

**Interdisciplinary Program of Engineering-Engineering Technology (English-Taught Program)
112 Academic Year Admission
Compulsory course、Credits & Graduation threshold**

類別 Type	科目名稱 Courses		學分數 Credits		備註 Remarks
			上學期 1 st Sem	下學期 2 nd Sem	
校定必修 (30學分) Compulsory (30 Credits)	大學中文 College Chinese		2		修讀華語課程得免修大學中文，請參考國立清華大學外國學生修讀華語課程實施要點。 Students who complete Mandarin courses are exempt from taking the "College Chinese" required course. Please refer to the Mandarin Course Requirements for NTHU International Students.
	英文 English		8		英文能力檢定通過者，得依學校規定申請免修或減修，請參照語文中心網頁。 Students who pass the official English Proficiency tests could waive credits. Please refer to the attachment of NTHU Center of Language Education.
	通識課程 General Education Course	核心通識 Core General	8-12		至少修畢四門核心通識課程，並須含括四個核心向度。因應外籍生需要，可由本系自開部分課程抵免。 Students are required to register four Core courses from at least four different dimensions. Foreign students could choose to take courses given by this department.
		選修科目 Elective Course	8-12		自由選修，可由本系自開部分課程抵免。 Free electives. Students could also take courses given by this department.
		合計 Total	20		
	體育 Physical Education		0		1 至 3 年級必修 A required course for freshmen to juniors
	服務學習 Student Service		0		畢業前必修 60 小時 60 hours required before graduation
操行 Conduct				每學期成績及格 Will be graded each term	
學士班必修 (17學分) Compulsory (17 Credits)	微積分(一) Calculus (I)	微積分(二) Calculus (II)	3	3	
	普通物理(一) General Physics (I)	普通物理(二) General Physics (II)	3	3	
	普通物理實驗 General Physics Laboratory		1		
	計算機程式語言 Introduction to Programming Languages		3		計算機程式語言 (IEEM)、計算機程式設計 (EE)、計算機程式設計一 (CS)
	專題 Undergraduate Research		1		

基礎選修 (任選23學分) Basic courses (23 Credits)	普通化學一、二 General Chemistry (I), (II)	3	3	普通化學一(CHEM)、普通化學二(CHEM)、普通化學二(MSE)	
	普通化學實驗 General Chemistry Laboratory	1			
	工程數學一、二 Engineering Mathematics (I), (II)	3	3		
	材料科學與工程一 Material Science and Engineering I	3			
	工作研究 Work Study		3		
	熱力學 Thermodynamics	3		材料熱力學一 (MSE)、化工熱力學(CHE)、基礎熱流學一(PME)	
	電路學 Circuitry	3		電路學(PME)、電工原理(MSE)	
	質能均衡 Material and Energy Balance		3		
	應用力學一 Applied Mechanics (I)	2			
專業核心課程 Core Courses (24 Credits)	化工 (CHE)	物理化學一、二 Physical Chemistry (I), (II)	3	3	1 Major field: 15 credits + 1 Minor field: 9 credits
		程序設計 Process Design	3		
		程序控制 Process Control		3	
		生物技術概論 Introduction to Biotechnology	3		
		輸送現象及單元操作一 Transport Phenomena and Unit Operations (I)	3		
		化工單操 Chemical Engineering Unit Operations		3	
		化學反應工程 Chemical Reaction Engineering	3		
		化工熱力學 Chemical Engineering Thermodynamics	3		
		儀器分析及實驗一 Instrumental Analysis and Lab.(I)	3		
	動機 (PME)	應用力學二 Applied Mechanics(II)		2	
		基礎熱流學二 Thermal and Fluid Science(II)		3	
		材料力學 Mechanics of Materials	3		
		控制系統一 Control System (I)	3		
		程式設計 Programming Design	3		
		機械設計 Machine Design	3		
		機械製造 Manufacturing Processes	3		
電子學 Electronics		3			

專業核心課程 Core Courses (24 Credits)	材料 (MSE)	材料科學與工程二 Material Science and Engineering II		3	1 Major field: 15 credits + 1 Minor field: 9 credits
		材料熱力學二 Thermodynamics of Materials (II)		3	
		結晶繞射概論 Introduction to Crystal Structure and Diffraction Theories	3		
		機械性質 Mechanical Properties	3		
		量子物理導論 Introduction to Quantum Physics	3		
		擴散與相變化 Diffusion and phase transformation		3	
	工工 (IEEM)	線性代數 Linear Algebra		3	
		離散數學 Discrete Mathematics	3		
		機率論 Probability Theory	3		
		生產計劃與管制 Production Planning and Control		3	
		人因工程一 Human Factors (I)	3		
工程經濟 Engineering Economics	3				
專業選修 (18 學分) Free Elective Course (18 Credits)			18	工學院內課程，任選至少 6 門並達 18 學分 Choose at least 6 courses from the College of Engineering and achieve 18 credits	
自由選修 (16 學分) Free Course (16 Credits)			16		
最低畢業總學分 Minimum Credits Needed for Graduation			128		
備註	<p>1. 中五學制學生畢業總學分應另增加 12 學分，詳細內容請洽詢國際班辦公室。 If you're in the Form 5 school system (Take 5 years to complete Junior High School and High School,) you have to take extra 12 credits for graduation. Please check the details with International Bachelor Degree Program office.</p> <p>2. 110、111 學年度入學的學生可以依據 112 學年度的修課及學分規範修習。 Students enrolled in the 110 and 111 academic years can follow the course and credit requirement for the 112 academic year.</p>				