

Department of Materials Science & Engineering
Required courses and credits (applicable to undergraduates enrolling in 2022)
材料科學工程學系 111 學年度入學學生必修科目、學分數暨畢業總學分表

類別 Categories	科目名稱 Courses		學分數 Credits		備註 Note
			上學期 Autumn semester	下學期 Spring semester	
校定必修 (30 學分) University required (30 credits)	大學中文 College Chinese		2		
	英文領域 English		8		通過本校訂定之英語能力檢定考試者，得免修選讀英文 2 學分 Pass the English Proficiency tests stipulated by NTHU can decrease 2 credits of Selected English courses.
	通識課程 General education courses	核心必修 Core courses required	8-12		學生須於四個不同的核心向度中，至少各選一門課，須修畢至少四門核心課程 Each min. one course in any of 4 dimensions
		選修科目 Optional courses	8-12		學生自由選修課程 free electives
		合計 Total	20		
	體育 Physical Education		0		1 至 3 年級必修 Required from Year 1 to Year 3
	勞作服務 Service		0		畢業前必修 60 小時 60hr before graduated
	操行 Manual Labor Service				每學期成績及格 Pass in each semester
系定必修 (71 學分) Department required (71 credits)	普通化學 General Chemistry		3	3	
	普通化學實驗 General Chemistry Laboratory		1	1	
	普通物理 General Physics		3	3	
	普通物理實驗 General Physics Laboratory		1	1	
	微積分 Calculus		3	3	
	材料科學與工程 Materials Science and Engineering		3	3	
	工程數學 Engineering Mathematics		3	3	
	材料熱力學 Thermodynamics of Materials		3	3	
	晶體缺陷 Crystal defect		3		
	擴散與相變化 Diffusion and Phase Transformation		3		
	材料實驗一、二 Laboratories of Materials (I)(II)		2	2	
	材料科技論壇 The Forum of Materials Science and Technology		1		
	工程導論 Introduction to Engineering		2		
	機械性質 Mechanical Properties		3		
	材料之物理性質 Physical Properties of Materials		3		
	結晶繞射概論 Introduction to Crystal Structure and Diffraction Theories		3		
	金屬材料 Metallic Materials		3		5 科任選 3 科 Must choose three of these five courses
	電子材料 Electronic Materials		3		
	陶瓷材料 Ceramic Materials		3		
	高分子材料 Polymer Materials		3		
	生醫材料 Biomedical Materials		3		
	專業選修 Specialized Elective (27 學分) (27 credits)	專業科目 Specialized courses		27	
最低畢業總學分 Min. credits requirement at graduation			128		
備註 Note	修讀本系為雙主修之學生需修足本系專業選修學分 Double major students are required to take all the specialized elective courses offered by MSE Department.				