

111學年度日間部國際產學合作專班(秋季班)-半導體與光電科技系選修課程變動表

113學年度科目	第__學年/學期	學分/時數	114學年度科目	第__學年/學期	學分/時數	變動類別(停開、新增、更改課程名稱、學分)	修訂及重補修原則說明
			視覺光學	四下	3/3	新增	
			電腦輔助光學系統設計	四下	3/3	新增	
			實體設計工程	四下	3/3	新增	
			複合材料與實務	四下	3/3	新增	
			真空技術實務	四下	3/3	新增	

系課務委員簽章：

半導體系課程
規劃委員 1

系主任簽章：

半導體與光電科技系
系主任 陳炳茂

院長簽章：

學院
院長 陳啟文

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

1 st year(111)					2 nd year(112)					3 rd year(113)									
	Course	1 st semester		2 nd semester			Course	1 st semester		2 nd semester			Course	1 st semester		2 nd 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			
	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 Equipment	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		Computer-Assisted Design of Optical Thin Films			3	3
								Chromatics			2		2		Optoelectronic Semiconductor Manufacturing Technology			3	3
								Measurement of LEDs			2		2		Digital Logic Design			3	3
								Light - Emitting - Diode Technology			2		2		Python Application			3	3
															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			

4 th year(114)					
	Course	1 st semester		2 nd 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	40	9	40
	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
	Vision Optics			3	3
	Computer-Aided Optical System Design			3	3
Engineering of Solid Design CAD			3	3	
Composite Materials and Applications			3	3	
Practical Vacuum Technology			3	3	

Cr./hr. = Credit/hour

Remarks:

- Minimum credits required for graduation: 128 credits including 86 compulsory credits, and at least 42 elective credits (including the interdepartmental elective credits).
- Undergraduate students shall take 5-hour chinese tutoring courses (0 credits) in the second semester of the second academic year.
- Inter-departmental elective credits are transferable. Professional elective course credits shall not be fewer than 36.
- 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.



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