外實習(一)	out-of-school internship(一)	4	●		9	720	
40294004	專業認證	Professional certification	2		●	0	0	

### 專業選修類

### Department Elective Course

課號 Course ID	課程名稱 Course	英文課程名稱 Course	年級 Year	上學期 Sem. 1	下學期 Sem. 2	學分 Credits	時數 Hours	總計 Total
40291009	無線網路	Wireless Network	1		●	3	3	48
40291010	機器人概論	Introduction to robots	1	●		3	3	
40291403	生產力管理	Productivity management	1		●	3	3	
40291409	物聯網通訊原理	Internet of Things Communication Principles	1		●	3	3	
40291412	運輸與倉儲管理	Transportation and warehouse management	1		●	3	3	
40291413	製造程序概論	Introduction to manufacturing procedures	1	●		3	3	
40291415	電動車概論	Introduction to electric vehicles	1		●	3	3	
40292012	行動多媒體實務	Mobile Multimedia Practice	1	●		3	3	
40293418	物聯網生活與創意	IOT life and creativity	1	●		3	3	
40292011	嵌入式系統軟體設計與實作	Introduction to Embedded Systems Design and Implementation	2	●		3	3	
40292408	智慧自動化	Intelligent Automation	2	●		3	3	
40292409	電腦軟體與應用	Computer Software and Applications	2	●		3	3	
40292412	物聯網路架設	Internet of Things Network Setup	2		●	3	3	
40292416	Linux 作業系統操作	Linux operating system operation	2		●	2	2	

40292418	無人機飛行基礎實務	UAV flight basics	2		●	3	3	
40292419	行動定位服務應用	Mobile location service application	2		●	3	3	
40292420	智慧生產控制	Intelligent Production Control	2		●	3	3	
40292421	機器人 APP 設計	Robot APP design	2		●	3	3	
40292422	物聯網科技英文	English for Internet of Things Technologies	2		●	2	2	
40292423	車輛智慧安全系統	Vehicle smart security system	2		●	3	3	
40292424	職場實務實習一	Workplace Practical Internship 1	2		●	4	320	
40293002	大數據應用	Big data application	3		●	3	3	
40293009	物聯網應用與服務	Internet of Things applications and services	3		●	3	3	
40293401	行動系統開發與應用	Mobile system development and application	3		●	3	3	
40293405	機器人生活應用	Robot life application	3		●	3	3	
40293414	智慧家庭實務	Smart Home Practices	3		●	3	3	
40293416	智慧綠能	Smart green energy	3		●	3	3	
40293419	統計軟體應用	Statistical software application	3		●	2	2	
40293420	行動商務	Mobile business	3		●	2	2	
40293421	車輛智慧影像導航系統	Vehicle intelligence image navigation system	3		●	3	3	
40293433	職場實務實習二	Workplace Practical Internship 2	3		●	5	400	
40293434	Python 人工智慧應用	Python artificial intelligence applications	3		●	3	3	
40294405	生產成本與管理	Production Cost and Management	4		●	3	3	
40294415	物聯網工程整合應用	Internet of things engineering integration application	4		●	3	3	
40294416	生產管理資訊系統	Production Management Information System	4		●	3	3	
40294417	創新研發與管理	Innovation R&D and Management	4		●	3	3	
40294418	校外實習(二)	out-of-school internship(二)	4		●	9	720	
<b>總計 Total</b>							<b>128</b>	

**總說明：**

(中文)

1.選修課程於每學年開始前作必要之增減，實際課程以系上公告為主。

2.畢業門檻：

(1)語言證照一張：「英文檢定」課程須具有全民英檢初級以上或本校認可的同等級英語測驗標準，並於二年級下學期第 18 週結束前繳交至系辦審查，未達標準者，方可參加第一階段（三年級上學期）補救措施。

(2)專業證照：請參閱本系畢業門檻檢覈要點取得證照方得畢業。

3.證照補救課程：

(1)語言證照：未達標準者，方可參加第一階段(三年級上學期)補救措施；或三年級下學期參加校外英文檢定或本校自辦之英語能力測驗，成績通過者，視同通過英語能力畢業門檻。

4.專業選修 48 學分：其中其他各系專業選修至多承認 20 學分。

5.通識分類選修課程應修 8 學分（詳閱通識中心課程規劃表）。

**Notes：**

(英文)

### **1. Elective Courses:**

Necessary additions or deletions to elective courses shall be made before the beginning of each academic year. The actual courses offered are subject to the official announcement by the department.

### **2. Graduation Requirements:**

#### **(1) Language Proficiency Certificate:**

For the “English Proficiency” course requirement, students must obtain a certificate equivalent to **GEPT Elementary Level or above**, or any **English proficiency test recognized by the university**. The certificate must be submitted to the department office for review **by the end of Week 18 in the second semester of the sophomore year**.

Students who fail to meet the standard may participate in the **first-stage remedial program (offered in the first semester of the junior year)**.

#### **(2) Professional Certification:**

Students must obtain professional certificates **in accordance with the Department’s Graduation Requirements and Evaluation Guidelines** in order to graduate.

### **3. Remedial Courses for Certification Requirements:**

#### **(1) Language Certificate:**

Students who do not meet the language requirement may participate in the **first-stage remedial program (in the first semester of the junior year)**, or take part in an **external English proficiency test** or a **university-administered English test** in the **second semester of the junior year**.

Those who pass the test will be deemed to have met the English proficiency graduation requirement.

### **4. Professional Electives:**

A total of **48 credits** of professional elective courses are required. Among these, **a maximum of 20 credits** may be recognized from professional electives offered by other departments.

### **5. General Education Electives:**

Students must complete **8 credits** of general education elective courses. (Please refer to the General Education Center’s course plan for details.)