

元智大學 電機工程學系(乙組) 物聯網「網路層」深耕跨域微學程 科目規劃表

Department of Electrical Engineering (Program B), Yuan Ze University
“IoT Network Layer”Advanced Cross-Domain Micro Program Course Planning Table

(115學年度申請適用)

(For students applied in Academic Year 2026)

115.04.29 一一四學年度第七次教務會議通過

Passed by the 7th Academic Affairs Meeting, Academic Year 2025, on April 29, 2026

一、教學目標 Teaching Objectives :

物聯網系統架構涵蓋了感知層、網路層、應用層三層架構。本微學程著重在網路層，內容包括電腦通訊網路標準與實作、網路程式設計、軟體定義網路等關鍵知識與技能，學生可根據興趣，由各類必修與選修課程自由組合，吸收成為自身充分掌握的專業知識體系。

The Internet of Things (IoT) system architecture comprises three layers: the perception layer, the network layer, and the application layer. This micro program focuses on the network layer, covering key knowledge and skills such as computer communication network standards and implementation, network programming, and software-defined networking. Students may flexibly combine required and elective courses based on their interests, developing a well-structured and comprehensive body of professional expertise.

二、課程設計 Curriculum Design :

必修課程：3學分

Required Courses: 3 credits

課號 Course ID	課程名稱 Course Name	學分 Credit(s)	學制 Degree structure	開課系所 Department Offered the Present Course(s)	備註 Remarks
EEB108	計算機概論 Introduction to Computer Science	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	4 選 1 Choose 1 of the 4 options
EEB209	微電腦系統 Micro-Computer Systems	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB312	通訊網路 Communications Network	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB340	智慧物聯網 AIoT Fundamentals	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	

選修課程：6學分

Elective courses: 6 credits

課號 Course ID	課程名稱 Course Name	學分 Credit(s)	學制 Degree structure	開課系所 Department Offered the Present Course(s)	備註 Remarks
EEB406	電腦網路 Computer Network	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	8 選 1 Choose 1 of the 8 options
EEB303	通訊系統 Communications System	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB305	數位通訊 Digital Communications	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB415	網路管理 Network Administration	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB429	雲端運算與智慧聯網簡介 Introduction to Cloud Computing & Internet of Things	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB413	行動通訊概論 Introduction to Mobile Communications	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB567	網路程式設計與應用 Network Programming and Applications	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEB568	軟體定義網路 Software Defined Networks	3	大學部 Undergraduate Program	電機系(乙組) Department of Electrical Engineering(Program B)	
EEA313	通訊系統 Communication Systems	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	6 選 1 Choose 1 of the 6 options
EEA494	物聯網應用技術與實作(一) IoT Ecosystem and Applications(I)	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	
EEA495	物聯網應用技術與實作(二) IoT Ecosystem and Application(II)	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	
EEA464	電腦網路 Computer Network	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	

課號 Course ID	課程名稱 Course Name	學分 Credit(s)	學制 Degree structure	開課系所 Department Offered the Present Course(s)	備註 Remarks
EEA647	家庭網路傳輸標準 Transmission Standards of Digital Home Network	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	6 選 1 Choose 1 of the 6 options
EEA654	網路模擬與實作 Network Simulation and Implementation	3	大學部 Undergraduate Program	電機系(甲組) Department of Electrical Engineering(Program A)	

三、學程證書授予標準 Certificate Award Criteria :

欲修讀本學程之同學，請先至個人portal進行線上登記作業。

Students who wish to enroll in this program are required to complete the online registration through the personal portal in advance.

四、領域別 Fields of Study : 人工智慧 Artificial Intelligence

五、學程召集人 Program Director : 林柏江老師 Prof. Po-Chiang Lin

六、負責規劃單位 Responsible Planning Unit :

電機系乙組 Department of Electrical Engineering (Program B)