

**Curriculum for the Department of Mechanical Engineering(Intelligent Machinery 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 of Machining Tools	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 of Precision Machines	2/2								
Division Required Elective Courses (at least 3 courses)									Sensor Principle and Application	2/2	Machine Vision and Inspection	2/2				
									Precision Machining	2/2	Precision Measurement	2/2				
											Light Mechanical and Electrical Conformity System Design	2/2				
Professional Elective Courses							Introduction of Micro-processor	3/3	Computer-Aided Manufacturing	3/3	Mechanical Vibration Analysis and Testing Technology	3/3	Tolerance Design	2/2	Lasers and Their Applications	3/3
							Introduction to Smart Automation	2/2	Cutting principle	3/3	Pneudraulic Principle and Application	3/3	Denign of MEMS	3/3	Semiconductor Fabrication and Packaging	3/3
							Introduction to Unmanned Aerial Vehicles	3/3	Introduction to Mold 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	Automatic Control Systems	2/2	Precision Measurement	3/3	Computer Numerical	3/3	Business Experience	3/3
									Computer-Aided Manufacturing	2/2	Principles & Applications of Precision Machine Design	2/2	Manufacturing Practice	3/3	Factory Practice	3/3
									Industrial Hygiene	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