MUST Curriculum Planning for Undergraduate Students of Academic Year 2024-2027,
Department of Semiconductor and Electro-Optical Technology

1st year(2024)						2nd year(2025)						3rd year(2026)					
	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	2	2	2	2	MUST Core Required Courses						MUST Core Required Courses	Taiwanese Society	2	2		
	chinese tutoring	0	5										Taiwanese Art			2	2
	Chinese Pinyin Pronunciation Practice	1	2														
	Chinese Listening Practice	1	2														
	Chinese Conversation Practice	1	2														
	Chinese Reading and Comprehension	1	2														
	Chinese Writing Practice	1	2														
	Chinese Literature			3	3												
	Chinese Culture			3	3												
	Taiwanese Culture			2	2												
	Taiwan Life and Law			2	2												
	Subtotal	7	17	12	12		Subtotal	0	0	0	0		Subtotal	2	2	2	2
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
													Ethics for Engineers			2	2
	Subtotal	2	2	2	2		Subtotal	0	0	0	0		Subtotal	2	2	4	4
Compulsory Courses	Physics	3	3			Compulsory Courses	Lab of Property Practice	9	32	9	32	Compulsory Courses	Introduction to Modern Science	3	3		
	Applied Mathematics	2	2										Semiconductor Material and Device	3	3		
	Basic Circuit Theory	2	2										Electronics Lab(II)	3	3		
	Introduction to Optoelectric Industry	2	2										Laser Engineering			3	3
	Computer Data Processing			3	3								Optoelectric Lab			3	3
	Electronics Circuits			3	3								Semiconductor Manufacturing			3	3
	Electronics Lab(I)			3	3												
	Geometrical Optics			3	3												
	Subtotal	9	9	12	12		Subtotal	9	32	9	32		Subtotal	9	9	9	9
Elective Courses	Vacuum Technology			2	2	Elective Courses	Material Science and Engineering	2	2			Elective Courses	Certification of Solid Design CAD and License Counseling	3	3		
	Introduction to Bio-Medical Engineering			2	2		Introduction to Computers and Programming	2	2				Optical Thin Film and Coating Technology	3	3		
	Engineering Applied Mathematics			2	2		Solid State Lighting	2	2				Technology Management	3	3		
	Introduction and Application of Artificial Intelligence			3	3		Thin Film Technology	2	2				Photonics applications	3	3		
	Introduction to Semiconductor Materials Industry			3	3		Vision optics	2	2				Thin Film Technology	3	3		
	Material Science and Engineering			2	2		Measurement of LEDs	2	2				Semiconductor Inspection technology	3	3		
							Micro-computer Application	3	3				Semiconductor Manufacturing Equipment	2	2		
							Mobile Computing Practice	3	3				Certification of Solid Design CAD	3	3		
							App Programming	3	3				Nanomaterials	3	3		
							Practical Vacuum Technology	3	3				Computer-Aided Optical System Design	3	3		
							Surface Engineering and AI Assistance	3	3				Semiconductor Packaging Process and Equipment	3	3		
							Introduction of Flat Panel Displays	3	3				Data Science			3	3
							CAD of Solid Design			2	2		Chromatics			3	3
							Introduction to Artificial Intelligence			2	2		Optoelectronic Device and Application			3	3
							Engineering statistics			2	2		Solar Photovoltaic Technology			3	3
							Chromatics			2	2		Digital Logic Design			3	3
							Solar Photovoltaic Technology			2	2		Python Application			3	3
													Memory Device Technology			3	3
													Semiconductor Lab			3	3
													Semiconductor Manufacturing Equipment			3	3
													CAD of Solid Certification			3	3
													Semiconductor Materials and Applications			3	3
													Photonic Biomedical Engineering			3	3
													Computer-Assisted Lighting System design			3	3
													Optical Factory			3	3
													Silicon Nano-Device Detection and Analysis			3	3
													Certification of Solid Design CAD			3	3
													Machine Learning			3	3
													Smart Industry and Manufacturing			3	3

4th year(2027)					
	Course	1st semester		2nd	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses					
	Subtotal	0	0	0	0
School Professional Required Courses					
	Subtotal	0	0	0	0
Compulsory Courses					
	Subtotal	0	0	0	0
Elective Courses	Lab of Property Practice(III)(IV)	9	32	9	32
	Project of Optoelectronics	3	3	3	3
	Solar Photovoltaic Technology	3	3		
	Optoelectronic Detection Engineering	3	3		
	Chromatics	3	3		
	Artificial Intelligence-Deep Learning	3	3		
	Labview Programming Design	3	3		
	Python Program Application	3	3		
	Machine Learning with Python	3	3		
	Generative AI and Applications	3	3		
	spectral analysis	3	3		
	Creative Design in Optoelectronics			3	3
	Nano Bio-Photonics			3	3
	Technology of Organic Light-Emitting Diode Display			3	3

Cr./hr.=Credit/hour

【Remarks】

1.Minimum graduation credits: 128 credits, including __38__ elective credits (at least __29__ credits for this major,
2.Elective courses for listed are subject to change if necessary.
3.According to university regulations, students are required to meet the graduation requirement of basic proficiency and professional skills.
4.For off-campus internship courses, please follow the relevant implementation regulations.
5.Off-campus practice courses : Lab of Property Practice(I)(II)(III)(IV), 1 credit requires no more than 80 hours. The actual internship hours for Lab of Property Practice(I)(II) are 36 to 40 hours per week, and the actual internship hours for Lab of Property Practice (III) and (IV) are 32 to 40 hours per week.