淡江大學航空太空工程學系課程地圖 (114學年度入學新生起適用)

A6

LEARNING MAP Of Sep. 2025 freshman. *Department of Aerospace Engineering, TKU*

一年級 1st year

- 微積分 (3) CALCULUS → 基礎工程數學(3) BASIC ENGINEERING MATHEMATICS
- 普通物理(一) (2) GENERAL PHYSICS (I) → 熱力學(一) (3) THERMODYNAMICS (I)
- 普通物理(二) (2) GENERAL PHYSICS (II)
- 靜力學 (3) STATICS
- 太空工程概論 (1) INTRODUCTION TO ASTRONAUTICAL ENGINEERING
- 工程材料學(2) ENGINEERING MATERIALS
- Fortran程式語言設計(3) COMPUTER PROGRAMMING IN FORTRAN
- 機械畫 (2) MECHANICAL DRAWING
- * 飛機系統(2) AIRPLANE SYSTEMS → 航空工程概論(1) INTRODUCTION TO AERONAUTICAL ENGINEERING

二年級 2nd year

- 工程數學 (3) ENGINEERING MATHEMATICS → 工程數學 (3) ENGINEERING MATHEMATICS
- 熱力學(二) (2) THERMODYNAMICS (II)
- 流體力學 (3) FLUID MECHANICS
- 動力學 (3) DYNAMICS
- 電工學(2) ELECTRICAL ENGINEERING → 電子學(2) ELECTRONICS
- 訊號及系統(2) SIGNALS AND SYSTEMS
- 材料力學 (3) STRENGTH OF MATERIALS
- C語言程式設計(3) PROGRAMMING IN C LANGUAG
- 工場實習 (1) WORKSHOP PRACTICE → 流體力學實驗(1) FLUID MECHANICS LAB.
- * 航空儀表學(2) INSTRUMENTATION
- 基礎航行學(2) GENERAL NAVIGATION

三年級 3rd year

- *線性代數 (2) LINEAR ALGEBRA
- *熱流實驗量測法(2) EXPERIMENTAL METHODS IN THERMO-FLUIDS
- 空氣動力學(3) AERODYNAMICS
- 振動學(3) ENGINEERING VIBRATIONS
- 隨機程序概論(3) INTRODUCTION TO RANDOM PROCESS
- 自動控制 (3) AUTOMATIC CONTROL
- 飛機性能分析(2) AIRCRAFT PERFORMANCE ANALYSIS
- 飛具結構學 (3,2) AIRCRAFT STRUCTURES
- 航空材料學(2) AIRCRAFT MATERIALS
- 高等材料力學(2) ADVANCED STRENGTH OF MATERIALS
- 產業前瞻技術發展(2) FRONTIER INDUSTRIAL TECHNOLOGY DEVELOPMENT
- AI雲端機房熱管理(2) AI CLOUD DATA CENTER THERMAL MANAGEMENT
- *航空電子系統(3) AVIONICS SYSTEMS
- *基礎熱傳學(2) FUNDAMENTALS OF HEAT TRANSFER
- *高等流體力學(2) ADVANCED FLUID DYNAMICS
- *氣體動力學(2) GAS DYNAMICS
- 空氣動力學(2) AERODYNAMICS
- 電工學實驗(1) ELECTRONIC AND CIRCUIT LABORATORY
- 飛行力學 (3) FLIGHT MECHANICS
- *近代控制系統設計/太空飛行力學(3)(對開) MODERN CONTROL SYSTEM DESIGN/ SPACE FLIGHT MECHANICS
- 電子計算機工程應用 (2) ENGINEERING APPLICATION OF OMPUTERS
- 無人機與火箭教學實作(2) UNMANNED AERIAL VEHICLE AND ROCKET PRACTICE COURSE
- 航太工程實驗(1) AEROSPACE ENGINEERING LABORATORY
- 航機英文 (2) ENGLISH FOR AIRCRAFT SYSTEMS
- 航空氣象專論(2) AVIATION WEATHER
- 基礎飛機修護實作(2) BASICS OF AIRCRAFT MAINTENANCE PRACTICES

四年級 4th year

- 偏微分方程(2)(工) PARTIAL DIFFERENTIAL EQUATIONS
- *永續能源與節能產業(2) ENERGY SUSTAINABILITY AND ENERGY-SAVING INDUSTRY
- *綠色能源科技概論(3) INTRODUCTION TO GREEN ENERGY TECHNOLOGY
- 航空發動機 (3) AIRCRAFT ENGINES
- 飛機設計 (3) AIRCRAFT DESIGN
- 無人機應用(2) AIRCRAFTAPPLICATION OF DRONE
- *飛行原理專論(2) SPECIAL TOPICS IN PRINCIPLES OF FLIGHT
- 旋翼機專論(2) SPECIAL TOPICS IN ROTARY WING AIRCRAFT
- * 控制器實務(2) IMPLEMENTATION OF CONTROLLERS
- 無人機與國際關係(2) UNMANNED AERIAL VEHICLES AND INTERNATIONAL RELATIONS
- 進階程式語言(2) ADVANCED PROGRAMMING IN C LANGUAG
- 機械製造(2) MANUFACTURING PROCESSES
- 航太專題實驗(1) PRACTICE OF AEROSPACE ENGINEERING
- *校外實習 (1) PROFESSIONAL INTERSHIP
- *航太醫學(2) FUNDAMENTALS OF AVIATION MEDICINE
- 廿一世紀的航太產業(2)(工) AEROSPACE INDUSTRY OF THE 21ST CENTURY
- 飛航實務概論(2)(講座課程) INTRODUCTION OF PPL GROUND COURSE
- *風力發電系統專論(2) SPECIAL TOPIC ON SMALL WIND TURBINE SYSTEM
- *微奈米工程概論(3) INTRODUCTION TO MICRO AND NANO ENGINEERING
- * 火箭工程(3) ROCKET PROPULSION
- * 基礎燃燒學 (2) AN INTRODUCTION TO COMBUSTION
- 低空軌道衛星的國防應用(2) THE DEFENSE APPLICATIONS OF LOW-EARTH ORBIT SATELLITES
- 前瞻產業實務(2) TECHNOLOGY FORESIGHT FOR INDUSTRIAL APPLICATION
- 航空品保(2) AVIATION QUALITY ASSURANCE
- *民航機設計驗證(2) DESIGN CERTIFICATION OF CIVIL AIRCRAFT
- *管理與科技(2) MANAGEMENT AND TECHNOLOGY
- 系統工程(2) System Engineering
- 有限元素法(2) FINITE ELEMENT METHODS
- 電腦輔助設計與製造(2) CAD / CAM
- *機隊管理(2)
- 民航學程實習(9) AVIATION PROGRAM INTERNSHIP
- *航空英文(2) AVIATION ENGLISH
- 飛行安全專論(2) FLIGHT SAFETY
- 空中交通管制(2) AIR TRAFFIC CONTROL
- 航太專案管理(2)(講座課程) AEROSPACE PROJECT MANAGEMENT

* ： 114未開課

註解：必修 Required / 選修 Elective

第1學期 fall credits	第2學期 spring credits	第1學期 fall credits	第2學期 spring credits	第1學期 fall credits	第2學期 spring credits	第1學期 fall credits	第2學期 spring credits
(6 / 2)	(1 2 / 5)	(1 2 / 7)	(9 / 2)	(9 / 1 6)	(1 0 / 2 0)	(7 / 1 6)	(0 / 2 7)

114學年度起 必修學分：91學分(含通識26學分)；本系選修課最低學分：9學分；畢業學分數：128學分

Sep. 2025- Completion of 128 credits , including 91 credits of compulsory courses and 9 credits of elective courses.