

中國文化大學 理工學院 化學工程與材料工程學系 必修科目表

115 學年度起入學新生實施

[illegible]

Chinese Culture University, Required Courses List,
Department of Chemical and Materials Engineering , College of Natural Science and
Engineering

Effective for Students Enrolled in and from the 2026 Academic Year

Categories for Compulsory Courses	Course Title	Credit Hours	1st Year		2nd Year		3rd Year		4th Year		Remark
			1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	
Required Courses											
General Required Courses	SCHOOL—BASED CURRICULUM	2	1					1			
	CHINESE	4	2	2							
	FOREIGN LANGUAGE READING AND CONVERSATION(1)	3	1.5	1.5							Choose 1 of 3 Courses
	FOREIGN LANGUAGE READING AND CONVERSATION(2)	3			1.5	1.5					
	INTERDISCIPLINARY PROGRAM	12			6	6					
	ART AND HUMANITIES	4	4	4							
	SOCIAL SCIENCES	4									
Common Courses	PHYSICAL EDUCATION	0	0	0	0	0					
Total General and Common Courses		32	8.5	7.5	7.5	7.5		1			
Required Courses by College	(N246) ARTIFICIAL INTELLIGENCE APPLICATIONS AND PLANNING PRACTICE	3	3								Choose 1 of 3
	(N247) NET ZERO EMISSIONS AND GREEN TECHNOLOGIES	3	3								
	(N248) EMERGING TECHNOLOGIES	3		3							
Required Courses by Department	(2021)CALCULUS	6	3	3							Core Courses
	(2026) General Physics	4	2	2							
	(2019) General Chemistry	4	2	2							
	(2020) General Chemistry Laboratory.	2	1	1							
	(6003) Engineering Mathematics	6			3	3					
	(0682) Materials Science and Engineering	3			3						
	(6048) Mass and Energy Balance	3			3						
	(2025) Organic Chemistry	3			3						
	(2148) Organic Chemistry Laboratory	1			1						
	(2060) Physical Chemistry	3				3					
	(2163) Physical Chemistry Laboratory	1				1					
	(H531) Technical Paper Reading and Writing	2				2					
	(3430) Transport Phenomena and Unit Operations (I)	3				3					
	(3433) Transport Phenomena and Unit Operations (II)	3					3				
	(6026) Thermodynamics	3					3				
	(2215) Instrumental Analysis	2					2				
	(I074) Inorganic Materials	3						3			
	(6332) Chemical Reaction Engineering	3						3			
	(C696) Research Project and Implementation (I)	1						1			
	(N321) Chemical and Materials Engineering Laboratory	1							1		
	(C697) Research Project and Implementation (II)	1							1		
	(2972) Process Control	3							3		
	(6057) Process Design	3							3		
Total Credits of Required Subjects		67	8-11	8-11	13	12	8	7	8		

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			1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	1st semester (Sep)	2nd semester (Feb)	
Total Required Credits		99	16.5-19.5	15.5-18.5	20.5	19.5	8	8	8		
Graduate Credits		128									
Other provisions of graduate requirements :											
Global competitiveness	Passing the "Implementation Measures for the Global Competitiveness Assessment of University Students" is mandatory for graduation. Visit the website of the Registration Section for more information.										
Professional Ethics/ Special Topics in Chinese Culture	According to the university's 'Implementation Guidelines for Professional Ethics Education' and 'Implementation Guidelines for Chinese Culture Topics Lectures,' students are required to participate in two-semester courses: 'Professional Ethics' and 'Chinese Culture Topics.' For detailed information, please refer to the website of the Curriculum Section: https://cur.pccu.edu.tw/										
Whole Person Learning Passport	To fulfill the Whole Person Learning Passport requirements, students must actively participate in various learning activities. These activities are organized in accordance with our university's guidelines for the Whole Person Learning Passport. For more detailed information, please visit the website of the Extracurricular Activities Section at https://activity.pccu.edu.tw/ ."										