Department of Mechanical Engineering

Curriculum Requirements for Enrollees in the Academic Year 114 (Fall 2025)

Prog	gram	Four-year technical college program of the Day Division										
Gro	oup	None										
Class	Туре	Regular Class										
Special Program		None										
		Department Curriculum 114.04.09										
		College Curriculum	114. 05. 16									
		University Curriculum	m 114.06.09									
		Academic Affairs	114. 06. 09									
Graduatio /Study I		At least 128 credits required (normally 4 years).										
Credit I Seme			Stude	nts in	Grades 3 a		credits and no more that take no fewer than 9 cm					
Required an	nd Elective	Credits	Subject Category			Credits						
			Gen	eral I	Education		19 Credits					
Requ	ired	82 Credits	Ma	ajor R	equired	63 Credits						
			C	ollege	Major	0 Credits						
		46 Credits		General Educat		8 Credits						
Elec	tive			ajor E	lective	38 Credits						
Other Reg	gulations	程)。	.領域 :生需第	完成技任	憂進階課程,		表數控工具機與電腦輔助					
Rema	arks	"Computer Course" mear	ns com	puter	access is 1	required (c	omputer and internet us	sage f	ee).			
	First S	emester, First Year				Second S	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	404101	Computational Thinking and Creative Programming	3/3	Compu ter Cours e	Major Required	404106	Calculus(2)	3/3				
Major Required	404102	Calculus(1)	3/3	Č	Major Required	404107	Physics(2)	3/3				
Major Required	404103	Physics(1)	3/3		Major Required	404108	Laboratory of Physics	2/2				
Major Required	404104	Chemistry	3/3		Major Required	404109	Statics	3/3				
Major Required	404105	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	496504	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	404115	Mechanics of Materials	3/3			
Major Required	404111	Programming Language	3/3	Compu ter Cours e	Major Required	404116	Design of Machine Elements	2/2			
Major Required	404112	Engineering Mathematics(1)	3/3	-	Major Required	404118	Pneumatic Control and Practice	3/3			
Major Required	404113	Dynamics	3/3		Major Required	404123	Artificial Intelligence	3/3			
Major Required	404114	Computer aided drawing and Practice	3/3	Compu ter Cours e	Major Elective	404P06	Computer-aided Manufacturing and Practice	3/3	Compu ter Cours e		
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	404P61	Graphics Program Design and Virtual Instrumentation	3/3			
					Major Elective	404P67	Introduction of CNC Machine Design	3/3			
		Credits, 30 Hours			37 Credits, 37 Hours						
		Semester, Third Year	a	T	Second Semester, Third Year						
Course	Course	Course Name	Credits / Hours	110000	Course	Course	Course Name	Credits / Hours	Notes		
Major Required	404119	Computer-Aided Design and Practice	3/3	Compu ter Cours e	Major Required	404121	Special Topics	2/2			
Major Required	404120	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 Integration 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	Compu ter Cours e		
Major Elective	404P19	Manufacturing Engineering	2/2		Major Elective	404P32	Thermodynamicsand Practice	2/2			

Major Elective	404P20	Heat Treatment	2/2		Major Elective	404P33	Professional Counseling	2/2	
Major Elective	404P21	Vibration Theory and Applications	2/2		Major Elective	404P34	Microcomputer Interfacing Practice	3/3	
Major Elective	404P22	Fluid Dynamics and Practice	2/2		Major Elective	404P35	Non-Destructive Inspection	2/2	
Major Elective	404P23	Personal and Professional Ethics	2/2		Major Elective	404P36	Machining technology and practice of CNC tool machine (1)	2/2	
Major Elective	404P24	Design and Manufacturing for Precision Optical Component	3/3		Major Elective	404P62	Engineering Reliability	3/3	
					Major Elective	404P68	Ultra Precision Machining	3/3	
	35 (Credits, 35 Hours				39 (Credits, 38 Hours		
	First Se	emester, Fourth Year				Second S	emester, Fourth Year		
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
General Education	404039	English Proficiency qualification	0/2		College Major	40TND9	Interdisciplinary program learning	0/1	
Major Elective	404P37	Summer Off-campus Internship	3/3		College Major Required	40TNF1	Interdisciplinary Micro Course Program for Engineering Digital Technology	0/1	
Major Elective	404P38	Semester off-campus internship (1)	9/9		Major Required	404122	Proficiency Assessment of Mechanical and Mechatronic Technology	3/3	
Major Elective	404P39	Five-axis Compound Machining and Practice	3/3		Major Elective	404P50	Semester off-campus internship (2)	9/9	
Major Elective	404P40	Non-traditional Manufacturing	2/2		Major Elective	404P51	Opto-Mechatronics Systems	2/2	
Major Elective	404P41	Welding Engineering and Practice	2/2		Major Elective	404P52	Plastic Working	2/2	
Major Elective	404P42	Introduction to Semiconductor Manufacturing Technology	2/2		Major Elective	404P53	Engineering Statistics and Quality Management	2/2	
Major Elective	404P43	Computer-Aided Engineering Analysis	3/3	Compu ter Cours e	Major Elective	404P54	Nano Engineering and Applications	2/2	
Major Elective	404P44	Principles of Electro-Motor and Applications	2/2		Major Elective	404P55	CNC Machine Design and Analysis	2/2	
Major Elective	404P45	Heat Engine Engineering and Applications	2/2		Major Elective	404P56	Air-Conditioned Engineering	2/2	
Major Elective	404P46	Industrial Management			Major Elective	404P57	Introduction of Electronics Cooling Technology	2/2	
Major Elective	404P47	Intelligent Manufacturing Topics	3/3		Major Elective	404P58	English for Engineering	2/2	
Major Elective	404P48	Principles and Application of Robotic Arm	2/2		Major Elective	404P59	Dynamic System Feedback Control Analysis	3/3	
Major Elective	404P49	Machining technology and practice of CNC tool machine (2)	2/2		Major Elective	404P60	Machining technology and practice of CNC tool machine (3)	2/2	
Major Elective	404P63	Numerical Analysis	3/3		Major Elective	404P65	Cyber-Physical Systems	3/3	
		Digital Signal	3/3		Major	404P66	Big data analytics	3/3	

43 Credits, 45 Hours 39 Credits, 41 Hours