

National Chung Cheng University Guidelines on the Implementation of the Generational Sustainability and Smart Technology Micro- Program

Approved by the fifth Center for General Education Meeting in the 2024 academic year on March 19, 2025
Approved by the first General Education Committee Meeting in the second semester of the 2024 academic year on March 26, 2025
Approved by the Curriculum Committee Meeting in the second semester of the 2024 academic year on April 28, 2025

I. Program Title: Generational Sustainability and Smart Technology Micro-Program

II. Purpose of Establishment:

This micro-program is designed to cultivate talent with interdisciplinary perspectives and innovative thinking. In response to pressing societal needs in the areas of population aging, artificial intelligence transformation, and sustainable development, the program adopts an interdisciplinary approach to help students understand the connections among various fields and develop abilities to address challenges.

Centered on the three core themes of “Aging Education”, “Artificial Intelligence”, and “Sustainable Development”, the program emphasizes a balanced integration of theory and practice. The micro-program encourages cross-domain thinking and innovative applications to foster leadership with technological literacy, humanistic compassion, and social responsibility. Graduates are expected to exert influence amid the rapid changes wrought by digital transformation and sustainable development, promoting intergenerational inclusion and the ethical use of technology to drive positive change for society.

III. Program Objectives:

1. To cultivate comprehensive competencies through interdisciplinary integration.
2. To enhance knowledge application abilities by emphasizing a learning approach that values both theoretical foundations and practical implementation.
3. To foster innovative thinking and problem-solving abilities through teamwork and project-based learning.
4. To promote intergenerational inclusion, the ethical use of technology, and sustainable social development, developing influential and socially responsible individuals.

IV. Administrative Unit: Center for General Education

V. Teaching Unit: Center for General Education and Bachelor Program in Interdisciplinary Studies

VI. Faculty Planning:

(1) Faculty members for this program must be full-time (including project-based) or part-time instructors affiliated with the University.

(2) Faculty Composition:

Instructor	Highest Degree	Areas of Expertise
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Lee Ya-Hui	PhD in Educational Science, Université Bordeaux II, France	Philosophy of adult education, comparative adult education, human resource development for middle-aged and older adults, retirement planning, and qualitative research methods
Eddy Chen	PhD in Mechanical Engineering, National Cheng Kung University	Thermal-fluid and energy science, predictive modeling, occupational safety and health, net zero carbon emissions and ESG
Wang Chiu-Ling	MA in Human Resource Management and Public Relations, Da-Yeh University	Human resource management, career planning, and corporate social responsibility
Fan Chung-Shou	PhD in Computer Science and Engineering, National Sun Yat- sen University	Wireless sensor networks, Internet of Things applications, and robotics

VII. Program Requirements:

- (1) This micro-program addresses two topics: “Core Literacy” and “Applied Practice”. Students must complete a minimum of eight (8) credits to fulfill the program requirements, including six (6) credits from three “Core Literacy Courses” and two (2) credits from an “Applied Practice Course”.

Topic	Course Title	Credit	Course Type	Instructor(s)
Core Literacy	Education and Career Development for Middle-aged and Older Adults	2	Required	Lee Ya-Hui and Wang Chiu-Ling
	Sustainable Development and ESG	2		Eddy Chen and Wang Chiu-Ling
	Artificial Intelligence and Innovative Applications of Smart Technologies	2		Fan Chung-Shou
Applied Practice	Career Competencies	2	Required	Lee Ya-Hui, Eddy Chen, Fan Chung- Shou, and Wang Chiu-Ling

- (2) Course Delivery Method:

The core literacy courses adopt a modular design that integrates theoretical instruction, expert lectures, and practical projects. The applied practice course is conducted under faculty

supervision to guide students to share the results of their independent research projects or academic research in formal presentations. Students are encouraged to apply for research grants, such as college student research project grants provided by the National Science and Technology Council, or to participate in other academic and industry–academia collaboration initiatives. This approach strengthens both academic research and practical application abilities.

VIII. Eligibility and Application Procedures:

(1) Application Submission

Applications are accepted in May and September each year. Applicants must download and complete the “National Chung Cheng University Interdisciplinary and Micro-Program Application Form” and the “Student Statement of Purpose and Study Plan” from the website of the Center for General Education and submit all completed documents directly to the Center.

To ensure the quality of instruction, the program admits up to 25 students per year. In the event that more than 25 students apply, applicants will be ranked and admitted on the basis of the relevance of their proposed plans to their future career development.

(2) Course Enrollment

Students must follow the curriculum plan outlined in the program. Courses that were completed prior to formal enrollment in the program may be counted toward program requirements, provided they align with the designated curriculum.

(3) Certificate Application

Students who have been approved for enrollment and who have completed all program requirements may apply for a program certificate in accordance with the regulations of the Office of Academic Affairs.

IX. In accordance with Article 3 of the “National Chung Cheng University Regulations on the Implementation of Interdisciplinary Programs”, these guidelines and any amendments thereto shall take effect after approval by the curriculum committees of the participating units and their respective colleges, approval by the Curriculum Committee of the University, and announcement by the University