Curriculum of the Bachelor Program at the Department of Artificial Intelligence

Chang Gung University (For students admitted in Fall, 2023)

April 16, 2026 Revision

Required / Elective	1st Y		2nd Y		3rd Y		4th Y	
	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.	1st Sem.	2nd Sem.
Required	Discrete Mathemetics 3		Linear Algebra 3		Capstone (1)(2) 0	1	Capstone (3) 1	
	Computational Thinking and Programming 3		Machine Learning 3		Computer Vision 3			
	Introduction to Intelligent Computing 3		Brain and Cognitive Science 3		Data Mining 3			
	Probability and Statistics	3	Data Structure 3		Natural Language Processing and Applications	3		
	Information Security	3	Deep Learning	3	Seminar 1			
	Programming Language for AI	3	Algorithms	3				
	General Physics 2							
	Organic Chemistry 2							
	General Biology	2						
	Calculus (1) (2) 3	3						
Elective			Mobile Application Development	3	Introduction to Human Diseases 2		Internship (1)(2) 4	4
			Web Application Development 3		Data Science 3		International Study Course 1	
			Computer Networks	3	Operating System 3		Virtual and Augmented Reality✻ 3	
					Introduction to Omics	2	Health Data Management and Analysis✻	3
					Parallel Programming Design	3	Special Topics on Deep Learning	3
					Cloud Systems	3	Speech Processing✻	3
							Information Retrieval and Extraction	3

Master's program commences

Genomic Data Science	3	
Intelligent Cyber-Physical System ★	3	
Multiagent Systems	3	
Introduction to Quantum Computing ★	3	
Bioinformatic Analysis ★	3	
Medical Image Processing	3	
Blockchain Technologies: Foundation and Application	3	
Applications of Deep Learning		3
AI and Internet of Things ★		3
Clinical Informatics ★		3
Generative Artificial Intelligence Applications		3
Advanced AI Programming ★		3
Introduction to Cybersecurity ★		3

Note

1. Graduation Credits: 128 credits.

   (1) Required Courses: 60 credits.

   (2) Elective Courses: 40 credits, with a minimum of 30 credits from elective courses offered by the department.

   (3) General Education Courses: Please refer to the regulations of the General Education Center. In the English field, Core, and Diverse Curriculum, 29 credits are required. After completing the mandatory "AI Programming Language" course, which is credited towards the Diverse - Computational Thinking domain, the total becomes 28 credits.

2. Physical Education is required for freshmen and sophomores with 0 credits.

3. Undergraduate students have a credit limit of 25 credits and a minimum of 12 credits per semester (9 credits for seniors in their fourth year).

4. [Shengen Campus] is a mandatory course with 0 credits. Please refer to the Office of Academic Affairs for detailed information on the Shengen Campus program.

5. The university has set an English graduation threshold. Graduation is contingent upon meeting the university's standards; please refer to the Language Center regulations for details.

6. All elective courses offered by the Master's program can be counted as departmental elective credits. (The fields marked with dotted lines are for courses offered in the Master's program of this department; the fields marked with ✻ are for courses offered in the third year of the undergraduate program [for students admitted in 2024].)

Advanced Courses：

English-taught courses：★