

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

114 學年實施

Effective from : 2025 Academic Year

114 年 3 月 26 日 1132 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 |

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|----------|------|----------------------|---|---|--|---|---|---|
| 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 | |
| 40291416 | 環境科技創新 | Environmental Technological Innovation | 1 | ● | | 1 | 1 | |
| 40291417 | 生態環境走讀與科技應用實踐 | Eco-Exploration and Technology Application Practice | 1 | | ● | 1 | 1 | |
| 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 | |

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|-----------------|---------------|--|---|---|---|---|------------|
| 40292409 | 電腦軟體與應用 | Internet of Things Network Setup | 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 |
| 總計 Total | | | | | | | 128 |

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。

Notes :

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）。

(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.)