Artificial Intelligence Technology (G) (EMI), Micro Credential(9 Credits)

IEE-G-MP-002

Admitted Academic Year：2026

Program's Descriptions：

The distinguishing feature of this micro-degree program is the integration of information technology tools, starting from the basics of artificial intelligence, and incorporating data science, machine learning, deep learning, and domain expertise. It is incorporated into the teaching of the professional courses in the College of Information and Electrical Engineering, and explained in a systematic way to analyze these information technology tools. In terms of operations, it combines classroom teaching, student reports, company visits, project implementation, practical competitions, and industry internships. Companies are invited to participate and propose industry issues that need to be addressed. Students form teams and develop solutions to these issues, with the aim of cultivating students' ability to use expertise and information technology to solve practical industry problems. Students who complete three courses are expected to be able to use "artificial intelligence technology tools" to solve or meet various artificial intelligence problems or requirements proposed by companies.

Program's Curriculum：

Required/ Elective	Course Number	Course name	Credit	Course Clusters
Elective	AUTO4030	SMART MANUFACTURING	3	1.基礎
Elective	AUTO5005	OPTIMIZATION THEORY	3	1.基礎
Elective	IEE6002	PATTERN RECOGNITION	3	1.基礎
Elective	AUTO6006	OPTIMAL CONTROL	3	1.基礎
Elective	COME3046	MACHINE LEARNING	3	1.基礎A
Elective	IEE6001	MACHINE LEARNING	3	1.基礎A
Elective	AUTO6003	ADVANCED DIGITAL SIGNAL PROCESSING	3	2.進階
Elective	IEE6009	COMPUTER VISION	3	2.進階
Elective	IECS6003	LARGE LANGUAGE MODEL APPLICATIONS AND PRACTICES	3	3.實務
Elective	IINE6005	DATA MINING: CONCEPTS, TECHNIQUES, AND APPLICATIONS	3	3.實務
Elective	ELEN6022	DESIGN AND DEPLOYMENT OF INTELLIGENT VISION SYSTEM	3	3.實務
Elective	IEE7017	ARTIFICIAL INTELLIGENCE APPLICATIONS	3	3.實務
Elective	IECS7024	SPECIAL TOPICS IN ARTIFICIAL INTELLIGENCE	3	3.實務

Total credits： 9 Required credits： 0 Elective credits： 9

Industrial Classification：

C27	Manufacture of Computers, Electronic and Optical Products
C28	Manufacture of Electrical Equipment
C26	Manufacture of Electronic Parts and Components

Guidelines for Program Completion：

Management Unit： College of Information and Electrical Engineering / College of Information and Electrical Engineering