

中信科技大學 四年制 機械工程系 日間部 課程規劃表(適用114學年度入學)
 CTBC University of Science and Technology
 Curriculum of Mechanical Engineering Department
 for Four-Year Bachelor's Degree Program-Day Division (Effective from Fall 205)

科目名稱 Subject			第一學年 1st school year				第二學年 2nd school year				第三學年 3rd school year				第四學年 4th school year			
			上學期 1st semester		下學期 2nd semester		上學期 1st semester		下學期 2nd semester		上學期 1st semester		下學期 2nd semester		上學期 1st semester		下學期 2nd semester	
			學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours	學分 Credits	時數 Hours
校訂 課程 Stipulated Courses	通識 基礎 必修 Required General Education Courses	中文閱讀與表達(1)(2) Chinese Reading and Expression(1)(2)	2/ 2		2/ 2													
		英文聽力與閱讀(1)(2) English Listening and Reading(1)(2)					2/ 2		2/ 2									
		服務教育與大學社會責任(1)(2) Service Education and University Social Responsibility (1)(2)	1/ 1		1/ 1													
		體育(1)(2)(3) Physical Education(1)(2)(3)	2/ 2		2/ 2		2/ 2											
		多元語言 Multilingual Learning					2/ 2											
		小 計	5/ 5		5/ 5		6/ 6		2/ 2		0/ 0		0/ 0		0/ 0		0/ 0	
	通識博雅 必修 Required Liberal Arts Courses	健康與生活領域 Health and Life category	2/ 2		2/ 2													
		創意思考與訓練領域 Creative Thinking and Training category			2/ 2													
		跨域探索領域(1) Liberal Arts and Interdisciplinary Learning category(1)					2/ 2											
		資訊與智慧生活領域 Information and Smart Life category					2/ 2											
		生命與永續領域 Life and Sustainability category							2/ 2		2/ 2							
		人文與社會領域 Humanities and Social Sciences category									2/ 2							
		藝術與美感領域 Art and Beauty category											2/ 2					
		小 計	2/ 2		4/ 4		4/ 4		2/ 2		4/ 4		2/ 2		0/ 0		0/ 0	
	一般 選修 General Elective Courses	全民國防教育軍事訓練(1)(2)(3)(4) National Defense Education and Military Training (1)(2)(3)(4)	2/ 2		2/ 2		2/ 2		2/ 2									
		跨域探索領域(2)(3)(4)(5) Liberal Arts and Interdisciplinary Learning category(2)(3)(4)(5)							2/ 2		2/ 2		2/ 2		2/ 2			
		小 計	2/ 2		2/ 2		2/ 2		4/ 4		2/ 2		2/ 2		2/ 2		0/ 0	
專業必 修課程 Professional Required Courses	院必修 課程 Required College Courses	數學演練習作 Math Drills	2/ 2															
		生活物理 Life Physics	2/ 2															
		電腦軟體應用 Computer Software Application			2/ 2													
		職場倫理 Employment Ethics			2/ 2													
		創意實作 Innovations and Implementations					2/ 2											
		半導體概論 Introduction of Semiconductor					2/ 2											
		簡報製作與表達 Presentation and Expression							2/ 2									
		小 計	4/ 4		4/ 4		4/ 4		2/ 2		0/ 0		0/ 0		0/ 0		0/ 0	
		工程圖學 Engineering Drawing	2/ 2															
		電腦輔助繪圖 Computer-Aided Drawing	2/ 2															
		AI輔助程式設計 AI-assisted programming	2/ 2															

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系必修 課程 Required Department Courses	AI輔助機械製造 AI-Aided Manufacturing Processes			2/ 2													
	數控工具機 Computer Numerical Control Tool Machine			2/ 2													
	數控工具機實習 Computer Numerical Control Machine Tools Practice					2/ 2											
	可程式控制實習 Programmable Logic Controller Practice							2/ 2									
	工程材料與實驗 Engineering Materials and Test							2/ 2									
	氣液壓學 Pneumatics and Hydraulics									2/ 2							
	氣壓實習 Pneumatics Practice									2/ 2							
	實務專題(1)(2)(3)(4) Project(1)(2)(3)(4)					2/ 2		2/ 2		2/ 2		2/ 2					
	機電整合 Mechatronic											2/ 2					
	機電整合實習 Mechatronic Practice											2/ 2					
	小 計	6/ 6		4/ 4		4/ 4		6/ 6		6/ 6		6/ 6		0/ 0		0/ 0	
系專業選修 課程 Professional Elective Courses	工廠實習 Factory Practice	2/ 2															
	機械加工實習 Machine Work Practice	2/ 2															
	工程力學 Engineering Mechanics and Experiment	2/ 2															
	電工學與實習 Electric Machinery and Practice			2/ 2													
	飛機維修概論 Aircraft Maintenance			2/ 2													
	精密量測 Theory of Precision Measurement			2/ 2													
	校內實習(1)(2)(3)(4)(5)(6) On-Campus Internship(1)(2)(3)(4)(5)(6)					2/ 2		2/ 2		2/ 2		2/ 2		2/ 2		2/ 2	
	機構學 Mechanism					2/ 2											
	熱流概論 Introduction to Heat and Fluid					2/ 2											
	數位邏輯與實習 Digital Logic Design and Practice					2/ 2											
	熱處理與實習 Heat Treatment and Practice							2/ 2									
	電腦輔助立體製圖 Computer-Aided 3D Drawing							2/ 2									
	感測器原理與應用 Application and Theory of Sensor							2/ 2									
	自動控制 Automatic Control							2/ 2									
	飛機系統實務 Aircraft System Practices							2/ 2									
	工程數學 Engineering Mathematics									2/ 2							
	無人飛機概論 Introduction of UAV									2/ 2							

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	材料力學 Mechanics of Materials									2/ 2							
	微控器應用與實習 Microcontroller Application and Practice									2/ 2							
	材料機械性質 Mechanical Property of Materials									2/ 2							
	氣壓順序控制與實習 Pneumatic Sequential Control and Practice											2/ 2					
	機械設計 Design of Machine Elements											2/ 2					
	車銑複合加工實務 Milling and Turning Compound Processing											2/ 2					
	自動化機構設計與實習 Automation Mechanism Design and Practice											2/ 2					
	專利與工程創新 Patents and Engineering Innovation											2/ 2					
	無人機維修實務 UAV Maintenance													2/ 2			
	模流分析實務 Molding Flow Analysis and Practice													2/ 2			
	冷凍空調原理 Principle of Refrigeration and Air Conditioning													2/ 2			
	智慧製造技術 Intelligent Manufacturing Technology													2/ 2			
	工業影像檢測與實習 Practice of Industrial Image Inspection													2/ 2			
	智慧生活應用與實習 Application and Practice of Smart life													2/ 2			
	綠色廠務系統 Green Facility Systems													2/ 2			
	學期校外實習 Off-Campus Internship													9/			
	能源工程 Energy Engineering															2/ 2	
	模具設計實務 Mold Design Practice															2/ 2	
	電腦監控應用與實習 PC-Based Control Application and Practice															2/ 2	
	AI機器人應用與實習 AI Robotics Application and Practice															2/ 2	
	無人機應用實務 UAV Practice															2/ 2	
	半導體製程 Introduction of Semiconductor Process															2/ 2	
	電腦輔助工程分析 Computer-Aided Engineering Analysis															2/ 2	
	產業校外實習 Industrial Off-Campus Internship															9/	
	小 計Subtotal	6/ 6		6/ 6		8/ 8		12/ 12		12/ 12		12/ 12		25/ 16		25/ 16	
擬開最低選修學分 Proposed Minimum Elective Credits	合 計Total	4/ 4		2/ 2		2/ 2		6/ 6		6/ 6		6/ 6		10/ 10		10/ 10	

114年 07月08日 校課程發展委員會會議通過Amended Date：2025-07-08

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備註 Note	<p>一、畢業總學分至少128學分： The total number of credits completed to be eligible to graduate shall not be less than 128 credits.</p> <p>1.校訂必修36學分(含通識基礎必修18學分、通識博雅必修18學分)。 The stipulated compulsory credits shall be 36 credits.(18 credits for required general education courses, and 18 credits for required liberal arts courses.)</p> <p>2.專業必修46學分(院必修14學分、系必修32學分)。 The professional compulsory credits shall be 46 credits.(14 credits for required college courses, and 32 credits for required department courses.)</p> <p>3.系專業選修至少34學分。 The professional elective credits shall be not less than 34 credits.</p> <p>4.跨系選修至多12學分。 The number of inter-department elective credits shall be up to 12 credits.</p> <p>※「微學分課程」最多採計12學分。 The number of 'Micro-Credit Courses' credits shall be up to 12credits.</p> <p>二、畢業門檻 Graduation Threshold：</p> <p>1.學生於修業年限內，應修畢「校訂必修」、「專業必修」、「系專業選修」、「跨系選修」共計128學分。 Students are required to complete a total of 128 credits of " Stipulated Compulsory Course", "Professional Compulsory Course", "Department Professional Elective Course", and "Inter-College Elective Courses " within their academic years.</p> <p>2.系專業能力門檻(依中信科技大學機械工程系畢業門檻實施要點辦理)。 Department Professional Threshold (CTBC University of Science and Technology Regulations of Graduation Threshold of Mechanical Engineering Department).</p> <p>3.英文能力門檻(依中信科技大學輔導學生取得英檢證照實施辦法辦理)。 English Proficiency Threshold (CTBC University of Science and Technology Regulations of Tutoring Students to Get English Proficiency Certificates)</p> <p>三、校訂課程 Stipulated Courses：</p> <p>1.校訂課程不須依先後順序修課，不得互抵者，包括「中文閱讀與表達(1)(2)、英文聽力與閱讀(1)(2)、體育(1)(2)(3)」課程。 Stipulated courses are not required to be taken in sequence and the credits shall not be mutually transferred, including 「Chinese Reading and Expression(1)(2), English listening and reading (1)(2), and physical education (1)(2)(3)」 courses.</p> <p>2.校訂課程不須依先後順序修課，得互抵者，包括「服務教育與大學社會責任(1)(2)」、「健康生活領域」、「跨域探索領域(1)(2)(3)(4)(5)(6)」、「生命與永續領域」課程。 Stipulated courses are not required to be taken in sequence, and those that may be mutually substituted include 「Service Education and University Social Responsibility (1)(2)」、「Health and Life category」、「Liberal Arts and Interdisciplinary Learning category (1)(2)(3)(4)(5)(6)」,and 「Life and Sustainability category」 courses.</p> <p>3.校訂課程不須依先後順序修課，包括「全民國防教育軍事訓練(1)(2)(3)(4)」課程。 Stipulated courses are not required to be taken in sequence, including 「National Defense Education (1)(2)(3)(4)」 courses.</p> <p>四、專業課程 Professional Courses：</p> <p>1.「實務專題(1)(2)(3)(4)」課程應依先後順序修課，得互抵。 「Project(1)(2)(3)(4)」 shall be taken in sequence and may complement each other.</p> <p>2.「校內實習(1)(2)(3)(4)(5)(6)」課程不須依先後順序修課。 「On-Campus Internship(1)(2)(3)(4)(5)(6)」 are not required to be taken in sequence.</p>															