

元智大學資訊學院英語學士班 電通學院英語學士班 工程學院英語學士班

全英語授課「人工智慧」深耕跨域學程 科目規劃表

International Bachelor Program in Informatics / International Bachelor Program in Electrical and Communication Engineering / International Bachelor Program in Engineering
Yuan Ze University

“Artificial Intelligence” Advanced Cross-Domain 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

115.06.10 一一四學年度第八次教務會議修訂通過

Amended by the 8th Academic Affairs Meeting, Academic Year 2025, on June 10, 2026

115.8.25 一一五學年度第一次教務會議修訂通過

Amended by the 1st Academic Affairs Meeting, Academic Year 2026, on August 25, 2026

一、教學目標 Teaching Objectives：

本學程提供一個全英文的人工智慧課程，以培訓具備以人工智慧技能造福人群的國際人才。人工智慧的應用範圍廣泛，近年來，人工智慧專業人才需求強烈，因此，提供一個完整的人工智慧訓練課程已成為當務之急。本學程提供學生人工智慧技術的數學算法之基礎，並結合程式設計的訓練，以及使用人工智慧工具和基礎模型的能力，使學生具備以人工智慧技術解決問題的能力。

This program offers a fully English-based Artificial Intelligence curriculum designed to cultivate international talents equipped with AI skills to benefit humanity. The applications of AI are extensive, and in recent years, the demand for professionals in this field has grown significantly. Therefore, providing a comprehensive AI training program has become an urgent priority.

The program equips students with the mathematical foundations of AI algorithms, combined with programming training, as well as the ability to use AI tools and foundational models. This enables students to apply AI technologies to solve problems effectively. To further enhance students' competencies in AI applications, the program also offers a variety of elective courses, allowing them to apply AI techniques in developing solutions across diverse fields.

二、課程設計 Curriculum Design：

核心課程：至少 3 學分

Core Courses: At least 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
【資訊學院 College of Informatics】					
IN103	程式設計（一） Computer Programming(I)	3	大學部 Undergraduate Program	資訊學院英語學士班 International Bachelor Program in Informatics	
IN207	機率與統計 Probability and Statistics	3			
【電通學院 College of Electrical and Communication Engineering】					
EN006 B	AI 程式設計-Python（一） Fundamentals of AI Programming - Python (I)	2	大學部 Undergraduate Program	電通學院 College of Electrical and Communication Engineering	EI109與EN006B為搭配課程，需同時選修。
EI109	程式語言實驗（一） Programming Language Labs(I)	1		電通學院英語學士班 International Bachelor Program in Electrical and Communication Engineering	EI109 and EN006B are paired courses and must be taken concurrently.
【工程學院 College of Engineering】					
EG011	AI程式設計（一）	2	大學部	工程學院	EG011 C與

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
C	Fundamentals of AI Programming (I)		Undergraduate Program	College of Engineering	DE114需一起選修
DE114	AI 程式設計實驗 (一) Fundamentals of AI Programming Lab. (I)	1		工程學院英語學士班 International Bachelor Program in Engineering	EG011 C and DE114 must be taken together.

專業課程：至少 9 學分

Professional Courses: At least 9 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
【資訊學院 College of Informatics】					
IN309	虛擬實境 Virtual Reality	3	大學部 Undergraduate Program	資訊學院英語學士 班 International Bachelor Program in Informatics	合開課程 This course co- offered with other departments
IN312	人工智慧概論 Introduction to Artificial Intelligence	3			
IN314	影像處理概論 Introduction to Image Processing	3			合開課程 This course co- offered with other departments
IN315	大數據分析概論 Introduction to Big Data Analysis	3			
IN317	智慧製造 Smart Manufacturing	3			合開課程 This course co- offered with other departments
IN322	機器學習 Machine Learning	3			
【電通學院 College of Electrical and Communication Engineering】					
EI228	機器學習導論 Introduction to Machine Learning	3	大學部 Undergraduate Program	電通學院英語學士 班 International Bachelor Program in Electrical and Communication Engineering	
EI320	深度學習使用 Python Deep Learning with Python	3			
EI334	智慧機器人 Applications of Artificial Intelligence in Robotics	3			
EI412	機器人概論 Introduction to Robotics	3			
EI413	半導體製程技術 Semiconductor	3			

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
	Processing Technology				
EI423	半導體人工智慧 Artificial Intelligence for Semiconductors	3			
【工程學院 College of Engineering】					
DE208	半導體基礎 Fundamentals of Semiconductors	3	大學部 Undergraduate Program	工程學院英語學士班International Bachelor Program in Engineering	
DE251	人因工程（一） Human Factors (I)	3			
DE314	自動控制 Automatic Control	3			合開課程 This course co-offered with other departments

三、學程證書授予標準Certificate Award Criteria：

1. 須至少修習一門非學生所屬學系之科目（不可包含院必修「AI 程式設計」、與他系合開之課程）Students are required to take at least one course offered by a department other than their own.(The college-compulsory course 'Fundamentals of AI Programming' and courses co-offered with other departments are not included.)
2. 修讀本學程之學生必須修畢核心課程至少 3 學分及專業課程至少 9 學分，計修滿 12 學分（含）以上者，授與「人工智慧」深耕跨域學程證書。Students enrolled in this program must complete at least 3 credits of core courses and at least 9 credits of professional courses. Those who complete a total of 12 credits or more will be awarded the “Artificial Intelligence” Advanced Cross-Domain Program Certificate.

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

五、學程召集人 Program Director：資訊學院英語學士班主任 黃怡錚主任

工程學院英語學士班主任 藍祺偉主任

電通學院英語學士班主任 蘇泰元主任

六、負責規劃單位 Responsible Planning Unit：

資訊學院英語學士班 IBPI

工程學院英語學士班 IBPE

電通學院英語學士班 IBP-ECE