Curriculum of the Bachelor Program at the Department of Department of Artificial Intelligence Chang Gung University(For students admitted in Fall, 2023) April 15, 2025 Revision Required / Elective Subject Subject Subject Subject 3 0 1 Capstone (3) 1 Discrete Mathemetics 3 Linear Algebra Capstone (1)(2) Computational Thinking and 3 3 Computer Vision 3 Machine Learning Programming Introduction to Intelligent 3 Brain and Cognitive Science 3 Data Mining 3 Computing Natural Language Processing 3 Probability and Statistics 3 Data Structure 3 and Applications Deep Learning 1 Required Information Security 3 3 Seminar 3 Programming Language for AI Algorithms General Physics 2 2 Organic Chemistry General Biology 2 Calculus (1) (2) 3 3 Mobile Application Introduction to Human 4 2 4 Internship (1)(2) Development Diseases Web Application Development 3 Data Science 3 International Study Course 1 3 3 Computer Networks 3 Operating System Genomic Data Introduction to Omics Virtual and Augmented Reality 3 Artificial Intelligent & Internet Intelligent Cyber-Physical 3 3 Special Topics on Machine 3 Parallel Programming Design 3 Learning Cloud Systems Multiagent Systems 3 Bioinformatic Analysis 3 Introduction to Quantum 3 Computing Quantum Machine Learning Clinical Informatics 3 Elective Health Data Management and 3 Medical Image Processing 3 Special Topics on Deep 3 Learning 3 Applications of Deep Learning 3 Speech Processing Information Retrieval and Extraction Generative Artificial 3 Intelligence Applications Advanced AI Programming 3 Academic Skills for AI

- 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.

Scientists

Introduction to Cybersecurity

Blockchain Technologies:

Foundation and Application

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- 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."