

Curriculum for the Department of Mechanical Engineering(Aviation Technology Divison), Chung Hua University

Apply for 109 class

	Freshman				Sophomore				Junior				Senior			
	Fall		Spring		Fall		Spring		Fall		Spring		Fall		Spring	
Common Required Courses (6 credits)	Physical Education (I)	0/2	Physical Education (II)	0/2												
	Freshman English(I)	2/2	Freshman English(II)	2/2	Freshman English(III)	1/2	Freshman English(IV)	1/2								
General Education Courses (22 credits)	Core course	2/2	Core course	2/2	Core course	2/2	Elective course	2/2	Elective course	2/2	Elective course	2/2				
	Core course	2/2	Core course	2/2	Core course	2/2	Elective course	2/2	Elective course	2/2						
Required Courses (59 credits)	Engineering Graphics & Computer Practice	1/3	Mechanism Design and Drawing & Practice	1/3	Mechanical Material and Manufacture	3/3	Mechanical and Electrical Project Experiment	1/3	Machine Design	3/3	Mechanical and Electrical Conformity	3/3				
	Experimental Physics (I)	1/3	Statics and Mechanics of Materials	3/3	Engineering Dynamics	2/2	Introduction to Unmanned Aerial Vehicles	3/3	Project of Precision Machines	3/3	Senior Projects	1/3				
	Programming Language	3/3	Experimental Physics (II)	1/3	Electrical Engineering	3/3	Thermal and Fluid Engineering (I)	2/2	Thermal and Fluid Engineering (II)	2/2	Case Study	2/2				
	3D Printer Technology	3/3	Calculus	4/4	Programmable Logic Controller	2/2	Engineering Statistics	3/3								
	Introduction to Mechanical Engineering	1/1	Physics	3/3	Theory of Mechanisms	2/2										
					Engineering Mathematics	3/3										
Required Elective Courses (4 credits)	Creativity Engineering	2/2					Introduction to Aeronautical Engineering	2/2								
Division Required Elective Courses (at least 3 courses)								Flight Principle and Flight Simulator Implementation	2/2	Structure and Processing of Composite Material	2/2					
								Sensor Principle and Application	2/2	Aircraft Engines and Gas Turbines	2/2					
										Design of Opto-Mechatronic Systems	2/2					
Professional Elective Courses							Introduction of Micro-processor	3/3	Aerodynamics	3/3	Drones Geoinformatics of Application	3/3	Tolerance Design	2/2	Lasers and Their Applications	3/3
							Introduction to Smart Automation	2/2	Avionics	2/2	Servo Motor Control	3/3	Computer Numerical Control Machine Tools	3/3	Non-Destructive Test	3/3
							Introduction of Machining Tools	3/3	Automatic Control Systems	2/2	Computer Aided Engineering Analysis	3/3	Non-traditional Machinning	2/2	Quality Control and Reliability Engineering	3/3
							Introduction of Precision Machines	2/2	Industrial Hygiene	2/2	Introduction to Aviation Maintenance	2/2	Navigation and Global Positioning System	3/3	Business Experience	3/3
								Computer-Aided Manufacturing	3/3	Aviation quality Assurance	3/3	Manufacturing Practice	3/3	Factory Practice	3/3	
								Precision Machining	2/2	Intelligent Robot	2/2	Business Ethics	3/3	Work Ethics	3/3	
											Precision Measurement	2/2	Internships	3/3	Overseas Professional Internship	2/2
Required Credits : 87 (including 59 credits of professional required courses, 6 credits of English course, 22 credits of general education courses which include 12 credits of core general education courses and 10 credits of elective general education courses.) Elective Credits: 41 (including 4 credits of department required courses, 6 credits of division required courses, 22 credits of department elective course and 9 credits in other Department) Graduation Credits: 128 credits																