

Curriculum of the Master Program at the Department of Artificial Intelligence

Chang Gung University (For students admitted in Fall, 2026)

April 16, 2026 Revision

Required / Elective	Subject	1st Y		Subject	2nd Y		
		1st Sem.	2nd Sem.		1st Sem.	2nd Sem.	
Elective	Introduction to Intelligent Methodologies	3		Independent Study	2	2	
	Multiagent Systems	3					
	Blockchain Technologies: Foundation and Application	3					
	Bioinformatic Analysis ★	3					
	Medical Image Processing	3					
	Introduction to Quantum Computing ★	3					
	Intelligent Cyber-Physical Systems ★	3					
	Introduction to AI and Musics	3					
	Genomic Data Science	3					
	Applications of Machine Learning	3					
	Introduction to Cybersecurity ★		3				
	Clinical Informatics ★		3				
	Machine Learning and Its Medical Applications		3				
	Generative Artificial Intelligence Applications		3				
	Deep Learning		3				
	AI IC Design		3				
	AI and Internet of Things ★		3				
	Robot Learning		3				
	Introduction to Artificial Intelligence and Literature		3				
	Advanced AI Programming ★		3				
	Doctoral program	Introduction to Intelligent Technologies ★	3		Technical Literature Survey ★	1	1
		Deep Learning Architecture ★	3				
		Generative Artificial Intelligence ★	3				
		Intelligence Medicine Engineering ★	3				
		Quantum Information ★	3				
Graph Mining and Learning		3					
Academic Paper Writing in Artificial Intelligence ★		3					
Advanced Computer Vision ★			3				
Natural Language Processing ★			3				
Digital Medical Image Processing ★			3				
Clinical Image Analysis ★			3				
Quantum Machine Learning ★			3				
Multiagent Systems ★			3				
Note	<p>1. Graduation Credits: 35 credits English-taught courses : ★</p> <p>(1) Elective Courses: 24 credits (Up to 6 credits from master's programs of other departments/institutes may be recognized after review):</p> <ol style="list-style-type: none"> a. Students from non-CS-related backgrounds are recommended to take "Introduction to Intelligent Computing Techniques" or "Introduction to Intelligent Methods" offered by the department's doctoral program. b. "Technical Literature Survey": This course can be repeated and must be taken at least twice. c. "Independent Study" can be taken repeatedly. d. "Technical Literature Survey": This course can be repeated and must be taken at least twice. e. "Introduction to Quantum Computing" must be completed before taking "Quantum Machine Learning." <p>(2) Thesis: 6 credits (Awarded after passing the degree examination and submitting the approved thesis).</p> <p>2. With the advisor's approval, students may take up to 6 credits of master's courses from other departments. Students planning to do so must complete the "Application Form for Elective Courses in Other Departments" and submit it to the department for record-keeping after completing the application process.</p> <p>3. Graduation is contingent upon meeting the English graduation threshold.</p> <p>(1) Graduation is contingent upon meeting the English graduation threshold. For detailed regulations, please refer to the "Implementation Measures for English Graduation Threshold" provided by the Language Center of CGU.</p> <p>(2) Those who obtained certificates before enrollment can submit them directly to the department for approval.</p> <p>4. All elective courses in the department's doctoral program can be recognized as elective credits for the department. (Please select courses offered by the department's doctoral program for positions marked with a dashed line).</p> <p>5. Recognition of credits for TAICA courses (Deep Learning, Computer Vision, Natural Language Processing, Machine Learning).</p>						