

Curriculum for the Department of Mechanical Engineering(Intelligent Automation Divison), Chung Hua University

Apply for 108 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	Physical Education	0/2	Physical Education	0/2								
	All-out Defense Education Military Training- International Situations	0/2	All-out Defense Education Military Training-Defense Technology	0/2												
	Freshman English I (Level A Plus.A.B.C)	2/2	Freshman English II (Level A Plus.A.B.C)	2/2	Freshman English III (Level A Plus.A.B.C)	1/2	Freshman English IV(Level A Plus.A.B.C)	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 of Micro- processor	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 Smart Automation	2/2								
Division Required Elective Courses (at least 3 courses)									Sensor Principle and Application	2/2	Machine Vision and Inspection	2/2				
									Automatic Control Systems	2/2	Intelligent Robot	2/2				
											Light Mechanical and Electrical Conformity System Design	2/2				
Professional Elective Courses							Introduction of Machining Tools	3/3	Opto-Mechanical Design	3/3	Human-Computer Interaction Design	3/3	Tolerance Design	2/2	Lasers and Their Applications	3/3
							Introduction of Precision Machines	2/2	Fundamental Optics	3/3	Servo Motor Control	3/3	Computer Numerical Control	3/3	Signal Process	3/3
							Introduction to Unmanned Aerial Vehicles	3/3	Software Engineering	3/3	Computer Aided Engineering Analysis	3/3	Non-traditional Machinning	2/2	Quality Control and Reliability Engineering	3/3
							Introduction to Aeronautical Engineering	2/2	Precision Machining	2/2	Precision Measurement	2/2	Computer Numerical	3/3	Business Experience	3/3
									Computer-Aided Manufacturing	3/3	Principles & Applications of Precision Machine Design	3/3	Manufacturing Practice	3/3	Factory Practice	3/3
									Flight Principle and Simulator Implementation	2/2	Airplane Structure and Composite Material	2/2	Business Ethics	3/3	Work Ethics	3/3
											Aircraft Engines and Gas Turbines	2/2	Internships	3/3		

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