

臺北城市科技大學四年制日間部機械工程系(車輛組)課程規劃表(113學年度入學適用)

TPCU four-year Undergraduate Program Day School Department of Mechanical Engineering/Division of Vehicle Engineering curriculum Planning(applicable to 113 semester year admission)

113年01月22日-112學年度第2學期第2次系課程發展委員會訂定
113年03月18日-112學年度第2學期第1次系課程發展委員會審議
113年04月02日-112學年度第2學期第1次系課程發展委員會審議
2024-01-22 112 academic year 2nd semester 2nd committee of department curriculum development reviewed
2024-03-18 112 academic year 2nd semester 1st committee of department curriculum development reviewed
2024-04-02 112 academic year 2nd semester committee of school curriculum development reviewed

類別 category	科目名稱 subject name	第一學年 1st semester year				科目名稱 subject name	第二學年 2nd semester year				科目名稱 subject name	第三學年 3rd semester year				第四學年 4th semester year					
		上學期 fall		下學期 spring			上學期 fall		下學期 spring			上學期 fall		下學期 spring		上學期 fall		下學期 spring			
		學分 credit	時數 hour	學分 credit	時數 hour		學分 credit	時數 hour	學分 credit	時數 hour		學分 credit	時數 hour	學分 credit	時數 hour	學分 credit	時數 hour	學分 credit	時數 hour		
基礎通識 basic general education	中文閱讀與寫作 Chinese Reading and Writing	2	2			體育(三) Physical Education(III)	2	2													
	共同外語(一) Common Foreign Language (I)			2	2	共同外語(二)(三) Common Foreign Language(II)(III)	2	2	2	2											
	體育(一) Physical Education (I)	2	2																		
	體育(二)-高爾夫 Physical Education II: Golf			2	2																
	小計 subtotal	4	4	4	4	小計 subtotal	4	4	2	2	小計 subtotal	0	0	0	0	小計 subtotal	0	0	0	0	
類別學分小計 category credits subtotal		14																			
		1.共同外語課程需修滿6學分。學生於修課前即可選擇「英語」或「日語」為外語課程。 1. Common foreign language courses require 6 credits. Students can choose "English" or "Japanese" as the foreign language course before taking the course. 2.選定語言後，不可異動。 2. Once the language is selected, it cannot be changed.																			
職用通識 career application general education	職場應用文 Workplace Applied Chinese			2	2	法律與生活 Law and Life			2	2											
	社會責任實踐(一)(二) Social Responsibility Practice (I) (II)	0	1	0	1																
	職場禮儀與口語表達 Workplace Etiquette and Oral Communication	2	2																		
	小計 subtotal	2	3	2	3	小計 subtotal	0	0	2	2	小計 subtotal	0	0	0	0	小計 subtotal	0	0	0	0	
類別學分小計 category credits subtotal		6																			
多元通識 multiple general education			1.「多元通識」由通識教育中心訂定預備課程，預備後列出應選修之人文藝術領域、自然科技領域及社會科學領域三類之應選修課程，每一領域至多選修4學分，共計8學分之課程。 1. The General Education Center would offer "Multiple General Education" courses selection for students to choose from. After the advance selection, the General Education center would list courses in the following three categories (domains): Arts and Humanities, Natural Technologies and Social Science. Students are to choose at most 4 credits from each category (domain), with the total of 8 credits. 2. 通識教育中心所公布各院、系、學程所提供之補助課程，亦可承認為通識選修課程。唯學生選修所隸屬之院、系及學程提供之課程，則不予承認。 2. Supplementary courses provided by various colleges, departments, and programs announced by the General Education Center can also be recognized as general elective courses. However, students taking elective courses provided by the colleges, departments, and programs to which they are affiliated will not be recognized. 3. 「名人講座」係跨類別選修課程，可承認為「多元通識課程」中任一領域課程，以一次為限。 3. "Celebrity Lecture" is a cross-category elective course and can be recognized as a course in any field of "Multiple General Education Courses", only once.																		
	類別學分小計 category credits subtotal		8																		
	院訂必修 compulsory courses required by the college	工程通識 Engineering General Education	2	2			科技應用 Application of Science and Technology			2	2	職業講座 Occupation Career Lecture	2	2			工程產業講座 Engineering Industry Seminar			2	2
小計 subtotal		2	2	0	0	小計 subtotal	0	0	2	2	小計 subtotal	2	2	0	0	小計 subtotal	0	0	2	2	
類別學分小計 category credits subtotal		8																			
專業基礎必修 compulsory courses for professional basics	電腦軟體應用 Computer Software Applications	3	3			工程材料與應用 Engineering Materials and Applications	3	3			工程術語導讀(一) English for Engineering Terminology (I)	2	2								
	機械製圖 Mechanical Drawing	2	3			電腦輔助立體繪圖 Computer Aided 3D Model Drafting	2	3			實務專題(一) Practical Project (I)	2	3								
	工程概論 Introduction to Engineering	3	3			液壓控制與實習 Fluid Pressure Control and Internships			2	3	實務專題(二) Practical Project (II)			2	3						
	電腦輔助繪圖 Computer Aided Drawing			2	3					工程術語導讀(二) English for Engineering Terminology (II)			2	2							
	應用力學 Applied Mechanics			2	2					熱流學與實驗 Thermo-Fluid Science and Experiment			2	3							
	小計 subtotal	8	9	4	5	小計 subtotal	5	6	2	3	小計 subtotal	4	5	6	8	小計 subtotal	0	0	0	0	
類別學分小計 category credits subtotal		29																			
專業必修 required for majors	內燃機 Internal Combustion Engine	2	2			車輛工程與實務(二) Vehicle Engineering and Practice (II)	2	3			車輛感測學 Vehicle Sensing Science	2	2								
	車輛安全概論 Automobile Safety Devices			2	2	智慧車輛實務 Intelligent Vehicle Practice	2	3			汽機車結構設計 Automotive Body Design	2	2								
	車輛工程與實務(一) Vehicle Engineering and Practice (I)			2	3	油電車輛概論 Hybrid Electric Vehicle Introduction	2	2			電腦輔助設計 Computer Aided Design	2	3								
	應用電子學與實習 Application of Electronics Lab.			2	3	電動車輛新科技 Electric Vehicle New Technology	3	3			車輛專業實務 Vehicle Professional Practice			3	3						
							汽機車綜合檢修實習 Internship in Comprehensive Maintenance of Automobile and Locomotive			2	3	綠能車輛技術 Green Electric Vehicles			2	2					
	小計 subtotal	2	2	6	8	車輛底盤實務 Vehicle Chassis Practice			2	3	汽機車體結構實務 Automotive Body Design			2	3						
類別學分小計 category credits subtotal		34																			
專業核心選修 professional core electives	汽機車原理 Principles of automobiles and locomotives	2	2			車輛懸吊系統 Automotive Suspension System	3	3			電動車輛電池技術實務 Electric Vehicle Battery Technology Practice	3	3								
							機車動力檢修實習 Motorcycle Maintenance & Repair Services Practice	3	3			電動車輛電腦控制與實習 Electric Car Computer Control and Practice	3	3							
							電動車輛電路控制 Electric Car Circuit Control			3	3	車身钣金與塗裝 Auto Body Repairs & Painting	2	2							
							電動車輛檢測及維修 Electric Car Examination and Service			2	2	引擎電路控制 Engine Control System	3	3							
							焊接實務 Welding Practice			3	3	中古車鑑定與實務 Used Car Appraisal Practice	3	3							
	小計 subtotal	2	2	0	0	小計 subtotal	6	6	8	8	小計 subtotal	14	14	3	3	小計 subtotal	0	0	0	0	
類別學分小計 category credits subtotal		33																			
專業選修 professional electives	計算機程式 Computer Programming			3	3	機械設計 Mechanical Design	3	3			專利申請與撰寫 Patent Application and Writing	2	2			軌道車輛實務學	3	3			
	機構創意思考與設計 Creative Thinking and mechanism Design			3	3	熱力學 Introduction to Thermodynamics	2	2			機電科技應用 Electromechanical Technology Application	3	3			校外實習(一) Off-campus Internship (I)	9	*			
	工程數學 Engineering Mathematics			2	2	視窗程式設計 Windows Programming Design	3	3			汽車市場行銷與企劃 Automotive Marketing and Planning	2	2			車輛設計 Vehicle Design	3	3			
	焊接原理 Welding Principle			2	2	順序控制與實習 Sequence Control and Practice	3	3			顧客抱怨處理技巧 Dealing with a Customer Complaint			2	2	潔淨車輛概論 Introduction to Vehicle Cleaning	3	3			
							自動變速箱原理 Principle of Automatic Transaxles	2	2			焊接工程與實習 Welding Engineering and Internship			3	3	校外實習(二) Off-campus Internship (II)			9	*
							引擎系統 Engine System	2	2			車輛經營與管理實務 Vehicle Operation and Management Practices			2	2	軌道機電系統 Electrical and Mechanical System of Railway			3	3
							材料力學 Mechanics of Materials			2	2	校外實習(暑) Off-campus Internship (Summer)			3	*	車輛鑑賞 Vehicle Appreciation			2	2
	小計 subtotal	0	0	10	10	小計 subtotal	15	15	2	2	小計 subtotal	7	7	10	7	小計 subtotal	18	9	17	8	
	類別學分小計 category credits subtotal		79																		
備註 remark	基礎通識basic general education : 14		1.本系未開辦之課程可至外系選修，並於選課前提出申請，經核准後始得列入專業專業選修學分，以各系制定專業選修學分為標準，至多可承認二分之一為上限。 1. Courses not offered by this department can be taken as electives at external departments, and applications must be submitted before course selection. Only after approval can they be included in the elective credits for graduation majors. The elective credits for majors set by each department shall be used as the standard. At most one-half may be admitted as the upper limit.																		
	職用通識career application general education : 6		2.校外實習課程可任選下列三種方式之一實施： (1)暑期實習：需實習滿8週，每周40小時，共320小時(含)以上。 (2)學期實習：需實習滿18週，每周40小時，共720小時(含)以上。 (3)學年實習：需實習滿36週，每周40小時，共1,440小時(含)以上。																		
	多元通識multiple general education : 8		2. Off-campus internship courses can be implemented in one of the following three ways: (1) Summer internship: The internship is required for 8 weeks, 40 hours per week, and a total of more than 320 hours (inclusive). (2) Semester internship: The internship is required for 18 weeks, 40 hours per week, and a total of more than 720 hours (inclusive). (3) Internship during the academic year: The internship is required for 36 weeks, 40 hours per week, and a total of more than 1,440 hours (inclusive).																		
	院訂必修compulsory courses required by the college : 8		*本校日間部四年制學生，除依本校學則規定修滿應修之學分外，並應符合相關外語能力、專業實務技能規定之條件始得畢業。 *Four-year day school students of our school, in addition to completing the required credits in accordance with the school's academic regulations, must also meet the requirements of relevant foreign language proficiency and professional practical skills in order to graduate.																		
	專業必修required for majors : 63 (其中專業核心選修至少10學分) 專業核心選修超修學分可計入專業選修 Professional electives (including electives prescribed by the college) : 29 (including at least 10 credits of professional core electives)		畢業最低學分數minimum credits for graduation : 128																		