

台鋼科技大學國際產學合作專班課程規劃表

114學年度秋季班

機械與自動化工程系

114年1月23日113學年度第1學期第1次課程發展委員會審議通過

選別	屬性	第一學年				第二學年				第三學年				第四學年							
		科目名稱	第一學期		第二學期		科目名稱	第一學期		第二學期		科目名稱	第一學期		第二學期		科目名稱	第一學期		第二學期	
			學分	時數	學分	時數		學分	時數	學分	時數		學分	時數	學分	時數		學分	時數	學分	時數
必修	共同科目	基礎華語	5	10	3	3	進階華語	3	3	3	3	應用華語	2	2	2	2					
		體育	1	2	1	2	職場英文	2	2												
	通識課程	智慧轉型概論	2	2			永續發展概論	2	2												
		法律與生活			2	2	東亞發展與新南向政策			2	2										
	專業課程	語言聽力練習	2	2			靜力學	3	3			電腦輔助機械設計製圖*	3	3							
		工程圖學*	3	3			電腦輔助機械製圖*	3	3			機構學*	3	3							
		語言書寫練習	2	2			液氣壓學	2	2			企業實習(三)*	6	20							
		自動化概論			3	3	企業實習(一)*	6	20			機電介面配線實務*			3	3					
		專業職場語言			2	2	材料力學			3	3	CNC綜合加工*			3	3					
		進階語言練習			2	2	CNC車床*			3	3										
		基本電學*			3	3	企業實習(二)*			6	20										
		電腦繪圖*			3	3															
	小計			15	21	19	20		21	35	17	31		14	28	8	8		0	0	0
選修	專業課程					電腦軟體應用*	3	3			精密量測*	3	3			影像處理*	3	3			
						電子電路*	3	3			液氣壓迴路設計*	3	3			機電整合實務*	3	3			
						圖形監控*	3	3			工模與夾具設計*	3	3			PC based控制與實務*	3	3			
						可程式控制*	3	3			機械設計			3	3	企業實習(五)*	6	20			
						工程視窗程式語言*			3	3	熱機學			3	3	機電整合乙級實務*			3	3	
						熱處理技術			3	3	微算機原理*			3	3	電腦輔助製造*			3	3	
						訊號與系統*			3	3	自動化機構設計*			3	3	企業實習(六)*			6	20	
						電動機原理*			3	3	企業實習(四)*			6	20						
小計			0	0	0	0		3	3	3	3		3	3	9	23		9	20	9	20
合計			15	21	19	20		24	38	20	34		17	31	17	31		9	20	9	20

備註: ※畢業至少應修滿 128 學分【必修94學分，選修至少34學分】

※選修課程小計是指當學期應開之最低學分/時數。

※若因故無法完成企業實習(必修)，得以實務實作課程(選修)抵免。

※課程名稱後加註「*」者為實作課程。

International Industry-University Cooperation Program Curriculum Planning Table of Taiwan Steel University of Science and Technology

2025 Academic Year Fall Class

Department of Mechanical and Automation Engineering

It was reviewed and approved by the 1st Curriculum Development Committee of the 1st semester of the 2024 academic year on January 23, 2025

Category		First year				Second year				Third year				Fourth year							
		Course	1st Sem.		2nd Sem.		Course	1st Sem.		2nd Sem.		Course	1st Sem.		2nd Sem.		Course	1st Sem.		2nd Sem.	
			Credit	Hour	Credit	Hour		Credit	Hour	Credit	Hour		Credit	Hour	Credit	Hour		Credit	Hour	Credit	Hour
Compulsory Subjects	Common subjects	Basic Mandarin Chinese	5	10	3	3	Advanced Mandarn Chinese	3	3	3	3	Apply Mandarin Chinese	2	2	2	2					
		Physical Education	1	2	1	2	English in Workplace	2	2												
	General education courses	Introduction to Intelligence Transformation	2	2			Introduction to Sustainable Development	2	2												
		Law and Life			2	2	East Asia And International Relationship			2	2										
	Professional Courses																				
		Listening Comprehension	2	2			Statics	3	3			Computer-Aided Mechanical Design And Drawing	3	3							
		Engineering Drawing	3	3			Computer-Aided Mechanical Drawing	3	3			Mechanisms	3	3							
		Writing Practice	2	2			Pneumatics and Hydraulics	2	2			Corporate Internship (3)	6	20							
		The Introduction to the Automation			3	3	Corporate Internship (1)	6	20			Practice for Interface Wiring of Mechatronics			3	3					
		Professional Workplace Language			2	2	Mechanics of Materials			3	3	CNC Integrated Machining			3	3					
		Advanced Language Practice			2	2	CNC Lathes			3	3										
		Fundamentals of Electricity			3	3	Corporate Internship (2)			6	20										
		Computer Graphics			3	3															
Subtotal			15	21	19	20		21	35	17	31		14	28	8	8		0	0	0	0
Elective Subjects	Professional Courses					Applications of Compter Software	3	3			Precision Measurement	3	3			Image Processing	3	3			
						Electronic Circuit	3	3			Circuit Design for Pneumatic and Hydraulic	3	3			Mechatronics Practice	3	3			
						Graphic Monitoring	3	3			Jig and Fixture Design	3	3			PC Based Control and Practice	3	3			
						Programmable Logic Controller	3	3			Design of Machine Elements			3	3	Corporate Internship (5)	6	20			
						Engineering Windows Programming Language			3	3	Heat Engines			3	3	Mechatronics Class B Practice			3	3	
						Technology of Heat Treatment			3	3	Fundamentals of Microprocessor			3	3	Computer Aided Manufacture			3	3	
						Signals and Systems			3	3	Automation Mechanism Design			3	3	Corporate Internship (6)			6	20	
						Motor Principle			3	3	Corporate Internship (4)			6	20						
Subtotal			0	0	0	0		3	3	3	3		3	3	9	23		9	20	9	20
Total			15	21	19	20		24	38	20	34		17	31	17	31		9	20	9	20

Remark:

- * At least 128 credits should be completed for graduation (94 credits compulsory courses, and at least 34 credits elective subjects)
- * The elective course subtotal refers to the minimum credits/hours that should be offered in the semester.
- * If the Corporate Internship (compulsory) is not able to complete for some reason, the professional practice courses (elective) can be taken to receive credits.
- * Those with "*" after the course name are practical courses.