

明志科技大學四技部進修部 107學年度入學 材料工程系 課程總表

107/05/22校課程委員會審議通過
 107/04/27院課程委員會審議通過
 107/03/29系課程委員會審議通過

| | 科目 名稱 | 一上 | | 一下 | | 二上 | | 二下 | | 三上 | | 三下 | | 四上 | | 四下 | |
|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | 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 |
| 基礎課程 | 國文 (Chinese) | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | 英文 (English) | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | 合計 | 6 | 6 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 必修 系專業必修 66學分 | 材料數學 (Materials Mathematics) | 3 | 3 | | | | | | | | | | | | | | |
| | 材料科學導論(Introduction to Materials Science) | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | 材料理化 (Materials Physics and chemistry) | 3 | 3 | 3 | 3 | | | | | | | | | | | | |
| | 工程數學(Engineering Mathematics) | | | | | 3 | 3 | | | | | | | | | | |
| | 基礎材料實務(Fundamental Experiments in Materials Science) | | | | | 3 | 3 | | | | | | | | | | |
| | 材料熱力學(Thermodynamics of Materials) | | | | | 3 | 3 | 3 | 3 | | | | | | | | |
| | 材料分析概論 (Introduction to Material Analysis) | | | | | | | 3 | 3 | | | | | | | | |
| | 材料物理性質(Physical Properties of Materials) | | | | | | | 3 | 3 | | | | | | | | |
| | 物理冶金(Physical Metallurgy) | | | | | | | 3 | 3 | 3 | 3 | | | | | | |
| | 材料機械性質(Mechanical Properties of Materials) | | | | | | | | | 3 | 3 | | | | | | |
| | 專題實務講座 (Special Topics and Professional Practice) | | | | | | | | | | 3 | 3 | | | | | |
| | X光繞射導論(Introduction to X-ray Diffraction) | | | | | | | | | | | 3 | 3 | | | | |
| | 品質管制(Quality Control) | | | | | | | | | | | 3 | 3 | | | | |
| | 電腦輔助設計(Computer-Aided Design) | | | | | | | | | | | 3 | 3 | | | | |
| | 薄膜製程(Thin Film Processing) | | | | | | | | | | | 3 | 3 | | | | |
| | 奈米製程(Nanofabrication) | | | | | | | | | | | | | 3 | 3 | | |
| | 金屬材料(Metallic Materials) | | | | | | | | | | | | | 3 | 3 | | |
| 半導體製程簡介(Introduction to Semiconductor Processing) | | | | | | | | | | | | | 3 | 3 | | | |
| 合計 | 9 | 9 | 6 | 6 | 9 | 9 | 12 | 12 | 9 | 9 | 12 | 12 | 9 | 9 | 0 | 0 | |
| 專業 (應修畢至少50學分) 系專業選修 (開設72學分) | 材料製程概論 (Introduction to Materials and Manufacturing) | | | 3 | 3 | | | | | | | | | | | | |
| | 模流分析(Mold flow Analysis) | | | 3 | 3 | | | | | | | | | | | | |
| | 材料力學(Mechanics of Materials) | | | 3 | 3 | | | | | | | | | | | | |
| | 逆向工程(Reverse Engineering) | | | | | 3 | 3 | | | | | | | | | | |
| | 腐蝕與防蝕(Corrosion and Corrosion Control) | | | | | 3 | 3 | | | | | | | | | | |
| | 機電整合實務(Mechatronics Practice) | | | | | 3 | 3 | | | | | | | | | | |
| | 模具設計與製造(Design and Manufacturing of Mould) | | | | | | | 3 | 3 | | | | | | | | |
| | 熱處理學(Heat Treatment) | | | | | | | 3 | 3 | | | | | | | | |
| | 鑄造學(Casting) | | | | | | | | | 3 | 3 | | | | | | |
| | 材料特性及應用(Characteristics and Applications of Materials) | | | | | | | | | 3 | 3 | | | | | | |
| | 奈米檢測分析(Nano-Characterization) | | | | | | | | | 3 | 3 | | | | | | |
| | 高分子材料(Polymeric Materials) | | | | | | | | | 3 | 3 | | | | | | |
| | 鋼鐵製程冶煉概論(Introduction to Steel Making) | | | | | | | | | | | 3 | 3 | | | | |
| | 射出成型加工技術(Injection Molding Technology) | | | | | | | | | | | 3 | 3 | | | | |
| | 材料專題實務(Special Project) | | | | | | | | | | | 3 | 3 | 3 | 3 | 3 | 3 |
| | 非鐵合金製程冶煉概論(Introduction to the Manufacture of Non-Ferrous Alloys) | | | | | | | | | | | | | 3 | 3 | | |
| | 材料表面工程(Surface Engineering of Materials) | | | | | | | | | | | | | 3 | 3 | | |
| | 切削學(Principle of Metal Cutting) | | | | | | | | | | | | | | | 3 | 3 |
| | 電控元件簡介(Introduction to Electronic Control Devices) | | | | | | | | | | | | | | | 3 | 3 |
| 奈米材料(Nanostructured Materials) | | | | | | | | | | | | | | | 3 | 3 | |
| 材料選擇與設計(Material selection and design) | | | | | | | | | | | | | | | 3 | 3 | |
| 產品設計實務(Product Design Practice) | | | | | | | | | | | | | | | 3 | 3 | |
| 合計 | 0 | 0 | 9 | 9 | 9 | 9 | 6 | 6 | 12 | 12 | 9 | 9 | 9 | 9 | 18 | 18 | |

畢業最少應修128 學分。
 基礎課程共12學分，專業必修共66學分，選修至少50學分。