

Department of Mechanical Engineering

Curriculum Requirements for Enrollees in the Academic Year 113 (Fall 2024)

Program	Four-year technical college program of the Day Division								
Group	None								
Class Type	Regular Class								
Special Program	None								
Curriculum Committee	Department Curriculum	114.04.09							
	College Curriculum	114.05.16							
	University Curriculum	114.06.09							
	Academic Affairs	114.06.09							
Graduation Credits /Study Duration	At least 128 credits required (normally 4 years).								
Credit Load per Semester	Students in Grades 1 and 2 must take no fewer than 16 credits and no more than 28 credits per semester. Students in Grades 3 and 4 must take no fewer than 9 credits and no more than 25 credits per semester.								
Required and Elective	Credits		Subject Category		Credits				
Required	82 Credits		General Education		19 Credits				
			Major Required		63 Credits				
			College Major		0 Credits				
Elective	46 Credits		General Education		8 Credits				
			Major Elective		38 Credits				
Other Regulations									
Remarks	"Computer Course" means computer access is required (computer and internet usage fee).								
First Semester, First Year					Second Semester, First Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	496804	Literary Appreciation and Expression	2/2		General Education	496904	Practical Chinese	2/2	
General Education	492001		2/2		General Education	492002	English (II)	2/2	
General Education	4912C0	Physical Education(1)	2/2		General Education	4912D0	Physical Education(2)	2/2	
General Education	490304	Community Service & Learning(1)	0.5/1		General Education	490404	Community Service & Learning(2)	0.5/1	
General Education	497A00		2/2		General Education	497B00		2/2	
Major Required	404I01	Computational Thinking and Creative Programming	3/3	Computer Course	Major Required	404I06	Calculus(2)	3/3	
Major Required	404I02	Calculus(1)	3/3		Major Required	404I07	Physics(2)	3/3	
Major Required	404I03	Physics(1)	3/3		Major Required	404I08	Laboratory of Physics	2/2	
Major Required	404I04	Chemistry	3/3		Major Required	404I09	Statics	3/3	
Major Required	404I05	Mechanical Workshop Practice	3/3		Major Required	404I10	Mechanical Engineering Drawing and Practice	3/3	
23.5 Credits, 24 Hours					22.5 Credits, 23 Hours				
First Semester, Second Year					Second Semester, Second Year				

Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	496404	Contemporary Taiwan and Moder World	2/2		General Education	496704	Human Rights and Legal	2/2	
General Education	492003	English(III)	2/2		General Education	497D00		2/2	
General Education	497C00		2/2		Major Required	404I15	Mechanics of Materials	3/3	
Major Required	404I11	Programming Language	3/3	Computer Course	Major Required	404I16	Design of Machine Elements	2/2	
Major Required	404I12	Engineering Mathematics(1)	3/3		Major Required	404I18	Pneumatic Control and Practice	3/3	
Major Required	404I13	Dynamics	3/3		Major Required	404I23	Artificial Intelligence	3/3	
Major Required	404I14	Computer aided drawing and Practice	3/3	Computer Course	Major Elective	404P06	Computer-aided Manufacturing and Practice	3/3	Computer Course
Major Elective	404P01	Numerical Control Machining and Practice	3/3		Major Elective	404P07	Thermodynamics	2/2	
Major Elective	404P02	Electric Circuits and Practice	3/3		Major Elective	404P08	Applied Electronics and Practice	3/3	
Major Elective	404P03	Creative Training	2/2		Major Elective	404P09	Engineering Mathematics(1)	3/3	
Major Elective	404P04	Introduction to Intelligent Machinery.	2/2		Major Elective	404P10	Material Science and Laboratory	3/3	
Major Elective	404P05	Material Science amd Engineering	2/2		Major Elective	404P11	Mechanism of Machines	2/2	
					Major Elective	404P12	Introduction of CNC Machine Design	2/2	
					Major Elective	404P61	Graphics Program Design and Virtual Instrumentation	3/3	
					Major Elective	404P67	Introduction of CNC Machine Design	3/3	
30 Credits, 30 Hours					39 Credits, 39 Hours				
First Semester, Third Year					Second Semester, Third Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	404I19	Computer-Aided Design and Practice	3/3	Computer Course	Major Required	404I21	Special Topics	2/2	
Major Required	404I20	Control System Engineering	3/3		Major Elective	404P25	Mechatronics	3/2	
Major Elective	404P13	Precision Measurement and Inspection Practice	3/3		Major Elective	404P26	Five-axis Numerical Control Machining and Practice	3/3	
Major Elective	404P14	Five-axis machining principle and practice	3/3		Major Elective	404P27	Adjustive and Corrective Technique for CNC Machine	3/3	
Major Elective	404P15	Programming Controller Application and Practice	3/3		Major Elective	404P28	Reverse Engineering and Practice	3/3	
Major Elective	404P16	Manufacturing Network Technology	3/3		Major Elective	404P29	Intelligent Manufacturing Technology	3/3	
Major Elective	404P17	Technology of CNC Machine Design	2/2		Major Elective	404P30	Sensor Theory & Applications	2/2	
Major Elective	404P18	Kinematics of Machines	2/2		Major Elective	404P31	Computer-Aided Control System Analysis and Design	3/3	Computer Course
Major Elective	404P19	Manufacturing Engineering	2/2		Major Elective	404P32	Thermodynamicsand Practice	2/2	

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43 Credits, 45 Hours	39 Credits, 41 Hours
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