

# International Doctoral Program in Integrative STEM Education

## Contact Information

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## Introduction

The International Doctoral Program in Integrative STEM Education at National Taiwan Normal University (NTNU) is designed to develop future STEM innovative educators, leaders, scholars, and researchers prepared to invent and disseminate new integrative approaches to STEM education. Our focus on creating an industry-based context for integrating STEM knowledge and competency practices uniquely sets us apart from other STEM education programs; meanwhile, most outstanding and famous professors in STEM fields at NTNU have been involved with planning and implementing the STEM education program. Moreover, it aims at cultivating researchers and professionals dedicated to addressing the challenges of providing high quality STEM education to students through a variety of departments in STEM education and innovative methods of delivery, e.g., e-learning, hands-on projects, and keynote speeches from outstanding STEM experts from around the world.



## Degree Requirements

This program focuses on cultivating high-level research talents in integrative STEM education and the educational objectives are:

- (1) To develop students' integrative research competency in integrative STEM education according to the needs and development of technological industry.
- (2) To develop students' professional competency in cultivating STEM innovative talents
- (3) To develop students' leadership, innovation, and collaborative problem solving in leading STEM education team.

According to previous educational objectives, the program has a comprehensive curriculum in accordance with industrial developments and demands in the field of STEM education. Three program areas of study are provided: STEM Education Pedagogy, STEM Education Seminars, and Technology Industry in STEM Education. It requires a minimum of 18 graduate credit hours in total. Graduates from this program will forge new ground in developing theories, designs, and practical solutions for future generations.

## Career Prospects

We have high expectation in our graduates' future development. The Ph.D. degree of **International Doctoral Program in Integrative STEM Education** is best suited for students who are interested in pursuing the following career pathways: (1) professors in colleges/universities; (2) researchers in academic research institutions; (3) professionals in research department of technological industries; (4) leaders in educational administrative authorities.