

Graduation Credits Requirement for the Department of Environmental Engineering

Enrollment Year	University Required (Language Courses)	College Required	Department Required	Department Compulsory Elective	Exploring Tainan & General Courses	Elective (Maximum six credits from other departments)	Total Required Credits
2025 Fall	8	35	31	18	20	17	129

【University Required Courses (General Education Core Courses)】

8 credits of language courses include 4 Credits of 【General Chinese】 and 4 Credits of 【English】.

【General Education Courses】

Area Courses	At least three of the following five study areas must be completed: Humanities, Social Sciences, Natural and Engineering Sciences (a maximum of 2 credits may be recognized by this department), Life Sciences and Health (a maximum of 4 credits may be recognized by this department), and Interdisciplinary Integration.
Comprehensive Courses	Includes 'Leadership Forum,' 'General Education Lecture Series,' 'General Education Forum-Navigating College,' 'Learning by Practice,' and 'Capstone Courses.' Students are required to take 1-15 credits.
Exploring Tainan	Students enrolling after the 2019 fall semester must take one credit of 「Exploring Tainan」.

Note 1 : The graduation credits and related regulations are different each academic year. (Please refer to [Courses Introduction - Department of Environmental Engineering \(ncku.edu.tw\)](http://ncku.edu.tw/CoursesIntroduction-DepartmentofEnvironmentalEngineering))

Note 2: The regulations for general courses are different each academic year; please refer to the Center for General Education website. (<http://cge.ncku.edu.tw/bin/home.php>)

【College Required Courses】★Must choose courses opened by the department first. When retaking a course (failed to pass), please fill out 「Credits Recognition Form for Undergraduate Students Planning to Take Courses from External Departments」.

Course Name	Credits	Course Name	Credits
General Physics	3	General Physics Laboratory	1
General Chemistry(1)(2)	6	General Chemical Laboratory(1)(2)	2
Calculus(1)(2)	6	Engineering Graphics	2
Introduction to Computer Languages	2	Engineering Mathematics(1)(2)	6
Engineering Mechanics	3		
Fluid Mechanics(I)	3	Fluid Mechanics Laboratory	1

【Department Required Courses】

Course Name	Credits	Course Name	Credits
Physical Chemistry	3	Environmental Microbiology	3
Experiment of Microbiology	1	Engineering Statistics	3
Hydrology	3	Laboratory of Environmental Analysis(1)	3
Air Pollution Control Engineering	3	Water Supply Engineering	3
Solid Waste Engineering	3		
Environmental Management	3	Environmental Engineering Capstone	3

【Department Compulsory Elective Courses】

Course Name	Credits	Course Name	Credits
Biology	3	Electron and Electrical Engineering	3
Wastewater Engineering	3	Reinforced Concrete	3
Introduction to Principles of Environmental Engineering Physics	3	Environmental Engineering Design(1)	3

【Department Elective Courses】 (※ Elective courses offered by the department at the undergraduate and graduate levels, as announced each semester [including Coursera courses provided by the department], may be recognized.)


Introduction to Environmental Engineering	Ecology	Physical Principles for Environmental Engineering	Water Quality Management
Environmental Economics	Atmospheric Chemistry and Application	Mathematical Principles for Environmental Engineering	Water Pollution Control
Advanced Wastewater Treatment	Introduction to Environmental Law	Environment Protection and Safety in the High-Tech Industry	Environmental Toxicology
Environmental Impact Assessment	Climate Change and Sustainable Development	Noise and Vibration Control	Introduction to Environmental Molecular Biology
Hazardous Waste Treatment	Transport of Air Pollution	Environmental Chemistry	Modern Air Pollution Control Technologies
Orientations Research	Biological Principles for Environmental Engineering	Environmental System Analysis	Combustion Principles and Control
Laboratory of Environmental Analysis (2)	Chemical Principles for Environmental Engineering	Membrane Processes for Water Treatment	Thesis (1) (2) [Must be completed consecutively to be eligible for credits]

★ **Starting from the 2025 fall semester, students applying for a transfer must meet the following requirements:**
'Students must have completed all required, compulsory elective, and elective courses from their first year (such as the courses highlighted in yellow) and obtained passing grades, or have their transfer applications approved by the transfer review committee before they can apply for a transfer.' (All of the above requirements are noted in the admissions channels for the 2025 fall semester.) Students who wish to transfer should pay special attention to this information.

Undergraduates

- ✦ [NCKU Curriculum Map](#)
- ✦ [NCKU Graduation Pre-Assessment System](#)
- ✦ [English Curriculum Q&A \(FLC\)](#)
- ✦ [English Course Exemption / Waiver and Confirmation of Foreign Language Competence System](#)
- ✦ [General Education Center - GE Credits Regulation](#)

Foreign Language Proficiency Indicators


 **Passing requirements :** The foreign language proficiency indicators for undergraduate students are as follows. **Those who have achieved one of the following proficiency indicators must log into the [English Course Exemption / Waiver and Confirmation of Foreign Language Competence System](#) before graduation and upload the certification documents. Students who have received credit for English courses must complete the certification process.**

Basic Requirement (For students enrolling during and after the 2022 fall semester)

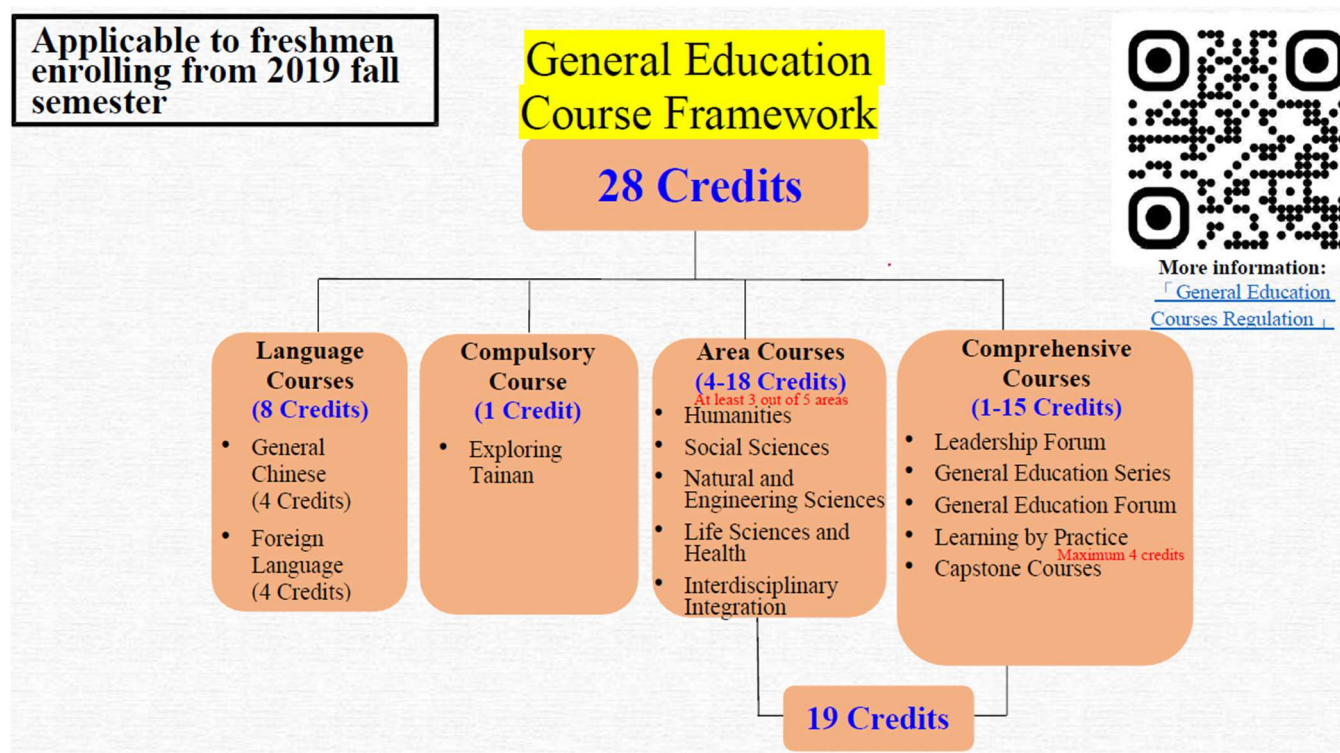
- ▶ Pass the second stage, High-Intermediate Level of GEPT.
- ▶ TOEFL iBT – 72 and above / TOEFL ITP – 527 and above .
- ▶ IELTS – 5.5 or above.
- ▶ New TOEIC – 785 or above for Listening & Reading and 310 or above for Speaking & Writing.
- ▶ Please provide a supportive document for other English proficiency tests equivalent to the CEFR B2 level or above.
- ▶ Reference : [CEFR Alignments from the Center for Teaching and Learning Development \(CTLTD\)](#) 2021 or updated version.

 **Failing requirement :** Students who have completed four credits of the English

course but failed to meet the mentioned requirements are eligible to take Online Remedial English and must pass the course.

 **The credit exemption for general English courses and reviewing foreign language proficiency indicators are two different systems. If both standards are met, separate applications must be submitted. Please pay attention to this part.**

Credit regulations for first-year students since the 2019 fall semester:



「Learning by Practice」 Credit Accreditation



Credit accreditation application deadline: The Friday of 15th week of every semester at 5 pm. Credit transfer application deadline The Friday of 16th week of every semester at 5 pm. Notes:

1. Freshmen enrolled during 2018-2020 fall semester are allowed to take 6 credits in maximum. From 2021 fall semester enrollment, freshmen can only take maximum of 4 credits.
2. 「General Education Seminars」, maximum of 6 points in exchange for 1 credit, with maximum of 3 points for each area per credit exchange ; 「Experiential Learning」 Maximum of 6 points from the 3 subjects in exchange of 1 credit. Else, maximum of 6 points for 1 credit.
3. 「Learning Through Exploration」 No time length limitation as long as the study trip is within the semester period with maximum of 6 points. Those who returned to their home country or country of residence and have applied for working experience accreditation are not applicable for this accreditation.
4. For more details, please view 「Learning by Practice」 certification regulation.



[Credit Accreditation Application System](#)



[「Learning by Practice」 Certification Regulation](#)

【Area Courses】 : [Center for General Education Regulations](#)

- (1) Students may take courses that other departments offer and apply for recognition as General Education credits. 【※Students should first email the [General Education Center contact person](#) (Ms. Chen, z10604029@email.ncku.edu.tw) to request the syllabus URL of the course to confirm its designated study area. 】 Applications must be submitted online ([Application for enrolling courses from other college/department as area courses for general education](#)) by the student during the application period announced in the system within the course selection period of the semester, and must be approved by both the student's department and the General Education Center. Late applications will not be accepted. If students wish to withdraw an approved course application for recognition as General Education credit, they must complete the withdrawal through the system before it closes for that semester. Late withdrawal will not be processed.
- (2) Any course application that has been approved and for which the student earns a passing grade at the end of the semester shall be recognized as General Education credit.

Approved by the Department Curriculum Committee Meeting on September 23, 2024.

★The department may recognize a maximum of 2 credits in the Natural and Engineering Sciences area.

★The department may recognize a maximum of 4 credits in the Life Sciences and Health area.

(3) Courses in foreign languages other than English may be recognized as credits in the Humanities area, whether taken at this university or other institutions. However, international students may not have courses in the official language(s) of their nationality recognized as General Education credits.

※ General education and elective courses with the same course title may only be selected once. Duplicate enrollment is not allowed and will not be counted towards graduation credits.

※ The regulations of this university shall handle matters regarding general education course credit waivers and cross-institutional course selection.