南開科技大學 112學年度入學 科技學院車輛工程系 造修部四技(車輛综合技術專班) 課程總表 Nankai University of Technology Course Catalog for the 112th Academic Year, College of Science and Technology, Department of Vehicle Engineering, Bachelor Program of Vehicle Comprehensive Technology, Continuing Education Division, Four-Year Program

	一年 Firs	級(112) st Year				二年級(113) Second Year					三年級(114) Third Year					四年級(115) Fourth year				
類別 Class		A	一上 Y(1) Fall		ー下 (1) Spring			二上 (2) Fall		下) Spring			三上 (3) Fall	AY(3	・下 Spring			上 4) Fall		四下 4) Spring
	科目 Subjects	學分 Cred	诗 its 時數 Cred Hour	it F	-4.41	科目 Subjects	學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours	科目 Subjects	學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours	₹ 月 Subjects	學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours
						體育(一)(二) Physical Education (1) (2)	2	2	2	2	中國文學欣賞與習作(一)(二) Appreciation and Practice of Chinese Literature (1) (2)	2	2	2	2	英文(一)(二) English (1) (2)	2	2	2	2
基本能力課程																				
Core Capabilities Courses																				
						小計 Subtotal Credits	2	2	2	2	小計 Subtotal Credits	2	2	2	2	小計 Subtotal Credits	2	2	2	2
分類通識 General Education Requirements						性別平權與社會關懷 Gender Equality and Social Care	2	2			資訊科技 Information Technology	2	2							
						禮節與倫理 Etiquette and Ethics	2	2			身心健康 Physical and Mental Health			2	2					
						人文素養 Humanities Literacy			2	2	國際視野與永續發展 International Perspective and Sustainable Development			2	2					
						小計	4	4	2	2	小計	2	2						_	+
系專業必修 Departmental Required Courses	汽車引擎技術			+	+	Subtotal Credits 工程力學	_	+	+ -	1 2	Subtotal Credits 汽車電子學	+	+		-	微處理機與實習		\vdash	\vdash	+
	Automotive Engine Technology 塗裝基本實習	3	+		+	Engineering Mechanics-Statics 汽車空調	3	3	-		Electronic and Experiment 車輛行銷管理	2	2			Microprocessor and Practice 智慧財產權	3	3	₩	+
	Automotive body painting	3	3			Automotive Air Conditioner	2	2	-		Automobile Marketing Management	2	2			Introduction to Intellectual Property Rights	2	2	<u> </u>	
	汽車板金寶習 Auto Sheet Metal Internship	3	3			計算機概論 Introduction to Computer Science	3	3			實務專題(一)(二) Practice Topics (I)(II)	2	3	2	3	汽車電子通訊技術 Automotive Electrical Communication Technology			3	3
	汽車底盤技術 Automotive Chassis Technology			3	3	綠色節能概論 Introduction of Green Energy Conservation			3	3	汽車綜合技術 Automotive Comprehensive Technology			3	3					
	汽車電系技術 Automotive Electrical System Technologies			3	3	電動車與混合動力車原理 Principles of electric vehicles and hybrid vehicles			2	2										
						車輛感測技術 Vehicle Sensing Technology			3	3										
	小計 Subtotal Credits	9	9	6	6	小計 Subtotal Credits	8	8	8	8	小計 Subtotal Credits	6	7	5	6	小計 Subtotal Credits	5	5	3	3
条專業選修 Departmental Elective Courses	<u>焊接實習</u> Welding Internship	3	3			能源工程 Energy Engineering	2	2			車輛零件加工技術 Vehicle Part Process Technology	3	3			汽車排放管制與控制 Automotive Emission Regulation and Control	2	2		
	汽車美容實習 Car Beauty Practice	3	3			化學 Chemistry	3	3			品質管制 Quality Control	2	2			汽車新科技 New Technology for Automobile	2	2		
	車輛工程與原理 Vehicle Engineering and Principle	2	2			車輛材料技術 Material Technology of Vehicle	3	3			錄色科技 Green Technology	3	3			電動車機電整合概論 Mechatronics of Electrical Vehicle	3	3		
	創意工程 Innovation Engineering	2	2			電腦輔助繪圖實務 Computer-Aided Draw Practice	3	3			工程倫理 Engineering Ethics	2	2			輔具概論 Introduction of Assistive Technology	3	3		
	潤滑學 Lubrication Theory	2	2			燃料噴射系統 Fuel Injection System	2	2			內燃機 Internal Combustion Engine	3	3			科技英文 Technology English	2	2		
	汽車塗裝材料 Automobile coating materials			2	2	機構學 Mechanism			3	3	工業安全管理 Industrial Safety Management			3	3	創業與財務規劃 Starting a Business and Financial Planning	2	2		
	汽車板金工作法 Automobile sheet metal working method			2	2	電腦輔助機械製圖 Computer Aided Mechanical Drawing			3	3	編客服務技巧 Customer Relationship Service Method			2	2	車輛控制系統 Vehicle Control System			2	2
	汽車塗裝工作法 Automobile painting work method			2	2	物理 Physics			3	3	熱流學 Thermofluids			3	3	車転通訊與行控 Vehicle Communication and Control			2	2
	銲接工作法			2	2	精密量具與檢測技術			3	3	福祉載具設計 Design of Welfare Vehicle			3	3	汽車性能檢測與分析			3	3
	Welding work method 材料力學 Mechanics of Materials			3	3	Metrology Practice 先逸阜輻科技概論 Concept of Automobile Technology			2	2	Python與資料分析 Python language and data analysis			3	3	Testing and Analysis of Automotive Performance 機械元件設計 Design of Machine Elements			3	3
	車身綜合實習 body comprehensive internship			3	3											汽車經營管理學與實務 Automobile Marketing Theory and Practice			2	2
	小計	12	12	14	14	小計	13	13	14	14	小計	13	13	14	14	小計	14	14	12	12
其他選修 Other Elective Courses	Subtotal Credits 永續發展與大學社會責任 Sustainable Development and University Social Respo		+	2	2	Subtotal Credits 運動(項目) Sports(Item)	2	2	2	2	Subtotal Credits 人工智慧與物聯網概論 Introduction of AI and IoT	2	2			Subtotal Credits 生命教育 Life Education	2	2		+
						職場英文 Workplace English	2	2			世界公民視野 Perspective of World Citizen			2	2	藝術創新與傳承 Artistic Innovation and Heritage			2	2
					\top	職涯分析與規劃			2	2	The state of the s									T
	小計 Subtotal Credits			2	2	Career Analysis and Planning 小計 Subtotal Credits	4	4	4	4	小計 Subtotal Credits	2	2	2	2	小計 Subtotal Credits	2	2	2	2
	승하	21	21	20	20	승하	27	27	26	26	승하	23	24	21	22	合計	21	21	17	17
附註:	Total Credits	21	-1			Total Credits		1	1 -		Total Credits		1			Total Credits			<u> </u>	1.

- 1. This curriculum is applicable to students of Continuing Education of the four-year technical program admitted for the academic year 2023. 2.最低畢業總學分為128學分,其中基本能力課程必修12學分、分類通識課程必修12學分、專業必修50學分,其餘54學分為選修學分。非本系所聞科目之選修學分數,至多承認16學分為畢業學分。

- 2. The minimum credits for graduation is 128. This includes 24 credits courses required by the university and general education courses, "50" credits for elective credits. A maximum of 16 credits of elective credits from non-departmental courses will be recognized as graduation credits.

 3. 「計算機概論」(3學分)、「綠色能源概論」(3學分)等2個科目為本學院共同科目,本条學生上進2個科目均為必遷修,部分科目須至院內他条修課,修習及格之科目,列計為畢業遷修學分。

 3. "Introduction to Computer Science" (3 credits) and "Introduction to Green Energy" (3 credits), are common subjects in the College. Students of the department are required to take the above two subjects. For some courses, students may need to take them in other departments within the college. Those courses that are completed will be counted as elective credits for graduation.

- 4.可至外条修讀相關課程, 選讀外条課程需經本条主任與修讀外条課程主任同意。 4. Taking related courses offered by other departments is subject to approval by the department chair and the chairs of departments whose courses are selected. 5. 校外實習類課程,學時為「*」校外實習類課程(暑期實習、產業實習、學期實習、海外實習及其他校外實習型態)詳見本校學生校外實習辦法。校外實習類課程總學分數至多採認18學分為畢業學分,超過18學分時,其超過部分不認列為畢業學分。
- 5. Off-Campus Internship-Related Courses (Summer Internship, Enterprise Internship, Semester-Based Internship, Overseas Internship, and other off-campus internship types) will be counted as 18 graduation credits. The excess will not be recognized. 6.學生選修運動(項目)為其他選修的學分數,系科最多採計2學分為畢業學分。

- his curriculum list has been reviewed and approved by the Department Curriculum Committee (2023.03.28), College Curriculum Committee (2023.03.30), and University Curriculum Committee (2023.04.11).