

Nankai University of Technology Course Catalog for the 112th Academic Year, College of Science and Technology, Department of Vehicle Engineering, International Bachelor Program of Industry-Academia Collaboration, Four-Year Program

類別 class	一年級(112) First Year				二年級(113) Second Year				三年級(114) Third Year				四年級(115) 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	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	華語聽力會話練習(一)(二) Mandarin Listening and Speaking Practice (1)(2)	2	4	2	3						英文(一)(二) English (1) (2)	2	2	2	2					
	體育(一)(二) Physical Education (1) (2)	2	2	2	2						華語閱讀與理解(一)(二) Mandarin Reading Comprehension (1)(2)	1	2	1	2					
											華文主題式讀寫(一)(二) Chinese Topical Reading and Writing	1	2	1	2					
	小計 Subtotal Credits	4	6	4	5						小計 Subtotal Credits	4	6	4	6					
專業基礎課程 Specialized Basic Courses	產業概論(一)(二) Introduction to Industries(1)(2)	3	3	3	3						網路概論 Introduction to Networks	3	3							
	計算機概論 Introduction to Computer Science	3	3																	
	文書軟體應用 Office Document Software Application			3	3															
	小計 Subtotal Credits	6	6	6	6						小計 Subtotal Credits	3	3							
通識課程 General Courses	法治教育 Legal Education	2	2																	
	台灣社會與生活 Society and Life in Taiwan	2	2																	
	職場倫理 Workplace Ethics			2	2															
	生涯規劃 Career Planning			2	2															
	小計 Subtotal Credits	4	4	4	4															
系專業必修 Departmental Required Courses	工程力學 Engineering Mechanics-Statics	2	2			學期實習(一)(二) Semester Internship(1) (2)	9	*	9	*	汽車綜合技術 Automotive Comprehensive Technology	3	3							
	汽車基礎電學應用與實習 Practical Applications of Automotive Basic Electrical Theory	3	3								電腦輔助製造技術 Computer Aided Manufacturing Technology	3	3							
	汽車引擎技術 Automotive Engine Technology			3	3						機構學 Mechanism	3	3							
											汽車電系技術 Automotive Electrical System Technologies	3	3							
											電動車與複合動力車原理 Introduction to Electric and Hybrid Vehicles	2	2							
											內燃機 Internal Combustion Engine			3	3					
											車輛感測技術 Vehicle Sensing Technology			3	3					
											微處理機與實習 Microprocessor and Practice			3	3					
											車輛專業英文 Professional Autotmotive English			2	2					
											汽車底盤技術 Automotive Chassis Technology			3	3					
	小計 Subtotal Credits	5	5	3	3	小計 Subtotal Credits	9	0	9	0	小計 Subtotal Credits	14	14	14	14					
語言能力必選修 (4必選2) Language Compulsory Courses (2 out of 4)	初級華語測驗練習 Basic Chinese Language Test Practice	3	6																	
	初級華語讀寫 Basic Chinese Reading and Writing			3	5															
	中級華語測驗練習 Intermediate Chinese Language Test Practice	3	6																	
	中級華語讀寫 Intermediate Chinese Reading and Writing			3	5															
	小計 Subtotal Credits	3	6	3	5															
系專業選修 Departmental Elective Courses	車輛工程與原理 Vehicle Engineering and Principle	3	3								人因概論 Introduction to Human Factors	2	2			學期實習(三)(四) Semester Internship(3) (4)	9	*	9	*
	工業安全管理 Industrial Safety Management	3	3								汽車空調技術實務 Practice of Automobile Air Conditioning Technology	3	3			汽車排放管制與控制 Automotive Emission Regulation and Control	2	2		
	創意工程 Innovation Engineering	2	2								汽車電子電路 Automotive Electronic Circuits	3	3			汽車新科技 New Technology for Automobile	2	2		
	汽車維修實務實習 Practice of Automobile Repair and Trouble Shooting			2	2						電腦輔助繪圖實務 Computer-Aided Draw Practice	3	3			動力學 Engineering Mechanics Dynamics	3	3		
	微積分 Calculus			3	3						車輛材料概論 Introduction to Vehicle Materials	2	2			機械元件設計 Design of Machine Elements	3	3		
	品質管制			2	2						工程倫理 Engineering Ethics	2	2			車輛通訊與行控 Vehicle Communication and Control			2	2
	物理 Physics			3	3						電動車機電整合概論 Mechatronics of Electrical Vehicle			2	2	汽車電子通訊技術 Automotive Electrical Communication Technology			3	3
	材料力學 Mechanics of Materials			3	3						精密量具與檢測技術 Metrology Practice			3	3	汽車動態性能檢測與分析 Measurement and Analysis of Automotive Dynamic Performance			3	3
	潤滑學 Lubrication Theory			2	2						顧客服務技巧 Customer Relationship Service Method			3	3	車身技術 Autobody Technology			3	3
	綠色科技 Green Technology			3	3						車聯網技術應用 Vehicle to Everything Technology Application			3	3	智慧車輛技術與應用 Smart Vehicle Technology and Application			3	3
											車輛零件加工技術 Automobile Parts Machining and Processing Technique			3	3					

										電池概論 Battery Introduction			2	2					
										燃料噴射系統 Fuel Injection System			2	2					
小計 Subtotal Credits	8	8	18	18						小計 Subtotal Credits	15	15	18	18	小計 Subtotal Credits	19	10	23	14
合計 Total Credits	30	35	38	41	合計 Total Credits	9	0	9	0	合計 Total Credits	36	38	36	38	合計 Total Credits	19	10	23	14

附註：
Note:
1.本表適用112學年度新南向車輛工程系國際學生產學合作專班入學學生。
1.This curriculum is applicable to students of International Programs of Industry-Academia Collaboration admitted for the academic year 2023.
2.最低畢業總學分為128學分，其中全校基本能力課程必修16學分、專業基礎必修6學分、通識課程必修8學分、**專業必修46學分**、語言能力必修為6學分，**合計82學分，專業選修學分數至少為46學分**。
2.The minimum credits for graduation is 128. This includes 16 credits for collegiate compulsory subjects of university cores, 6 credits for basic major-related compulsory subjects, 8 credits for general education compulsory subjects, 46 credits for department required courses, 6 credits for compulsory language proficiency subjects, 82 credits in total; A maximum of 46 credits of elective credits from non-departmental 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.Relevant courses can be taken from other departments. However, approval from the head of your current department and the department offering the courses is required for selecting courses from other departments.
4.跨系學程證明之核發依本校學程設置辦法規定辦理。
4.The issuance of a certificate for completing an interdisciplinary program shall be conducted in accordance with the regulations stipulated by the NKUT Interdisciplinary Establishment.
5.專班校外實習課程學分數**最多36學分**，與學習時數之對應基準為1學分實習80小時，校外實習依本校學生校外實習要點辦理。
5.The maximum credit for off-campus internship courses in specialized programs is 36 credits. The corresponding standard is 1 credit for 80 hours of internship. Off-campus internships shall be conducted in accordance with the NKUT Guidelines for Off-campus Internships.
6.本表業經系課程委員會(112.03.28)、學院課程委員會(112.03.30)、校課程委員會(112.04.11)審議通過。
6.This 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).