

**MUST Curriculum Planning for Undergraduate Students of Academic Year 2023-2027,  
Department of Mechanical Engineering**

Year		112				Year		113				Year		114			
Course	Cr.	hr.	FEB 2024		Course	Cr.	hr.	FEB 2025		Course	Cr.	hr.	FEB 2026				
			Cr.	hr.				Cr.	hr.				Cr.	hr.			
MUST Core Required Courses	Physical Education	1	2	1	2	MUST Core Required Courses				MUST Core Required Courses	Taiwanese Society	2	2				
	Chinese Pinyin & Pronunciation Practice	1	2												2	2	
	Chinese tutor	0	5														
	Chinese Listening	1	2														
	Chinese Daily Speaking	1	2														
	Chinese Reading	1	2														
	Chinese Writing	1	2														
	Chinese Literature			3	3												
	Chinese Culture			3	3												
	Taiwanese Classified General Education			2	2												
Taiwanese Culutre			2	2													
<b>Subtotal</b>	<b>6</b>	<b>17</b>	<b>11</b>	<b>12</b>	<b>Subtotal</b>					<b>Subtotal</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>			
School Professional Required Courses	Technical English(I)(II)	2	2	2	2	School Professional Required Courses				School Professional Required Courses	Technical English III (IV)	2	2	2	2		
															2	2	
<b>Subtotal</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>Subtotal</b>					<b>Subtotal</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>			
compulsory courses	Career ethics and Factory affairs introduction			3	3	compulsory courses	Industrial Practice (I)	9	9		compulsory courses	Physics	2	2			
	Manufacturing Processes	3	3				Industrial Practice (II)			9		9	Applied Mathematics	3	3		
	Mechanical Concept and Mechanical Drawing	3	3				Introduction to Quality Engineering	3	3				Computer Aided Mechanical Drafting	3	3		
	Introduction to Mold and Die			3	3		Introduction to Machine Tools			3		3	Machining Practice	3	3		
	Linear Algebra			3	3								Mechanical Materials	3	3		
													Introduction to Mechatronics			2	2
													Design of Machine Elements			3	3
<b>Subtotal</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>Subtotal</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>Subtotal</b>	<b>14</b>	<b>14</b>	<b>11</b>	<b>11</b>			
Elective Courses	Dimensioning system	3	3			Elective Courses				Elective Courses	Precision Instrument and Parts Inspection	3	3				
	Introduction to Plastic Material	3	3									Welding Techniques	3	3			
	Introduction to Tooling engineering	3	3									Plastic Products Design	3	3			
	Applied Mechanics (Statics)			3	3							Plastic Products selection	3	3			
	Manufacturing Processes			3	3							Plastic Materials Selection and Application	3	3			
													Systematic Innovation Method	3	3		
													Design Thinking			3	3
													Pneumatic Control Technology			3	3
										Mold and Die			3	3			
										Introduction to green technique and engineering			3	3			
										Robotic Engineering			3	3			
										Trouble shooting of plastic injection molding			3	3			
										Materials Science and Engineering			3	3			

Year		115			
Course	Cr.	hr.	FEB 2027		
			Cr.	hr.	
MUST Core Required Courses					
	<b>Subtotal</b>				
School Professional Required Courses					
	<b>Subtotal</b>				
compulsory courses					
	<b>Subtotal</b>				
Elective Courses	Industrial Practice (III)	9	32		
	Industrial Practice (IV)			9	32
	Introduction to Systematic Innovation Method	3	3		
	Practical design of products	3	3		
	Technology in Reverse Engineering	3	3		
	Application in Thermo Engineering	3	3		
	Product Design Practice	3	3		
	Practices of Freezing and Air-Conditioning Engineering	3	3		
	Heat Treatment	3	3		
	Wind Power Generation Technology			3	3
	Surface Processing			3	3
	Computer Aided Manufacturing			3	3
Metal Molding Design and Analysis			3	3	

Cr./hr.—Credit/hour

Remarks:

1. Minimum credits required for graduation: 128 credits including 92 compulsory credits, and at least 36 elective credits(including the interdepartmental elective credits).
2. Undergraduate students shall take 5-hour chinese tutoring courses (0 credits) in the first semester of the first academic year.
3. Inter-departmental elective credits are transferable. Professional elective course credits shall not be fewer than 24.
4. The off-campus internship courses include: Industry Practice Internship (I), (II), (III), (IV), with a maximum of 80 hours of off-campus internship for one credit. Industry Practice Internship (I) and (II): The actual internship hours range from 32 to 36 hours per week. Industry Practice Internship (III) and (IV): The actual internship hours range from 32 to 40 hours per week.
5. The elective courses listed in the tables are subject to adaptation when necessary.

課務會議:114/12/15修訂通過  
院務會議:114/12/18修訂通過  
教務會議:115/1/7修訂通過