

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(111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 111 semester year admission)

11202021201-112學年畢業生課程表(1)A(學業發展課程表)
 11202021201-112學年畢業生課程表(2)B(學業發展課程表)
 2023-02-28 111 students view 2nd semester 3rd semester of department curriculum development record
 11202021201-112學年畢業生課程表(3)C(學業發展課程表)
 2023-02-28 111 students view 2nd semester 3rd semester of college curriculum development record
 2023-02-28 111 students view 2nd semester 3rd semester of school curriculum development record

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.選定外語後，不可再更改。 2. Once the language is selected, it cannot be changed.																				
應用通識 career application general education	職場應用文 Workplace Applied Chinese			2	2	法律與生活 Law and Life			2	2										
	勞作教育(一)(二) Physical Education (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.為符合本校「通識教育特色」，同學應依規定修習「基礎通識」(6學分)、「應用通識」(6學分)、「多元通識」(8學分)、「跨領域」(2學分)等共計22學分。 1. In order to comply with the "general studies planning characteristics" of our school, students should graduate with 14 credits of "Basic General Studies", 6 credits of "Vocational General Studies" and 8 credits of "Diverse General Studies", for a total of 28 credits. 2.多元通識，由通識教育中心提供課程，同學須先向通識中心人文課選擇，由該師資組及通識中心人文課選擇二項之通識課程，並至少於2領域以上選擇，且計學分2學分。 2. "Multiple General Studies" has pre-selected courses set by the General Education Center. After pre-selection, the courses that should be taken are listed in the fields of humanities and arts, natural science and technology, and social sciences. Please choose at least 2 fields or more, a course with a total of 8 credits. 3.100學分畢業，修滿通識中心人文課、本系所有規定之通識課程，亦可申請為通識課程。若學生選擇非通識中心人文課、及非本系、學程所修之課程，則不予承認。 3. Starting from the 2023 academic year, the supplementary courses provided by various colleges, departments, and programs announced by the General Studies Center can also be recognized as general elective courses. Students can only take the courses provided by the college to which they are affiliated and the courses they are affiliated with. Courses provided by departments or programs will not be recognized. 4."Credit by Lecture" is a cross-category elective course, which can be used as a credit for any course in the "Classified General Courses" (2 credits), limited to one time.																			
	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			小計 subtotal	2	2			小計 subtotal	2	2			小計 subtotal	2	2	
		類別學分小計 category credits subtotal		8																
專業基礎必修 compulsory courses for professional basics	製造學 Manufacturing	3	3			工程材料與應用 Engineering Materials and Applications	2	3			工程術語導讀(一) English for Engineering Terminology (I)	2	2							
	電腦軟體應用 Computer Software Applications	3	3			電腦輔助立體繪圖 Computer Aided 3D Model Drafting	2	3			專業專題(一) Practical Project (I)	2	3							
	機械製圖 Mechanical Drawing	2	3			流體壓力控制與實習 Fluid Pressure Control and Internships		2	3		專業專題(二) Practical Project (II)		2	3						
	工程概論 Introduction to Engineering	3	3								工程術語導讀(二) English for Engineering Terminology (II)		2	2						
	電腦輔助繪圖 Computer Aided Drawing			2	3						熱流學與實驗 Thermo-Fluid Science and Experiment			2	3					
	靜力學 Statics			2	2															
	小計 subtotal	11	12	4	5	小計 subtotal	4	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		31																		
專業必修 required for majors	車輛工程實習(一) Vehicle Engineering and Practice (I)			2	3	車輛工程實習(二) Vehicle Engineering and Practice (II)	2	3			車輛感測學 Vehicle Sensing Science	2	2							
	應用電子學實習 Application of Electronics Lab.			2	3	智慧車輛實務 Intelligent Vehicle Practice	2	3			車輛結構實習 Car-Body Structure Practice	2	3							
						電動車輛設計 Electric Vehicle Design	2	2			車輛專業實務 Vehicle Professional Practice		3	3						
						汽車綜合檢修實習 Internship in Comprehensive Maintenance of Automobile and Locomotive		2	3		綠能車輛技術 Green Electric Vehicles		2	2						
						車輛結構設計 Car-Body Structure Design		2	2											
						車輛底盤實務 Vehicle Chassis Practice		2	3											
	小計 subtotal	0	0	4	6	小計 subtotal	6	8	6	8	小計 subtotal	4	5	5	5	小計 subtotal	0	0	0	0
類別學分小計 category credits subtotal		25																		
專業核心必修 professional core electives	汽車原理 Principles of automobiles and locomotives	2	2			車輛懸吊系統 Automotive Suspension System	3	3			電動電池技術實務 Electric Vehicle Battery Technology Practice	3	3			中古車鑑定與實務 Used car appraisal and practice	2	2		
	機車動力檢修實習 Motorcycle Power Inspection and Repair	3	3			自動變速箱原理 Principle of Automatic Transaxes	2	2			電動車輛控制與實習 Electric Car Computer Control and Practice	3	3			車輛設計 Automotive Design	3	3		
	內燃機 Internal Combustion Engine	2	2			引擎系統 Engine System	2	2			引擎電路控制 Engine Control System	3	3			潔淨車輛概論 Clean Vehicles Introduction	3	3		
	車輛安全概論 Automobile Safety Devices			2	2	電動車新式科技 Electric Vehicle New Technology	3	3			車身钣金與塗裝 Auto Body Repairs & Painting	2	2			車輛專題討論 Vehicles Seminar	3	3		
	車輛高壓 Vehicle Appreciation			2	2	電動車輛控制 Electric Car Circuit Control	3	3			電動車輛測試與實習 Electric Vehicle Motor Test and Practice	3	3							
						電動車輛檢測及維修 Electric Car Examination and Service		2	2		現代車輛技術 Modern Automotive Technology			3	3					
	小計 subtotal	7	7	4	4	小計 subtotal	7	7	8	8	小計 subtotal	11	11	6	6	小計 subtotal	8	8	3	3
類別學分小計 category credits subtotal		54																		
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			軌道工程學 Railway Engineering	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			流體力學 Fluid Mechanics	2	2			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			動力學 Dynamics	2	2			校外實習(二) Off-campus Internship (II)	9	*		
						數位控制機 Numerical Control Machine	3	3			熱傳學 Heat Transfer	3	3			軌道電機系統 Electrical and Mechanical System of Railway	3	3		
						順序控制與實習 Sequence Control and Practice	3	3			車輛經營管理實務 Vehicle operation and management practices		2	2						
						材料力學 Mechanics of Materials		2	2		電腦輔助設計 Computer Aided Design		3	3						
	小計 subtotal	0	0	8	8	小計 subtotal	14	14	4	4	小計 subtotal	6	6	8	8	小計 subtotal	12	3	12	3
類別學分小計 category credits subtotal		64																		
備註 remark	基礎通識basic general education : 14																			
	應用通識career application general education : 6																			
	多元通識multiple general education : 8																			
	院訂必修compulsory courses required by the college : 8																			
	專業必修required for majors : 56																			
專業選修 : 36 (其中專業核心必修至10學分) 專業核心必修課程學分計入專業必修 Professional electives : 36 (including at least 10 credits of professional core electives) Credits for overtaking major core electives can be counted into major electives. 專業最低學分數minimum credits for graduation : 128																				
1.本系未開辦之課程可至系課務，並於課前提出申請，經核及後檢附列入專業專業學分，以各系制定專業選修學分為準，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 applicable credits for majors set by each department shall be used as the standard. At most one-half may be admitted as the upper limit. 2.校外實習課程可採下列三種方式之一實施： (1)暑期實習：實習期間每週，每週40小時，共320小時(含)以上。 (2)學期實習：實習期間每週，每週40小時，共720小時(含)以上。 (3)學年實習：實習期間每週，每週40小時，共1,440小時(含)以上。 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). *校外實習四年制課程，除依本校學期規定專業學分學分外，並須符合相關外語能力、專業實務技能規定之條件方能畢業。 *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.																				