

中國文化大學 理工學院 機械工程學系 必修科目表

115 學年度起入學新生實施

必修類別	科 目 名 稱 (科目代號)	規定學分	一年級		二年級		三年級		四年級		備 註
			上	下	上	下	上	下	上	下	
通識科目	校本課程	2	1					1			
	國文	4	2	2							
	外文：閱讀與聽講（一）	3	1.5	1.5							三選一
	外文：閱讀與聽講（二）	3			1.5	1.5					
	跨域專長	12			6	6					
	人文學科領域	4	4	4							
	社會科學領域	4									
共同科目	體育	0	0	0	0	0					
通識及共同必修學分合計		32	8.5	7.5	7.5	7.5		1			
院必	(N246)人工智慧應用與規劃實務	3		3							三選一
	(N247)淨零排放與綠色科技	3		3							
	(N248)前瞻科技	3		3							
專業必修科目	(2021)微積分	6	3	3							院核心
	(2026)普通物理學	6	3	3							
	(2027)普通物理實驗	2	1	1							
	(6022)應用力學	4	2	2							
	(6030)機械製造	3	3								
	(6043)工廠實習	1	1								
	(6003)工程數學	6			3	3					
	(7173)電輔工程圖學	4			2	2					
	(6026)熱力學	3			3						
	(6029)材料力學	3			3						
	(6002)電路學	2			2						
	(2126)應用電子學	2				2					
	(6023)機動學	3				3					
	(6158)機械材料	3				3					
	(E523)電工實驗	1				1					
	(6031)機械設計原理	3					3				
	(6118)自動控制	3					3				
	(6025)流體力學	3					3				
	(D986)機械材料實驗	1					1				
	(6033)熱傳學	3						3			
	(8800)熱流實驗	1						1			
(C696)專題研究與實作I	1						1				
(C697)專題研究與實作II	1							1			
專業必修學分合計		68	13	12	13	14	10	5	1	0	
必修學分總計		100	21.5	19.5	20.5	21.5	10	6	1	0	
最低畢業學分數		128學分									
其他修業規定：											
全球競爭力檢定認證		通過全球競爭力檢定，依本校「學士班學生全球競爭力檢定實施辦法」辦理，詳細資訊請參考教務組網頁。 https://reg.pccu.edu.tw/									
倫理課程		參與「職業倫理」、「中華文化專題」，依本校「職業倫理教育實施要點」及「中華文化專題講座實施要點」辦理，詳細資訊請參考綜合業務組網頁。 https://cur.pccu.edu.tw/									
全人學習護照		參與全人學習護照各項學習活動達認證標準，依本校「全人學習護照實施辦法」辦理，詳細資訊請參考課外活動組網頁。 https://activity.pccu.edu.tw/									

Chinese Culture University, Required Courses List,
Department of Mechanical 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	0	2					
	SOCIAL SCIENCES	4									
Common Courses	PHYSICAL EDUCATION	0	0	0	0	0					
Total General and Common Courses Credits		32	8.5	7.5	7.5	7.5		1			
Required Courses by College	(N246) ARTIFICIAL INTELLIGENCE APPLICATIONS AND PLANNING PRACTICE	3		3				1			Choose 1 of 3
	(N247)NET ZERO EMISSIONS AND GREEN TECHNOLOGIES										
	(N248) EMERGING TECHNOLOGIES										
Required Courses by Department	(2021) Calculus	6	3	3							Core Courses
	(2026) General Physics	6	3	3							
	(2027) General Physics LAB.	2	1	1							
	(6022) Applied Mechanics	4	2	2							
	(6030) Manufacturing Processes	3	3								
	(6043) Machine Shop Practice	1	1								
	(6003) Engineering Mathematics	6			3	3					
	(7173) Computer Aided Engineering Graphics	4			2	2					
	(6026) Thermodynamics	3			3						
	(6029) Mechanics of Materials	3			3						
	(6002) Electrical Circuit Theory	2			2						
	(2126) Applied Electronics	2				2					
	(6023) Kinematics	3				3					
	(6158) Engineering Materials for Mechanical Engineers	3				3					
	(E523) Electrical Engineering Laboratory	1				1					
	(6031) Elements of Machine Design	3					3				
	(6118) Automatic Control Theory	3					3				
	(6025) Fluid Mechanics	3					3				
	(D986) Materials Test Experiment for Mechanical Engineers	1					1				
	(6033) Heat Transfer	3						3			
	(8800) Thermal and Fluid Experiments	1						1			
	(C696) Research Project and Implementation (I)	1						1			
	(C697) Research Project and Implementation (II)	1							1		
Total Credits of Required Subjects		68	13	12	13	14	10	5	1	0	
Total Required Credits		100	21.5	19.5	20.5	21.5	10	6	1	0	
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. https://reg.pccu.edu.tw/										

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/ ."