

Curriculum of the Bachelor Program at the Department of Artificial Intelligence

Chang Gung University (For students admitted in Fall, 2024)

April 16, 2026 Revision

Required / Elective	Subject	1st Y		Subject	2nd Y		Subject	3rd Y		Subject	4th Y	
		1st Sem.	2nd Sem.		1st Sem.	2nd Sem.		1st Sem.	2nd Sem.		1st Sem.	2nd Sem.
Required	Computational Thinking and Programm	3		Linear Algebra	3		Capstone (1)(2)	0	1	Capstone (3)	1	
	Introduction to Intelligent Computing		3	Data Structure	3		Computer Vision	3				
	Discrete Mathematics		3	Machine Learning	3		Data Analytics	3				
	Programming Language for AI		3	Probability and Statistics		3	Deep Learning	3				
	Information Security		3	Data Mining		3	Natural Language Processing and Applications		3			
	Calculus	3		Algorithms		3	Cloud Systems		3			
	General Physics	2					Seminar	1				
	Organic Chemistry	2										
	General Biology		2									
Elective				Mobile Application Development		3	Introduction to Human Diseases	2		Internship (1)(2)	4	4
				Brain and Cognitive Science		3	Introduction to Omics		2	International Study Course	1	
				Web Application Development		3	Parallel Programming Design		3	Special Topics on Deep Learning		3
				Computer Networks		3	Operating System		3	Information Retrieval and Extraction		3
							Virtual and Augmented Reality		3			
							Health Data Management and Analysis		3			
							Speech Processing		3			
							AI and Internet of Things ★		3	Intelligent Cyber-Physical System ★		3
							Blockchain Technologies: Foundation and Application		3	Multiagent Systems		3
							Genomic Data		3	Introduction to Quantum Computing ★		3
										Bioinformatic Analysis ★		3
										Medical Image Processin		3
										Applications of Deep Learning		3
										Clinical Informatics ★		3
										Generative Artificial Intelligence Applications		3
										Advanced AI Programming ★		3
									Introduction to Cybersecurity ★		3	
Note	1. Graduation Credits: 128 credits. Advanced Courses : ★ (1) Required Courses: 60 credits. English-taught courses : ★ (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. (Please select courses offered in the department's master's program for the fields marked with dotted lines.)											