

南開科技大學 111學年度入學 科技學院車輛工程系先進車輛組 進修部四技(產學訓車輛綜合技術專班) 課程總表
Nankai University of Technology Course Catalog for the 111th Academic Year, College of Science and Technology, Department of Vehicle Engineering, Advanced Vehicle Group, Bachelor Program of Vehicle Comprehensive Technology, Continuing Education Division, Four-Year Program

類別 class	一年級(111) First Year					二年級(112) Second Year					三年級(113) Third Year					四年級(114) Fourth year				
	科目 Subjects	一上 AY(1) Fall		一下 AY(1) Spring		科目 Subjects	二上 AY(2) Fall		二下 AY(2) Spring		科目 Subjects	三上 AY(3) Fall		三下 AY(3) Spring		科目 Subjects	四上 AY(4) Fall		四下 AY(4) Spring	
		學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours		學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours		學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours		學分 Credits	時數 Credit Hours	學分 Credits	時數 Credit Hours
基本能力課程 Core Capabilities Courses						英文(一)(二) English (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	體育(一)(二) Physical Education (1) (2)	2	2	2	2
											福祉科技與服務管理專論 Specialized Topics on Gerontechnology and Service Management			2	2					
						小計 Subtotal Credits	2	2	2	2	小計 Subtotal Credits	2	2	4	4	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										
						小計 Subtotal Credits	4	4	2	2	小計 Subtotal Credits	2	2	2	2					
院共同必修 College Compulsory Courses						計算機概論 Introduction to Computer Science	3	3								智慧財產權 Intellectual Property Rights	2	2		
						綠色節能概論 Introduction to Green Energy			3	3										
						小計 Subtotal Credits	3	3	3	3						小計 Subtotal Credits	2	2		
院共同選修 College Common Elective Courses						先進車輛科技概論 Introduction to Advanced Automotive Technology	2	2			Python與資料分析 Python and Data Analysis			3	3	創業與財務規劃 Entrepreneurship and Financial Planning	2	2		
						小計 Subtotal Credits	2	2			小計 Subtotal Credits			3	3	小計 Subtotal Credits	2	2		
專業必修 Departmental Required Courses	汽車引擎技術 Automotive Engine Technology	3	3			工程力學 Engineering Mechanics-Statics	3	3			汽車電子學 Electronic and Experiment	2	2			微處理機與實習 Microprocessor and Practice	3	3		
	塗裝基本實習 Automotive body painting	3	3			汽車空調 Automotive Air Conditioner	2	2			車輛行銷管理 Automobile Marketing Management	2	2			汽車電子通訊技術 Automotive Electrical Communication Technology			3	3
	汽車板金實習 Auto Sheet Metal Internship	3	3			電動車與混合動力車原理 Principles of electric vehicles and hybrid vehicles			2	2	實務專題(一)(二) Business Practice(一)(二)	2	3	2	3					
	汽車底盤技術 Automotive Chassis Technology			3	3	車輛感測技術 Vehicle Sensing Technology			3	3	汽車綜合技術 Automotive comprehensive technology			3	3					
	汽車電路技術 Automotive Electrical System Technologies			3	3															
	小計 Subtotal Credits	9	9	6	6	小計 Subtotal Credits	5	5	5	5	小計 Subtotal Credits	6	7	5	6	小計 Subtotal Credits	3	3	3	3
	焊接實習 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			綠色科技 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	車輛控制系統 Vehicle Control System			2	2

專業選修 Departmental Elective Courses	汽車钣金工作法 Automobile sheet metal working method			2	2	電腦輔助機械製圖 Computer Aided Mechanical Drawing			3	3	顧客服務技巧 Customer Relationship Service Method			2	2	車輛通訊與行控 Vehicle Communication and Control			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	汽車性能檢測與分析 Testing and Analysis of Automotive Performance			3	3
	銲接工作法 Welding Work Method			2	2	精密量具與檢測技術 Metrology Practice			3	3	福祉載具設計 Design of Welfare Vehicle			3	3	機械元件設計 Design of Machine Elements			3	3
	材料力學 Mechanics of Materials			3	3											汽車經營管理學與實務 Automobile Marketing Theory and Practice			2	2
	車身綜合實習 body comprehensive internship			3	3															
	小計 Subtotal Credits	12	12	14	14	小計 Subtotal Credits	13	13	12	12	小計 Subtotal Credits	13	13	11	11	小計 Subtotal Credits	12	12	12	12
其他選修 Other Elective Courses	永續發展與大學社會責任 Sustainable Development and University Social Responsibility			2	2	運動(項目) Sports(Item)	2	2	2	2	人工智慧與物聯網概論 Introduction of AI and IoT	2	2			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
						職涯分析與規劃 Career Analysis and Planning			2	2										
	小計 Subtotal Credits			2	2	小計 Subtotal Credits	4	4	4	4	小計 Subtotal Credits	2	2	2	2	小計 Subtotal Credits	2	2	2	2
	必修合計	9	9	6	6	必修合計	16	16	12	12	必修合計	10	11	14	15	必修合計	9	9	5	5

附註：
Note:
1.本表111學年度進修部入學新生適用。
1.This curriculum is applicable to students of Continuing Education of the four-year technical program admitted for the academic year 2022.
2.最低畢業總學分為128學分，其中基本能力課程必修14學分、分類通識課程必修10學分、院共同必修8學分、專業必修42學分，其餘54學分為選修學分(含院共同選修)。非本系所開科目及非本院共同選修科目之選修學分數，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, “8” credits for college common required courses, “42” credits for department required courses, and the remaining “54” credits for elective credits (including college common electives). A maximum of 16 credits of elective credits from non-departmental and non-college elective courses will be recognized as graduation credits.
3.可至外系修讀相關課程，選讀外系課程需經本系主任與修讀外系課程主任同意。
3.Taking related courses offered by other departments is subject to approval by the department chair and the chairs of departments whose courses are selected.
4.跨系學程證明之核發依本校學程設置辦法規定辦理。
4.Certificate of inter-disciplinary program completion will be validated abiding by regulations of the NKUT Program Establishment Guidelines.
5.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。
5.Students who choose to take sports (specific items) course as other elective credits can count a maximum of 2 credits for graduation in their department.
6.本表業經系課程委員會(111.03.18)、學院課程委員會(111.03.23)、校課程委員會(111.04.08)審議通過。
6.This curriculum list has been reviewed and approved by the Department Curriculum Committee (2022.03.18), College Curriculum Committee (2022.03.23), and University Curriculum Committee (2022.04.08).