MUST Curriculum Planning for Undergraduate Students for Academic Years 2021-2024 Department of Semiconductor and Electro-Optical Technology

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	2	2	2	2	MUST Core Required Courses						MUST Core Required Courses	Taiwan Life and Law	2	2		
	Chinese Pinyin & Pronunciation Practice	1	2										Taiwanese Society	2	2		
	Chinese Listening	1	2										Taiwanese Culture			2	2
	Chinese Daily Speaking	1	2										Taiwanese Art			2	2
	Chinese Reading	1	2														
	Chinese Writing	1	2														
	Chinese Tutoring	0	5														
	Chinese Literature			3	3												
	Chinese Culture			3	3												
	Subtotal	**7**	**17**	**8**	**8**		**Subtotal**						**Subtotal**				
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**						**Subtotal**				
Department compulsory courses	Physics	3	3			Department compulsory courses	Lab of Property Practice(I)(II)	9	9	9	9	Department compulsory courses	Introduction to Modern Science	3	3		
	Applied Mathematics	2	2										Optoelectronic Material and Device	3	3		
	Basic Circuit Theory	2	2										Electronics Lab(II)	3	3		
	Introduction to Optoelectric Industry	2	2										Optoelectric Lab			3	3
	Computer Data Processing			2	2								Laser Engineering			3	3
	Electronics Circuits			3	3												
	Electronics Lab(I)			3	3												
	Geometrical Optics			3	3												
	Subtotal	**9**	**7**	**11**	**11**		**Subtotal**	**9**	**9**	**9**	**9**		**Subtotal**	**9**	**9**	**6**	**6**
Department Elective Courses	Computer Aided Design Model and Engineering Drawings			2	2	Department Elective Courses	Optoelectronics Technology(I)(II)	2	2	2	2	Department Elective Courses	Solid State Lighting	3	3		
	Vacuum Technology			2	2		Material Science and Engineering	2	2				Certification of Solid Design CAD and Product Design	3	3		
	Material Science and Engineering			2	2		Introduction to Programming	2	2				Optical Thin Film and Coating Technology	3	3		
	Introduction to Bio-Medical Engineering			2	2		Solid State Lighting	2	2				Technology Management	3	3		
	Engineering Applied Mathematics			2	2		Vision optics	2	2				Photonics applications	3	3		
	Introduction and Application of Artificial Intelligence			3	3		Micro-computer Application	3	3				Thin Film Technology	3	3		
							Mobile Computing Practice	3	3				Data Science	3	3		
							App Programming	3	3				Nanomaterials	3	3		
							Practical Vacuum Technology	3	3				Semiconductor Manufacturing Equipement	2	2		
							Surface Engineering and AI Assistance	3	3				Computer-Aided Optical System Design			3	3
							Introduction of Flat Panel Displays	3	3				Chromatics			3	3
							Introduction to Artificial Intelligence			2	2		Optoelectronic Device and Application			3	3
							Engineering Statistics			2	2		Optoelectronic Semiconductor Manufacturing Technology			3	3
							Chromatics			2	2		Digital Logic Design			3	3
							Measurement of LEDs			2	2		Python Application			3	3
							Light - Emitting - Diode Technology			2	2		Memory Device Technology			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
													Photonic Biomedical Engineering			2	2

4th year(114)					
	Course	1st semester		2nd semester	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses					
	Subtotal	**0**	**0**	**0**	**0**
School Professional Required Courses					
	Subtotal	**0**	**0**	**0**	**0**
Department compulsory courses					
	Subtotal	**0**	**0**	**0**	**0**
Department Elective Courses	Lab of Property Practice(III)(IV)	9	32	9	32
	Project of Optoelectronics	3	3		
	Solar Photovoltaic Technology	3	3		
	Optoelectronic Detection	3	3		
	Chromatics	3	3		
	Artificial Intelligence-Deep	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		
	Project of Optoelectronics			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 credits required for graduation: 128 credits including 86 compulsory credits,
and at least 42 elective credits (including the interdepartmental elective credits).
2. Undergraduate students shall take 5-hour chinese tutoring courses (0 credits) in the second semester of the second academic ye
3. Inter-departmental elective credits are transferable. Professional elective course credits shall not be fewer than 36.
4. 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.
5. The elective courses listed in the tables are subejct to adaptation when necessary.