

**Tamkang University College of Science: Bachelor's Program in Advanced Materials
Science – Required Course List for Freshmen (112th Academic Year)**

科目名稱 Course title	credits	Year 1		Year 2		Year 3		Year 4		備註 Notes
		1st	2nd	1st	2nd	1st	2nd	1st	2nd	
普通化學 General Chemistry	6	3	3							
普通化學實驗 General Chemistry Lab	2	1	1							
普通物理 General Physics	6	3	3							
普通物理實驗 General Physics Lab	2	1	1							
微積分 Calculus	6	3	3							
材料科學導論 Introduction to Materials Science	2	2								
基礎生物 Basic Biology	3		3							
有機化學 Organic Chemistry	3			3						
應用電磁學 Applied Electromagnetics	3			3						
電子電路學（一） Electronic Circuits (I)	3			3						
近代物理導論 Introduction to Modern Physics	3				3					
生醫材料 Biomedical Materials	3				3					
有機材料 Organic Materials	3				3					
尖端材料專題研究（一） Advanced Materials Special Topics (I)	1				1					

科目名稱 Course title	credits	Year 1		Year 2		Year 3		Year 4		備註 Notes
		1st	2nd	1st	2nd	1st	2nd	1st	2nd	
高分子材料 Polymer Materials	3					3				
奈米科學 Nanoscience	3					3				
材料結構與檢測（一） Materials Structure and Characterization (I)	2					2				
光電材料 Optoelectronic Materials	3						3			
材料科學實驗（一） Materials Science Lab (I)	1						1			
材料結構與檢測（二） Materials Structure and Characterization (II)	2						2			
材料科學實驗（二） Materials Science Lab (II)	1							1		

- **Total Required Credits for this Degree Program:** 87 credits (including 26 credits for General Education courses)
- **Minimum Required Elective Credits for this Degree Program:** 21 credits
- **Other Elective Credits:** 20 credits
- **Total Credits for Graduation:** 128 credits