

工學院學士班工程技術全英語學程

111 學年度入學學生必修科目、學分數暨畢業總學分表

Interdisciplinary Program of Engineering-Engineering Technology (English-Taught Program)

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 website 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 (20 學分) Compulsory (20 Credits)	微積分(一) Calculus (I)	微積分(二) Calculus (I I)	3	3	
	普通物理(一) General Physics (I)	普通物理(二) General Physics(I I)	3	3	
	普通物理實驗 General Physics Laboratory		1		
	普通化學一 General Chemistry (I)		3		
	程式設計 Program Design			3	
	專題 Undergraduate Research		1		

基礎選修（任選24學分） Basic courses (24 Credits)		普通化學二 General Chemistry (II)		3	
		普通化學實驗 General Chemistry Laboratory	1		
		工程數學一、二 Engineering Mathematics(I),(II)	3	3	
		材料科學導論一 Introduction to Materials Science (I)	3		
		機械工程導論 Introduction to Mechanical Engineering	3		
		工作研究 Work Study		3	
		熱力學 Thermodynamics	3		熱力學一 (MSE、CHE) 、基礎熱流學一 Thermal and Fluid Science (I)
		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 學分 + 1 Minor field: 9 學分
		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		
		機械設計 Machine Design	3		
		機械製造 Manufacturing Processes	3		
		電子學 Electronics		3	
	材料 (MSE)	材料科學導論二 Introduction to Materials Science (II)		3	
		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	
		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 (15 學分) Free Elective Course (15 Credits)		15	工學院內課程，任選至少 5 門並達 15 學分		
自由選修 Free Course (15 Credits)		15			
最低畢業總學分 Minimum Credits Needed for Graduation			128		
備 註	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.				