114/7/22校課程委員會議通過 114/07/15 院課程會議通過 114/07/10 學程課程委員會議通過

		科 目 名 稱 文學器質與情意表達(Appreciation of Literature and Emotional Expression)	學分 2	·上 時數 2	學分	- ト 時数		上 時數	學分	ト 時數		上 時數		時數	學分		學分	時數	總學分	備註
基礎課程	#	永續發展與社會實踐 (Sustainable Development and Social Practice) 生活與職場英文(一)~(二)(English for Life and Business (I)-(II))	1	1	3	3	$\blacksquare$													
	計	全民國防教育軍事訓練(一)~(二)(All-out Defense Education Military Training(I)-(II))	0.5	2	0.5	2														
		體育(一)~(四)(Physical Education(I)-(IV)) 藝文涵養與社會參與(Art Literacy and Social Participation)	1	2	2		1	2	1	2										
		歷史思維與多元文化領域(Historical Thinking and Multicultural Studies)							2	2										
		英語聽講(一)-(二)(Aural-Oral English(I)- (II)) 英文實務(一)-(二)(Practical English(I)- (II))		Н		Н	1	2	1	2					1	2	1	2		
		合 計	7.5	10	6.5	9	2	4	4	6					1	2	1	2	22	
核心	共計2 學分	大學之道(The Goal of University Education) 設計思考(Design Thinking)	1	2	1	1														<del> </del>
課		合計	1	2	1	1													2	
校共	共計	工讀實務實習前素養訓練(Pre-Work-study Practicum Training) 工讀實務實習(一)(Practical Training Curriculum (1)		$\vdash\vdash$	<u> </u>	┝	$\vdash$				1	1	4							
同	18	工讀書符書台(一)(Practical Training Curriculum (2)											4							
必修	學分	工讀實務實習(三)(Practical Training Curriculum (3) 工讀實務實習(四)(Practical Training Curriculum (4)		ш	$\vdash$	$\vdash\vdash\vdash$							4							
課	74	上頭貝4万貝目(四)(Flactical Flaming Curriculum (4) 合計									1	1	17						18	
		微積分(Calculus)	3	3																
		<ul><li>普通物理(General Physics)</li><li>普通化學暨實驗(一)(General Chemistry and Experiment I)</li></ul>	2	2	<del>                                     </del>	$\vdash$	$\vdash$													實作課程
		材料科學導論(一)(Introduction to Material Science I)	2	2																2511 2012
		普通化學暨實驗(二)(General Chemistry and Experiment II)			2	2														實作課程
		工業安全與衛生(Industrial Safety and Hygiene)		Щ	2	2														
		材料科學導論(二)(Introduction to Material Science II) 半導體物理(Semiconductor Physics)		$\vdash$	2	2														<del> </del>
		機器學習數學(Mathematics of Machine Learning)			2	2														
		半導體產業實務(Professional Semiconductor Industry)					2	2												產學共構課程
yar	44-	質能均衡(Mass and Energy Balances)		لــــــا	igspace	ш	2	2												
專業	共 計 59	程式設計(一)(Computer Programming I) 物理化學(一)(Physical Chemistry I)		Н	H	H	2	2									-	-		+
必	59 學	初建化学(一)(Engineering Mathematics I)		П	$\vdash$	H	2	2							$\vdash$					<u> </u>
修課	学分	物理化學(二)(Physical Chemistry II)							2	2										
程		流體力學(Fluid Mechanics)		لت	ᆸ	ш	Ш		2	2										
		熱量與質量輸送(Heat and Mass Transfer) 半導體製程暨實驗(一)(Semiconductor Fabrication and Experiment I)		ш	$\vdash$	Ш	Н		2	2	2	2			$\vdash$		<u> </u>			實作課程
		半導體製程暨實驗(—)(Semiconductor Fabrication and Experiment I)       材料分析暨實驗(Material Analysis and Experiment)		Н	H	Н	$\vdash$				2	2								實作課程
		儀器分析暨實驗(Instrumental Analysis and Experiment)									2	2					L			實作課程
		工程統計(Engineering Statistics)													2	2				
		半導體製程暨實驗(二)(Semiconductor Fabrication and Experiment II)		Щ	Щ.	$\vdash \vdash$									2	2				實作課程
		工程倫理與實務講座(Engineering Ethics and Professional Topics) 實務專題(一)(Special Topics in Practice I)		Н	<del>                                     </del>	$\vdash$	$\vdash$								1	2				演講式課程 實作課程
		半導體製程暨實驗(三)(Semiconductor Fabrication and Experiment III)		$\Box$													2	2		實作課程
		實務專題(二)(Special Topics in Practice II)															1	2		實作課程
		合 計	9	9	10	10	10	10	6	6	6	6	0	0	6	8	3	4	50	
		基本電學(Preliminary Course of Electronic Engineering) 奈米材料與技術(Nanomaterial and Technology)	3	3	<del>                                     </del>	$\vdash$	$\vdash$													+
		分析什學(Analytical Chemistry)	-	Ť	3	3														
		半導體實務專題(一) (Semiconductor Special Topics in Practice I)					1	2												實作課程
		有機化學(Organic Chemisty)		ш			3	3												
		能源工程概論(Introduction to Energy Engineeting) 半導體設備概論(Introduction to Semiconductor Equipment)		Н	-	H	3	2												<del> </del>
		一个等層政策和影響(Introduction to Semiconductor Equipment) 近代物理(Modern Physics)		$\vdash$			3	3												
l	共	半導體實務專題(二) (Semiconductor Special Topics in Practice II)							1	2										實作課程
		程式設計(二)(Computer Programming II)		ш					2	2										
	選修	工程數學(二)(Engineering Mathematics II) 半導體實務專題(三) (Semiconductor Special Topics in Practice III)		$\vdash\vdash$	-	$\vdash \vdash$			2	2	1	2								實作課程
		電化學工程(Electrochemical Engineering)				M					2	2								SKII BKIZ
		數值分析(Numerical Analysis)													3	3				
		威測原理與應用(Principles and Applications of Sensors)		Щ	Щ.	$\vdash \vdash$									3	3				
		奈米觸媒技術與應用(Nanocatalytic Technology and Application) 反應工程(Chemical Reaction Engineering)		$\vdash$		H									3	. 5	,	2		
專		永續發展與技術創新(Sustainable Development and Technique Innovation)		$\Box$													2	2		
業		產業技術及問題解析(Problem Solving and Technical Communication)															3	3		
選修		鋰電池產業實務專題講座(Lecture on Lithium Battery Industry Practice)		ш	3	3	Н			Ш	Ш				H		3	3		1
課		綠色製程概論(Introduction to Green Fabrication) 真空技術與實務(Vacuum Technology and Practice)		H	- 5	5	3	3		H	H	H			H		$\vdash$	$\vdash$	_	<del>                                     </del>
程		能源材料與製程導論(Introduction to Energy Materials and Processes)		П		H	3	3												1
		工業與環境毒物學(Industrial and Environmental Toxicology)							3	3										1
	製	電池製程技術(Battery Process Technology)		ш	igspace	ш	Ш		3	3	_	_								<del> </del>
	程模	公用設施(Utility Installations)  材料物理性質(Physical Properties of Materials)		Н	H	H	$\vdash \vdash$				3	3					$\vdash$	-		+
	組	例を中の理性員(Prysical Properties of Materials) 廢棄物處理(Solid Waste Treatment and Disposal)		П	$\vdash$	H	$\vdash$				3	3			$\vdash$					<u> </u>
	選修	電池組裝與分析實作(Battery Assembly and Analysis Practice)									3	3								實作課程
	(至少	綠色化學技術叢論(Green Chemistry Technology Forum)		口	$ldsymbol{oxed}$	凵	П						3	3						
	15學 分)	化工基礎概念解析 (Fundamental Conception Analysis of Chemical Engineering)		ш	$\vdash$	ш	$\vdash \vdash$			$\vdash$	$\vdash$	$\vdash$	3	3	_	_	-	-	-	1
	.47	電漿與薄膜製程(Plasma and Thin Film Processing) 程序控制與實驗(Process Control and Experiment)		Н	H	Н	Н								3	3				實作課程
		半導體元件與製程整合(Semiconductor Devices and Process Integration)															2	2		
		廢棄物資源化工程(Waste Resourcization Engineering)					囯										3	3		1
		電路板與半導體製作(Fabrication of Semiconductor and PCB)		ш	$\vdash$	Ш	H	,		Ш	Ш				H		3	3		1
		材料分析概論 (Introduction to Material Analysis) 光電材料製程實務(Practice of Optoelectronic Materials)		Н	H	Н	3	3	3	3					H					<del> </del>
		高分子材料(Polymeric Materials)				H	$\Box$		3	3										<u> </u>
		金屬材料(Metallic Materials)							3	3										
		電子材料(Electronic Materials)		$\blacksquare$	$ldsymbol{\sqcup}$	Ш	Н		3	3										<del>                                     </del>
		材料化學(Material Chemistry) 電池材料與分析實作(Battery Materials and Analysis Practice)		Н	H	Н	Н				3	3								實作課程
		電池が科契力引責行(battery waterials and Analysis Fractice) 奈米製程與材料(Nano-fabrication and materials )			Ħ	楫	┌┤			ЬT	Ľ		3	3			L	LТ	L	
		奈米科技概論(Introduction to Nanotechnology)											3	3						
		電子顯微鏡分析(Electron Microscope Analysis)		لــــا	igsqcup	ш	Ш								3	3				ļ
		奈米檢測分析(Nano-Characterization)  雲世檢測的分析技術(Rattery Testing and Analysis Technology)		Н	$\vdash$	Н	$\vdash \vdash$			$\vdash$	$\vdash$	$\vdash$			3	3	-	-	-	1
		電池檢測與分析技術(Battery Testing and Analysis Technology) 光電半導體元件與應用(Semiconductor and Applications)		Н	$\vdash$	Н	H								3	3	3	3		+
		尤电十等極九仟兵應用(Semiconductor and Applications) 合計	5	5	6	6	21	22	23	24	21	22	12	12	24	24	21	21	133	
							$\overline{}$													T
院重		基石專題 (Cornerstone project)		ш	1	3	ш													實作課程
院專業選			0	0		3	0	0	0	0	1	3	0	0	0	0	0	0		實作課程

1. 专乘是少舊修 14等分,包含共同必修 42等分,通識整修等分,本类完整 42等分。 2. 本學學專業體發分為「就程與起」、「材料與起」,需要有至少一概組的1等分以上,並取得專業體修共計48等分以上,並用專業。 3. 每學期間提出股為 27 等分 1一至 三年級不得分別16步,三至即年級不得少於1等分。 4. 必修實實(三)教子之子。 25 與是國際政務等 5. 修學第二專長學分學程言:最低學業學分能開闢至為共同必修 42等分,理數數修至分 8 等分(五原型,任理四原各 2 等分),專業必修公等分,專業整修48等分,合計148等分;已修等之第二等長學分學程外未等分,提計為為專業整修等分。

- 1. A minimum of 148 credits are required for graduation, including 42 credits from common required courses, 48 credits from elective General Education courses (choose four categories; 2 credits for each category), and 50 credits from major required courses, 48 credits from elective courses.

  2. The elective courses in this program are divided into the "Process Module" and the "Materials Module." Students must complete at least 15 credits from one of these modules and earn a total of at least 48 credits in specialized electives in order to graduate.

  3. The upper limit of course selection per senseties is 27 credits, with no less than 16 credits for the first to second grade students and no less than 9 credits for the third to fourth grade students.

  4. Students are required to take Physical Education (III) and Physical Education (IV). PE courses can be selected based on students interior stead to fourth years.

  5. Students who have completed a second-specialization credit program. The minimum graduation credit structure is adjusted as follows: 42 credits from elective General Education courses (choose four categories from the given five categories; 2 credits for each category), and 50 credits from elective courses, totaling 148 credits in all. Completed second-specialization credit program credits earned from other departments are calculated as the Departments major elective credits.