

## 114學年度課程規劃表

半導體科技博士學位學程

日間部

[illegible]

第四學年(117)					
	科目	上學期		下學期	
		學分	時數	學分	時數
校 必 修	博士論文(三)(四)	3	3	3	3
	小計	3	3	3	3
院 必 修					
	小計	0	0	0	0
專 業 必 修	企業實務研發(三)(四)	2	2	2	2
	小計	2	2	2	2
專 業 選 修					

【科目類別】		學分	時數
通識科目、共同科目	校必修	12	12
專業科目	院必修	2	4
	專業必修	14	14
	專業選修	18	18
合計		46	48

**【注意事項】**

1. 最低畢業學分：46學分，含必修：28學分、專業選修18學分(本學位學程至少9學分)。
2. 請依本校「學生基本能力與畢業門檻實施辦法」實施。
3. 博士生需至本校研究所碩士班修習1門與英文能力訓練有關之課程(不包括專業課程)，但不計入畢業學分。
4. 學生第三年及第四年於產業或法人機構實作研發並完成論文為原則，並須修習「企業實務研發」共計4學期/8學分。修習「企業實務研發」時，除「博士論文」、「專題討論」以及博士學位候選人資格審定會議之加修專業課程外，不得同時修習其他課程。
5. 每學期修習學分：下限為1學分。
6. 「博士論文」必修12學分，俟口試通過後，一次給予12學分。
7. 本表建立於114年 2 月 12 日。





**MUST Curriculum Planning for Graduate Students for Academic Year 2025,  
Institute of Ph.D. Program in Semiconductor Technology**

1 <sup>st</sup> year(114)						2 <sup>nd</sup> year(115)						3 <sup>rd</sup> year(116)						
	Course	1 <sup>st</sup> semester		2 <sup>nd</sup> semester			Course	1 <sup>st</sup> semester		2 <sup>nd</sup> semester			Course	1 <sup>st</sup> semester		2 <sup>nd</sup> semester		
		Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.			Cr.	hr.	Cr.	hr.	
MUST Core Required Courses						MUST Core Required Courses						MUST Core Required Courses	Internship of Practical Technology Research and	2		2		
														Doctoral Dissertation(I)/(II)	3		3	
	Subtotal	0	0	0	0		Subtotal	0	0	0	0		Subtotal	5		5		
School Professional Required Courses	Semiconductor Technology Seminar(I)/(II)	1	2	1	2	School Professional Required Courses						School Professional Required Courses						
	Subtotal	1	2	1	2		Subtotal	0	0	0	0		Subtotal	0	0	0	0	
Compulsory courses	Semiconductor Engineering(I)/(II)	3	3	3	3	Compulsory courses						Compulsory courses						
	Subtotal	3	3	3	3		Subtotal	0	0	0	0		Subtotal	0	0	0	0	
Elective Courses	Nanotechnology	3	3			Elective Courses	Semiconductor Process Integration	3	3			Elective Courses						
	Semiconductor Processings Technology	3	3				Wide Bandgap Semiconductor Measurement and Analysis Technology	3	3									
	Solid state Physics	3	3				Power Diodes Devices	3	3									
	Semiconductor Materials	3	3				Spectral Analysis	3	3									
	Solar Photovoltaic Technology	3	3				Special Topics on Semiconductor Processings			3	3							
	Integrated Circuit Testing	3	3				Semiconductor Processings Lab.			3	3							
	Semiconductor Packaging Technology	3	3				Optical Detection Technology			3	3							
	Patent Search and Writing	3	3				Thin Films Measurement Technology			3	3							
	Physics of Semiconductor Devices			3	3		Semiconductor Bio-Medical Chip			3	3							
	Characterization of Materials			3	3													
	Devices Processings technology and Reliability			3	3													
	Semiconductor Packaging and Testing Practice			3	3													
	Optoelectric Materials and Devices			3	3													
	Big Data and Statistical Analysis Practice			3	3													
	Special topics on Nano-Materials and Fabrication			3	3													

4 <sup>th</sup> year(117)					
	Course	1 <sup>st</sup>		2 <sup>nd</sup>	
		semester Cr.	hr.	semester Cr.	hr.
MUST Core Required Courses	Internship of Practical Technology Research and Development(III)/(IV)	2		2	
	Doctoral Dissertation(III)/(IV)	3		3	
	Subtotal	5		5	0
School Professional Required Courses					
	Subtotal	0	0	0	0
compulsory courses					
	Subtotal	0	0	0	0
Elective Courses					

Remarks:

1. Please refer to the "Implementation Guidelines for Student Basic Competencies and Graduation Thresholds" of Ming-Hsin University of Sci. & Tech.
2. The minimum Graduation Credits are 46 credits which included 18 credits of professional electives (at least 9 credits must be from this Ph.D. degree program).
3. Students in this Ph.D. program must take one course related to English proficiency training from the master's program in the university (excluding professional courses), but it will not count into graduation credits.
4. During the third and the fourth years, students must take "Corporate Practice R&D" courses for a total of 8 credits in 4 semesters, Which are required to engage in research and development work at the related industry or corporate institution in order to complete ones thesis. While taking "Corporate Practice R&D" course, students are not allowed to take other courses, except those for "Doctoral Thesis", "Special Topics Discussions", and additional professional courses required for the Doctoral candidacy qualification review.
5. The minimum credits per Semester is 1 credit.
6. "Doctoral Thesis" is a mandatory 12 credits, awarded once after passing the oral examination.
7. The listed elective courses are for reference only and may be adjusted based on actual situation.
8. This form created on 2025/02/15.



辛學禮學院 張合

辛學禮學院 陳啟文