

Course Structure for Ph. D Program
Graduate Program in English, Department of Industrial Education
National Taiwan Normal University

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
110	10.0	18.0	8.0	36.0

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

I. Required Courses: 10.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
IEC0014	1 E Statistical Methods for Multivariate Analysis	2.0	2.0	0.0	
IED0074	2 E Research Methods in advanced Industrial Education	2.0	2.0	0.0	
IED0075	3 E Philosophy of Technological and Vocational Education	2.0	2.0	0.0	
IED0117	4 E Seminar (I)	1.0	1.0	0.0	
IED0118	5 E Seminar (II)	1.0	1.0	0.0	
IED0111	6 E Seminar (III)	1.0	1.0	0.0	
IED0112	7 E Seminar (IV)	1.0	1.0	0.0	

II. Elective Courses: 0.0 credit is required

III. Courses Offered to Students in Different Divisions

Required Course, 0.0 credit is required

Elective Course: 18.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
	1 Technical and vocational education system and policy field	6.0 credits are required			
IEC8002	1-1 E Special Topics in Contemporary Technical-Vocational Education Policies	2.0	2.0	0.0	
IED0064	1-2 E Special Topics in Technical Vocational Education in European and American Countries	2.0	2.0	0.0	
IED0069	1-3 E Studies in Policy and Law of Technological and Vocational Education	2.0	2.0	0.0	
	2 Technical and vocational education administration and management field	6.0 credits are required			
IED0054	2-1 E Special Topics in Vocational Technical Education Planning	2.0	2.0	0.0	
IED0092	2-2 E Educational Administration and Inspection for TVE	2.0	2.0	0.0	
IED0128	2-3 E Studies in Assessment of Technological Vocational Education	2.0	2.0	0.0	
	3 Technical and vocational education curriculum and teaching field	6.0 credits are required			
IEC0003	3-1 E Studies in Learning Theory of Technological and Vocational Education	2.0	2.0	0.0	
IED0083	3-2 E Studies in Career Planning and Consultation	2.0	2.0	0.0	
IED0123	3-3 E Special Topics in Teaching Methods of Technical-Vocational Education	2.0	2.0	0.0	
IED0129	4 E Research on Industrial Innovation and Strategies	2.0	2.0	0.0	

IV. Free Elective Credits: 8.0 credits are required