

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

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 Programming	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		Data Science	3		International Study Course	1	
				Web Application Development	3		Introduction to Omics		2	Genomic Data	3	
				Computer Networks		3	Artificial Intelligent & Internet of Things		3	Virtual and Augmented Reality	3	
							Parallel Programming Design		3	Intelligent Cyber-Physical System	3	
							Operating System	3		Special Topics on Machine Learning	3	
										Multiagent Systems	3	
										Introduction to Quantum Computing	3	
										Bioinformatic Analysis	3	
										Quantum Machine Learning		3
										Clinical Informatics		3
										Health Data Management and Analysis		3
										Medical Image Processing	3	
										Special Topics on Deep Learning		3
										Applications of Deep Learning		3
										Speech Processing		3
										Information Retrieval and Extraction		3
										Generative Artificial Intelligence Applications		3
										Advanced AI Programming		3
										Academic Skills for AI Scientists		3
									Introduction to Cybersecurity		3	
									Blockchain Technologies: Foundation and Application	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. Students who wish to take "Quantum Machine Learning" must first complete "Introduction to Quantum Computing."											