## 明志科技大學四技部 113 學年度入學 化學工程系 課程總表 Ming Chi University of Technology <sup>「2024</sup> SchoolYear」 Department of Chemical Engineering

113/06/18权課程委員會議通過 113/06/06院課程委員會議通過 113/06/06课程委員會議通過 Examination at School Curriculum Committee Meeting on Jure 18.2024 Examination at College Curriculum Committee Meeting on Jure 6.2024 Examination at Department Curriculum Committee Meeting on Jure 4.2024

Part				- <u></u>		-下	_=		二下		三上三下			四上 Grade 4							at College Curriculum Committee Meeting on June 6,2024 epartment Curriculum Committee Meeting on June 4,2024
Mathematical	礎 課 程 開 設 20 學		Gra First Se	ide 1 emester	e 1 Grade 1 Second Semester		Grade 2 First Semester		Grade 2 Second Semester		Grade 3 Gr First Semester Second		ide 3 Semester		E O		Semeste 條件		Number of Class		
Martine Martin Martine Martine Martine Martine Martine Martine Martine Martine																			Upper	Lower	
Part		Expression)																	Link	Liiik	
Mathematical		生活與職場英文(English for Life and Business)	3	3																	
Mathematical Control		體育(Physical Education)		_	1	2	1	2	1	2											
Column		歷史思維與多元文化領域(Historical Thinking and Multicultural Studies)			2	2															
Mathematical	Basic Course						1	2	1	2				1	2	1	2				
Series Methods (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					6.5	9	2	4	4	6	0 0	0	0	1	2	1	2				
Mathematical   Math	分) Core Course	設計思考(Design Thinking)			1	1															
Series Medical Control (1988)			1	2	1	1					1 1										
Mathematical Control	校共同必修(共 20學分)	工讀實務實習(一)(Practical Training Curriculum (1))																			
Mile	School Course	工讀實務實習(三)(Practical Training Curriculum (3))										4									
Marie		合 計 Total					0	0	0	0	1 1		0	0	0	0	0				
Mathematical   Math		微積分(Calculus)	3	3																	
## Company of the com		普通化學(General Chemistry)	3	3	3	3															
Part		質能平衡(Material and Energy Balance)	3	3	3	3	2	3													
Mathematical Control of Control	核	物理化學(一)(Physical ChemistryI)					3	3													
## CHINCHICAL PARTIES AND PART	必	化工產業與人工智慧應用					3	3	1	2											演講式課程Lecture series
Proposed Section	課								1	3											
Control   Cont	58	單元操作與輸送現象(一)							3	3											
Mathematical Continue	分 Department	單元操作與輸送現象(二)									3 3										
Part	Compulsory	物理化學實驗(Physical Chemistry Experiment)																			
Mathematical part		儀器分析(Instrumental Analysis)												3	3						
Part		工程倫理與實務講座(Engineering Ethics and Professional Topics)												1	3		-				演講式課程Lecture series
		化學工程實習(I)(II)(Practice for Chemical Engineering, I∼II)													_	1	4				
8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			13	15	10	12	9	9	5	8	10 12	0	0	6	12						
Mile		有機化學(二) (Organic Chemistry II)																			
Part	選修	***																			
Part	程	單元操作與輸送現象(三)							3	3				3	3						
Minor	極	(Unit Operation and Transport Phenomena III)												-							, , , , , , , , , , , , , , , , , , ,
Minimate contains the contains and the	Elective modules	合 計 Total	0	0	0	0	0	0	9	9	0 0	0	0	3	3	0	0				
Principal Prin		材料到隐躪論(Introduction to Material Science)			3	3															受學學分學程礎終Honors credit program elective
## 14 Properties   1																					榮譽學分學程選修Honors credit program elective
Parameter   Para		高分子化學(Polymer Chemistry)					3	3													榮譽學分學程選修Honors credit program elective
## 1988年記録のはいまいました。 ***  ***  ***  ***  **  **  **  **  **		·																			榮譽學分學程選修Honors credit program elective
Part																					
## 15 Part		化工實務專題—					1	2													
### APPROVISION Provision Provision Provision ### APPROVISION Provision Provision ### APPROVISION Provision Provision ### APPROVISION Provision		能源工程概論					3	3													
## 14 Proprocess		能源材料與製程導論					3	3													
1									1	3											
工事業に の表が表がいたいたいたいたいたいたいたいたいたいたいたいたいたいたいたいたいたいた		高分子加工暨實驗(Polymer Processing and Experiment)																			榮譽學分學程選修Honors credit program elective
Sect Section Section of Columnia Superior (Section Section S																					榮譽學分學程選修Honors credit program elective
開きたいます。		(Special Topics in Practice of Chemical Engineering II)																			
									,	,	3 3										榮譽學分學程選修Honors credit program elective
工程発音器		電化學(Electrochemistry)									3 3										榮譽學分學程選修Honors credit program elective
Process   Process of Chancel Engineering   1	專																				
を受け、対している。	業選	(Special Topics in Practice of Chemical Engineering III)																			
변경 등	課																				
Manual Conception Analysis of Chemical Engineering	至											3	3								遠距教學Distance learning
변화되었는데 Biology (Page 2015) 전 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34 學 分 Professional Elective (Requires at least 34											3	3								遠距教學Distance learning
응답하는		生物科技與生質能源產業										3	3								遠距教學Distance learning
Pacific for Commission Industry		儀器分析實驗(Instrumental Analysis Experiment)												1	3						
C.工機震設計(共通回路の(Namendal Aspirecing)																					漢調式課程,榮譽學分學程期修Lecture series, Honors credit program elective
整備分析(Numerical Analysis)  を生して現代的なelemical Engineering)  はこれ 現代的なelemical Engineering)  はこれ 現代的なelemical Engineering)  はこれ 現代のess Classical Processing and Safety)  はこれ 現代のess Classical Processing and Safety)  はこれ 現代のess Classical Processing and Safety)  はたま は は は は は は は は は は は は は は は は は は						-															榮譽學分學程選修Honors credit program elective
生化工程作時を全emical Expinenting)																					榮譽學分學程選修Honors credit program elective
程序制導動機 (Process Control and Experiment)		· · · · · · · · · · · · · · · · · · ·																			
電池部測例分析技術(Batery Testing and Analysis Technology)																					THE RESEARCH ASSESSMENT OF THE SECOND
生物技術整要能(Biolechnology and Practice)														-							無管學分學程選修 Honors credit program elective
計算他工應用Computer Application in Chemical Engecring)																3	3				
<ul> <li>競技展学等機製作(Fabrication of Semiconductor and PCB)</li> <li>「して製業業務議僚(Professional Topics in Chemical Cartography)</li> <li>「して製業業務等機関係(Professional Topics in Chemical Cartography)</li> <li>「して製業業務を行われている。」</li> <li>「しております。」</li> <li>「しています。」</li> <l< td=""><td></td><td>奈米材料與技術(Nanomaterial and Technology)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td><td>3</td><td></td><td></td><td></td><td>榮譽學分學程選修 Honors credit program elective</td></l<></ul>		奈米材料與技術(Nanomaterial and Technology)														3	3				榮譽學分學程選修 Honors credit program elective
位工製圖兼務簿座(Professional Topics in Chemical Cartography)						-															榮譽學分學程選修 Honors credit program elective
#EOL/Byt/#Raging Magnification Chemistry Technology and Experiments)																					
產業技術及問題解析 (Problem Solving and Technical Communication)       1 <td></td> <td>綠色化學技術暨實驗</td> <td></td>		綠色化學技術暨實驗																			
計算化學(Computational Chemistry)		產業技術及問題解析														3	3				
銀電池產業實務專題湯應(Lecture on Lithium Battery Industry Practice)																3	3				
A																3	3				
院專業 第六光標膜的綠色環境應用(Green application of nano-photocatalysis) Professional Elective Iji石專題 (Capstone Project)  1 3  1 3			0	0	6	7	17	21	11	15	14 17	9	9	25	27	27	27				
選修 奈米光模碼的蜂色環境應用(Green application of nano-photocatalysis) 3 3 9 9 1 1 3 1 1 3 1 1 1 3 1 1 1 1 3 1 1 1 1	院專業				1	3															
2.0010	選修 Professional								3	3	1 ^										
	Elective		0	0	1	3	0	0	3	3		0	0	0	0	0	0				

1. 本条単生外等資前窓が開放機関化化等報訊之置待需報信号分変化工業程模型之置待審報信告分・
2. 参年第二等長号が寄報者、最低等用等分前領額監為共同心修り得分・選問面修正の場合(区類型・任置四期名2等分)・専業必修50等分・等級置修54等分・合計140等分:已修等之第何就等の場合を2等分・資料当為本等用置修等分・
3. 参率時間以降子分等程者:最低等用等分的結构整整法共同心修り達分・運動部態正の心等分(区類型・任置四期名2等分)・事業必修50等分・等級置修54等分・等級置修54等分・合計140等分:已修等之時間減等分等程外未等分・接計為本等用置修等分・
4. 巳中報報度資率物度商券支配者・採行音等支配合。共享利率分支工业修等可定之化工業材料或取分信等用置修52等分・
6. 任工業官等實(一)・(四)」及「工業日等支工、為三下心修・另外可能分類と 6. 「工業官等實(一)・(四)」及「工業日等支工、為三下心修・另外可用 7. 三上額包含型以4/3倍等数上層、以前足固数・ 3. 日本記念の型以4/3倍等数上層、以前足函数・ 9. 必修鑑實(三)、董育(四),於大二至大回、採其整準項数等・

: Catalog Remarks

Is Judents of this department must take at least 6 credits of elective courses in either the Applied Chemistry module or the Chemical Engineering Processes module before graduation.

2. Students who have completed a second-specialization credit program: The minimum graduation credit structure is adjusted as follows: 42 credits from chere's courses, at least 8 credits from elective General Education courses (choose four categories from the given five categories; 2 credits for each category), and 58 credits from major required\_6 credits for month are calculated as the Department's major elective credits.

3. Students who have completed an interdisciplinary credit program: The minimum graduation credit structure is adjusted as follows: 42 credits from common required courses, at least 8 credits from elective ceredits.

3. Students who have completed an interdisciplinary credit program: The minimum graduation credit structure is adjusted as follows: 42 credits from elective courses, at least 8 credits from elective ceredits.

3. Students who have completed an interdisciplinary credit program: The minimum graduation credit structure is adjusted as follows: 42 credits from elective courses; at least 8 credits from elective courses (choose four categories from the given five categories; 2 credits for each category), and 58 credits from major required\_6 credits for 45 tudents who have applied for Interdisciplinary Practical Ellie Program, College of Environment and Resources must complete at least 8 credits from elective courses for Materials Engineering/Safety, Health and Environmental Engineering.

5. The upper limit of course selection per semester 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.

6. Fractical Training Curriculum (1) 44) and Self-Safudy English During Vecational Practice are major required\_6 credits from elective courses for elective credits.

7. The courses for first sensester of Grade 3 will be hea