

Course Structure for M.A. Program
Graduate Program in English, Graduate Institute of Science Education
National Taiwan Normal University

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
111	4.0	18.0	6.0	28.0

Note: The first alphabet "E" on the course name refers to the course in English as a medium of instruction

I. Required Courses: 0.0 credit is required

II. Elective Courses: 0.0 credit is required

III. Courses Offered to Students in Different Divisions

Required Course, 4.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
SEC8014	1 E Foundation of Science Education	2.0	2.0	0.0	
SEC8013	2 E Business Communication	2.0	2.0	0.0	

Elective Course: 18.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
1 Science Education					
SEC8016	1-1 E Introduction to Science Education Research	3.0	3.0	0.0	
SEC0019	1-2 E Analysis of Science Instructional Activities	3.0	3.0	0.0	
SEC0065	1-3 E Philosophy of Science in Practice and Science Education	3.0	3.0	0.0	
SEC0086	1-4 E Topics on the Development and Process of Scientific Reasoning	3.0	3.0	0.0	
2 Research Methods					
SEC8012	2-1 E Academic Writing in Science Education	3.0	3.0	0.0	
SEC8015	2-2 E Elementary Statistics	3.0	3.0	0.0	

IV. Free Elective Credits: 6.0 credits are required

There are 6 credits of free electives, which are science subjects, and EMI science subjects are selected by all departments of the College of Science.