MUST Curriculum Planning for Undergraduate Students of Academic Year 2026-2029, Department of Semiconductor and Electro-Optical Technology

1Year						2Year						3Year					
	Course	SEP 2026		FEB 2026			Course	SEP 2027		FEB 2027			Course	SEP 2028		FEB 2028	
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.
MUST Core Required Courses	Classified general Education	2	2	2	2	MUST Core Required Courses	Classified general Education	2	2	2	2	MUST Core Required Courses	Classified general Education	2	2	2	2
	Physical Education	2	2	2	2		Applied English(Ⅲ)(Ⅳ)	2	2	2	2						
	Applied Chinese(I)(II)	2	2	2	2												
	Applied English(I)(II)	2	2	2	2												
	Subtotal	8	8	8	8		Subtotal	4	4	4	4		Subtotal	2	2	2	2
School Professional Required Courses	Calculus(Ⅰ)(Ⅱ)	3	3	3	3	School Professional Required Courses						School Professional Required Courses					
	Physics and Physics Laboratory	2	2														
	Chemistry and Laboratory	2	2														
	Introduction to Programming	2	2														
	Introduction to Artificial Intelligence			2	2												
	Subtotal	9	9	5	5		Subtotal	0	0	0	0		Subtotal	0	0	0	0
compulsory courses	Vector Analysis	3	3			compulsory courses	Electromagnetic(I)(II)	2	2	2	2	compulsory courses	Project of Semiconductor and Optoelectronics	1	1	1	1
	Basic Electricity and Electricity Experiment			2	2		Engineering Mathematics(I)(II)	3	3	3	3		Optoelectric Lab(II)	2	2		
	Introduction to Semiconductors and Optoelectron			2	2		Applied Electronics	2	2				Semiconductor Manufacturing Technology	3	3		
	Basic Electronics			2	2		Electronics Lab(II)	3	3				Ethics for Engineers			2	2
	Electronics Lab(I)			3	3		Introduction to Modern Physics	3	3				Laser Engineering			2	2
	Introduction to Materials			2	2		Mechanism of Optoelectronic System	2	2				Semiconductor Lab			3	3
							Geometrical Optics			2	2						
							Optoelectric Lab(I)			2	2						
							Semiconductor Materials and Devices			3	3						
	Subtotal	3	3	11	11		Subtotal	15	15	12	12		Subtotal	6	6	8	8
Elective Courses	Introduction to Semiconductor and Optoelectric Industry	1	1			Elective Courses	Programming Language	2	2			Elective Courses	Certification of Solid Design CAD and License Counseling	2	2		
	Basic Circuit Theory	2	2				Vacuum Technology	2	2				Computer-aided Optical System Design	2	2		
	Photoelectric Drawing and modeling			2	2		CAD of Solid Design			2	2		Graphical Programming Language Design	2	2		
	Electronic Circuit and License Counseling			2	2		Material Science and Engineering			2	2		Practice of Digital Circuits	2	2		
							Introduction to Bio-Medicine			2	2		Green Energy Photoelectric Laboratory	2	2		
							Integrated-Circuits Engineering			2	2		Thin Film Technology	2	2		
													Solid State Lighting and License Counseling	2	2		
													Wave Optics	2	2		
													Optoelectronic Material & Device Physics	2	2		
													Materials Analysis			3	3
													Computer-aided Illumination System Design			2	2
													Applied Circuits in			2	2
													Flat Panel Display			3	3
													Optoelectronic Device and Application			2	2
													Chromatics			2	2
													Optical Thin Film and Coating Technology			2	2
													Optoelectronic Detection			2	2
													Introduction to Optical Microelectromechanical			2	2
													Semiconductor biomedical chip			2	2
													Solar Photovoltaic			3	3

4Year					
	Course	SEP 2029		FEB 2029	
		Cr.	hr.	Cr.	hr.
MUST Core Required Courses					
	Subtotal	0	0	0	0
School Professional Required Courses					
	Subtotal	0	0	0	0
compulsory courses	Project of Semiconductor and Optoelectronics(I)(II)	1	1	1	1
	Subtotal	1	1	1	1
Elective Courses	Practicum Training(I)(II)	9	9	9	9
	Design and Operation of TFT-LCD Panels	3	3		
	Creative Design in Optoelectronics	3	3		
	Liquid Crystal Materials and Optic	3	3		
	Computer-Assisted Design of Optical Thin Films	3	3		
	The Measurement of Semiconductors	3	3		
	Micro Opto Electro Mechanical Device and	3	3		
	Sloar-Cell-Driven LED Display			3	3
	Technology Management			3	3
	Semiconductor Material Analysis			3	3
	Nano Bio-photonics			3	3
	Technology of Organic Light-Emitting Diode display			3	3
	Projection Display Technology			3	3

Cr. /hr.=Credit /hour

Remarks:

1. Minimum graduation credits: 128 credits; Compulsory credits: _99_ credits. Elective credits: _29_ credits (elective credits include inter-departmental elective credits); the elective credits for majors in the department must not be lower than _20_ credits.
2. In the first three years, students must take 16-30 credits per semester, and 9-30 credits per semester in the 4th year.
3. Elective courses are subject to change if necessary.
4. Please implement according to the school's "Implementation Measures for Students' Basic Abilities and Graduation Thresholds".
5. 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 Semiconductor and Electro-Optical Technology".
6. This form created in _02.19 2025_.

明新科技大學 財團法人 半導體與光電科技系 MUST

半導體系課程規劃委員1

半導體與光電科技系 系主任 陳炳茂

半導體學院 院長 張合