MUST Curriculum Planning for Undergraduate Students for Academic Years 2022-2025
Department of Mechanical Engineering

1st year(111)						2nd year(112)						3rd year(113)					
	Course	1st semester		2nd semester			Course	1st semester		2nd semester			Course	1st semester		2nd semester	
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.
MUST Core Required Courses	Physical Education	0	2	0	2	MUST Core Required Courses	Classified General Education	2	2	2	2	MUST Core Required Courses					
	Classified General Education	2	2	2	2		Classified General Education	2	2								
	Classified General Education	2	2	2	2												
	Subtotal	**4**	**6**	**4**	**6**		**Subtotal**	**4**	**4**	**2**	**2**		**Subtotal**				
School Professional Required Courses	Calculus (I) (II)	3	3	3	3	School Professional Required Courses	Technical English (III) (IV)	2	2	2	2	School Professional Required Courses					
	Physics (I) (II)	2	2	2	2												
	Ethics for Engineers	2	2														
	Applied Chinese(I)(II)	2	2	2	2												
	Technical English(I)(II)	2	2	2	2												
	Introduction to Programming	3	3														
	Introduction to Artificial Intelligence			3	3												
	Subtotal	**14**	**14**	**12**	**12**		**Subtotal**	**2**	**2**	**2**	**2**		**Subtotal**				
Department compulsory courses	Manufacturing Processes	3	3			Department compulsory courses	Computer Aided Mechanical Drafting	2	3			Department compulsory courses	Material Testing	2	3		
	Shop Practice (I)	1	3				Hydraulics and Pneumatics Practice	3	3				CNC Machine Tools Practice	2	3		
	Shop Practice (II)			1	3		Applied Mechanics (Statics)	2	2				Design of Machine Elements	3	3		
	Introduction to Mechatronics			2	2		Mechatronics and Practice	2	2				Thermodynamics	2	2		
	Mechanical Drawing			2	3		Engineering Mathematics (I)	3	3				Project (I)(II)	1	1	1	1
							Control Technology in PLC with Laboratory	1	2				Mechanical Design and Drawing			2	3
							Dynamics			2	2		Fluid Thermal Experiment			1	2
							Mechanics of Materials (I)			2	2		Precision Instrument and Parts Inspections			2	2
							Mechanism			3	3						
							Materials of Mechanical Engineering			3	3						
							Introduction to Mechatronics			2	3						
							Automatic Control Practice			3	3						
							Electronics Practice			2	2						
	Subtotal	**4**	**6**	**5**	**8**		**Subtotal**	**13**	**15**	**17**	**18**		**Subtotal**	**10**	**12**	**6**	**8**
Department Elective Courses						Department Elective Courses						Department Elective Courses	Intelligent Manufacturing Practice	3	3		
													The Microprocessor Practice	3	3		
													Introduction to Green Technique and Engineering	3	3		
													Semiconductor Manufacturing Process and Equipments	3	3		
													Engineering Mathematics (II)			3	3
													Heart Treatment			3	3
													Surface Engineering			3	3
													Pneumatic Control Technology			3	3
													Computer-Aided Design			3	3
													Robotic Engineering			3	3
													Computer-Aided Manufacturing			3	3
													Graphic Language Design			3	3
													Technology in Reverse Engineering			3	3
													System Integration Practice			3	3
													Technology in Laser Manufacturing			3	3

4th year(114)					
	Course	1st semester		2nd semester	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses					
	Subtotal				
School Professional Required Courses					
	Subtotal				
Department compulsory courses	Internship			9	9
	Subtotal	**0**	**0**	**9**	**9**
Department Elective Courses	Automatic Optical Inspection Technology	3	3		
	Mold Flow Analysis	3	3		
	Introduction to Nanotechnology	3	3		
	Computer-Aided Engineering	3	3		
	Application of the Measurement Technology	3	3		
	Practice in Solar Thermal Energy	3	3		
	Human Machine Interface (HMI) Practice	3	3		
	Materials Science and Engineering	3	3		
	The Theory of Inventive Problem Solving	3	3		
	CAD/CAM Practice and Application	3	3		
	Practices of Interdisciplinary Creactivity	3	3		
	Creative Design of Mechanical Devices			3	3
	Computer-Aided Mold Design			3	3
	Practice of Automatic Precision Machinery Design			3	3
	Theory and Practice of Mechanical Vibrations			3	3

Cr./hr.=Credit/hour

Remarks:

1. According to university regulations, students are required to meet the graduation requirement of basic language proficiency and professional skills.
2. Students shall take 4 hours Service Education courses (0 credits) in the first and second semester of the first academic year.
3. In the first three years, students must take 16-30 credits per semester, and 9-30 credits per semester in the 4th year.
4. Minimum credits required for graduation: 128 credits including 109 compulsory credits, and at least 19 elective credits (7 interdepartmental credits are included).
5. Students having graduated from a foreign country, including Hong Kong and Macau, with the equivalent of the second year of high school study of the ROC's high school sophomore level, or with a high school equivalent degree, need to take 140 credits including 109 compulsory credits, and at least 31 elective credits (including inter-departmental elective credits), while elective professional course credits shall not be fewer than 19. The program can be extended up to 3 academic years.
6. Students should take off-campus internship courses, and the relevant measures are handled in accordance with the Implementation of Off-campus Internship Teaching for Students in the Department of Mechanical Engineering".
7. Elective courses are subject to change if necessary.