

Course Structure for M.A. Program

, Graduate Institute of Vehicle and Energy Engineering

National Taiwan Normal University

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
114	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: 4.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
VEC8001	1 E Seminar (I)	2.0	2.0	0.0	
VEC8002	2 E Seminar (II)	2.0	2.0	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 Core Elective Courses 9.0 credits are required					
VEC8005	1-1 E Advanced Vehicle Control System	3.0	3.0	0.0	
VEC8003	1-2 E Advanced Hybrid Power Vehicle System	3.0	3.0	0.0	
VEC9016	1-3 E Advanced Thermodynamics	3.0	3.0	0.0	
VEC9013	1-4 E Advanced Heat Transfer	3.0	3.0	0.0	
VEC8009	1-5 E Renewable Energy and Energy Storage Systems	3.0	3.0	0.0	
VEC9010	1-6 E Building Energy Conservation	3.0	3.0	0.0	
2 Professional Elective Courses					
VEC9014	2-1 E Advanced Fluid Mechanics	3.0	3.0	0.0	
VEC9012	2-2 E Hybrid Vehicles	3.0	3.0	0.0	

IV. Free Elective Credits: 6.0 credits are required