

淡江大學 115學年度 機械與機電工程學系碩士班（A組-學術組） 入學新生課程規劃表  
Curriculums of the Department of Mechanical and Electro-Mechanical Engineering  
Master's Program (Group A - Academic Track) at Tamkang University  
(Applicable to Newly-Admitted Students for the 2026 Academic Year)

| 科目名稱 /Subjects                                                                                  |                                                                 | 學分<br>Credits | 第1學年              |                 | 第2學年              |                 | 第3學年              |                 | 第4學年              |                 | 備註<br>Remarks                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                 |                                                                 |               | 1st Academic Year |                 | 2nd Academic Year |                 | 3rd Academic Year |                 | 4th Academic Year |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 |                                                                 |               | 第1學期              | 第2學期            | 第1學期              | 第2學期            | 第1學期              | 第2學期            | 第1學期              | 第2學期            |                                                                                                                                                                                                                                                            |
|                                                                                                 |                                                                 |               | 1st<br>Semester   | 2nd<br>Semester | 1st<br>Semester   | 2nd<br>Semester | 1st<br>Semester   | 2nd<br>Semester | 1st<br>Semester   | 2nd<br>Semester |                                                                                                                                                                                                                                                            |
| ■本系必修課程：2學分<br>Required Courses：2 credits                                                       | 研究方法（一）<br>Research Method (I)                                  | 1             | 1                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 研究方法（二）<br>Research Method (II)                                 | 1             |                   | 1               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 論文<br>Thesis                                                    | 0             |                   |                 |                   | 0               |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 |                                                                 |               |                   |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
| ■本系系選修課程：至少須修22學分以上。<br>Department Elective Courses: A minimum of 22 credits must be completed. | 高等工程數學<br>Advanced Engineering Mathematics                      | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 | 附註：<br>系選修課程之開設科目，將依據本校規定可開課學分數開課。不是每個科目都會開課。<br>Note:<br>The elective courses offered by the department will be arranged based on the number of credits permitted under the university's regulations. Not all listed courses will necessarily be offered. |
|                                                                                                 | 生醫工程整合技術<br>Integrated Technology of Biomedical Engineering     | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 黏滯流體力學<br>Viscous Fluid Flow                                    | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 積層製造之設計與應用<br>Design and Applications of Additive Manufacturing | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 視覺感測技術與應用<br>Visual Sensing Technology and Applications         | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 企業研發實務<br>Practice of Business Research and Development         | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 電子設備熱管理<br>Thermal Management of Electronics                    | 3             | 3                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 磁性資料儲存裝置簡介<br>Introduction to Magnetic Data Storage Devices     | 1             | 1                 |                 |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 微處理機<br>Microprocessors                                         | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 奈米材料生物晶片設計<br>The Design of A Nano-Material Applied Bio-Chip    | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 骨科基礎生物力學<br>Basic Biomechanics of Orthopedics                   | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 進階能源轉換<br>Advanced Energy Conversion                            | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 機器動力學<br>Dynamics of Machines                                   | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |
|                                                                                                 | 機械振動學<br>Mechanical Vibrations                                  | 3             |                   | 3               |                   |                 |                   |                 |                   |                 |                                                                                                                                                                                                                                                            |

(1)必修科目總學分數：2學分

(1)Total Credits for Required Courses: 2 credits

(2)最低應修本系選修科目總學分數：22學分

(2)Minimum Credits Required for Departmental Elective Courses: 22 credits

畢業總學分數：24學分

Total Number of Credits Required for Graduation: 24 credits