

The International Master Program of STEM Education is a new program in Innovative & International College which aims to recruit international students with a bachelor's degree in science, information science, and education. The faculty of the program is mainly from (all) the professors of the College of Science, the College of Computer Science, and the College of Education.



Introduction

National Pingtung University (NPTU) is a unique university integrating higher education, teacher education, and vocational education. With expanded employment opportunities globally in Science, Technology, Engineering, and Mathematics (STEM) fields, the program of STEM education plays an essential role in higher education, helping undergraduate and graduate students to access and engage in STEM learning. Thus, the Innovative & International College offers a special International Master Program of STEM education to help international students to pave the way in attaining a STEM education M. S. degree.

Mission • and Objectives

- 1. To nurture global educators or researchers in STEM.
- 2. To nurture global creators of education products in STEM
- 3. To support formal and informal education staffs in the field of STEM, e.g., narrators of science and technology museum, K-12 STEM teachers, etc.





National Pingtung University International Master Program of. STEM Education

■ NPTU ■ 副教授 國立屏東大學STEM教育國際碩士學位學程

Course Design

	International Master Program of STEM Education		
Required courses (9 credits)	Research Methodology, Thesis(I), Thesis(II)		
	Research Methodology (3 credits): Educational Statistics, Test Theory and Construction, Qualitative Research, Action Research		
Elective courses (21 credits)	STEM Content (6 credits) Topics in physics Topics in chemistry Topics in biology Topics in environmental science Topics in mathematics Topics in engineering and technology Topics in STEM education 	 STEM Education (6 credits) Learning theory in STEM education Research of Curriculum and instruction in STEM education Research on teaching and teacher development in STEM education Integrating Rs (Reading and wRiting) into STEAM Education 	 Supporting Course (6 credits) Effective use of Technology integrated into instruction Research on Computational Thinking in STEM education Studies of Science learning through engineering design Studies on creative thinking Mathematical Modelling in STEM education Advanced topics in STEM education Communication in STEM education

Career opportunity :

STEM curriculum developers, STEM education researchers, Science teachers, Museum and other informal field educators.

Learning Space





NPTU Maker Space Teaching Aid Prototype Factory



Communication and Cognition Lab.



Communication and VAR Technology Center

Course credits of International Master Program of STEM Education:

- 1. Required courses credits: 9 credits (including 6 credits for the thesis)
- 2. Elective courses credits: 21 credits
- Completing a Master's degree thesis or a technical report on the basis of the Degree Conferral Act, Article 7 (Ministry of Education, 2018)

Scholarships Information

Three levels of scholarships are available:

Level 1 -

NPTU Elite Scholarship includes 1. Tuition fee and incidental fee and 2.(1) Master: NTD 6,000 stipends per month (maximum for 2 years), (2) Ph.D.: NTD 10,000 stipends per month (maximum for 3 years) and 3.Free dormitory fee

Level 2 —

NPTU Brilliance Scholarship includes 1. Tuition fee and incidental fee and 2.Free dormitory fee

Level 3

NPTU Excellence Scholarship includes 1. Tuition fee and incidental fee or 2. NTD 6,000 stipends per month or 3. Free dormitory fee

For spring semester, applications received after July15 may not be considered for all scholarship programsand will be considered only if funds remain.

Hands-on Science Learning Center