MUST Curriculum Planning for Undergraduate Students for Academic Years 2025-2028
Department of Semiconductor and Electro-Optical Technology

1st year

Category	Course	FEB 2025 Cr.	FEB 2025 hr.	SEP 2025 Cr.	SEP 2025 hr.
MUST Core Required Courses	Classified general Education	2	2	2	2
	Classified general Education	2	2	2	2
	Physical Education	2	2	2	2
	Subtotal	**6**	**6**	**6**	**6**
School Professional Required Courses	Technical English(I)(II)	2	2	2	2
	Applied Chinese(I)(II)	2	2	2	2
	Calculus(I)(II)	3	3	3	3
	Physics and Physics Laboratory	2	2		
	Chemistry and Laboratory	2	2		
	Introduction to Computers and Programming	2	2		
	Introduction to Artificial Intelligence			2	2
	Subtotal	**13**	**13**	**9**	**9**
Compulsory Courses	Introduction to Semiconductors and Optoelectronics			2	2
	Basic Electronics			2	2
	Electronics Lab(I)			3	3
	Introduction to Materials			2	2
	Subtotal	**0**	**0**	**9**	**9**
Elective Courses	Introduction to Semiconductor and Optoelectric Industry	1	1		
	Basic Circuit Theory	2	2		
	Vector Analysis	3	3		
	Chinese Proficiency Test Preparation (I)	2	2		
	Chinese Grammar and Writing	2	2		
	Basic Electricity and Electricity Experiment			2	2
	Photoelectric Drawing and modeling			2	2
	Electronic Circuit and License Counseling			2	2
	Chinese Proficiency Test Preparation (II)			2	2

2nd year

Category	Course	FEB 2026 Cr.	FEB 2026 hr.	SEP 2026 Cr.	SEP 2026 hr.
MUST Core Required Courses	Classified general Education	2	2	2	2
	Subtotal	**2**	**2**	**2**	**2**
School Professional Required Courses	Technical English(III)(IV)	2	2	2	2
	Subtotal	**2**	**2**	**2**	**2**
Compulsory Courses	Electromagnetic(I)(II)	2	2	2	2
	Engineering Mathematics(I)(II)	3	3	3	3
	Applied Electronics	2	2		
	Electronics Lab(II)	3	3		
	Introduction to Modern Physics	3	3		
	Geometrical Optics			2	2
	Optoelectric Lab(I)			2	2
	Semiconductor Materials and Devices			3	3
	Subtotal	**13**	**13**	**12**	**12**
Elective Courses	Programming Language	2	2		
	Vacuum Technology	2	2		
	Mechanism of Optoelectronic System	2	2		
	CAD of Solid Design			2	2
	Graphical Programming Language Design			2	2
	Introduction to Bio-Medicine			2	2

3rd year

Category	Course	FEB 2027 Cr.	FEB 2027 hr.	SEP 2027 Cr.	SEP 2027 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	1	1	1	1
	Optoelectric Lab(II)	2	2		
	Semiconductor Manufacturing Technology	3	3		
	Ethics for Engineers			2	2
	Laser Engineering			2	2
	Subtotal	**6**	**6**	**5**	**5**
Elective Courses	Certification of Solid Design CAD and License Counseling	2	2		
	Computer-aided Optical System Design	2	2		
	Graphical Programming Language Design	2	2		
	Practice of Digital Circuits	2	2		
	Thin Film Technology	2	2		
	Solid State Lighting	2	2		
	Wave Optics	2	2		
	Optoelectronic Material & Device Physics	2	2		
	Semiconductor Lab			3	3
	Materials Analysis			3	3
	Computer-aided Illumination System Design			2	2
	Applied Circuits in Optoelectronics			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 Engineering			2	2
	Introduction to Optical Microelectromechanical System			2	2
	Semiconductor biomedical chip			2	2

4th year

Category	Course	FEB 2028 Cr.	FEB 2028 hr.	SEP 2028 Cr.	SEP 2028 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	Off-Campus Practice Training(I)(II)	9	9	9	9
	Project of Semiconductor and Optoelectronics(I)(II)	3	3	3	3
	Design and Operation of TFT-LCD Panels	3	3		
	Creative Design in Optoelectronics	3	3		
	Liquid Crystal Materials and Optic	3	3		
	Solar Photovoltaic Technology	3	3		
	Computer-Assisted Design of Optical Thin Films	3	3		
	The Measurement of Semiconductors	3	3		
	Micro Opto Electro Mechanical Device and System	3	3		
	Solar-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, including 41 elective credits (at least 29 credits for this major, the rest can be other departments).
2. The first, second, and third grade, students must take 16-30 credits each semester, and 9-30 credits each semester in the 4th grade.
3. Elective courses for listed are subject to change if necessary.
4. According to university regulations, students are required to meet the graduation requirement of basic proficiency and professional skills.
5. For off-campus internship courses, please follow the relevant implementation regulations.