

## 明志科技大學四年制112學年度入學 環資跨領域實務菁英班 課程總表

112/06/20院課程委員會審議通過  
112/06/27校課程委員會審議通過

| 學分  |                | 上   |    | 下   |    | 上   |    | 下  |    | 上  |    | 下  |    | 上  |    | 下  |   | 備註          |   |                    |                     |                   |            |
|---|----------------|---|----|-----|----|-----|----|----|----|----|----|----|----|----|----|----|---|-------------|---|--------------------|---------------------|-------------------|------------|
|   |                | 學分  | 學數 | 學分  | 學數 | 學分  | 學數 | 學分 | 學數 | 學分 | 學數 | 學分 | 學數 | 學分 | 學數 |    |   |             |   |                    |                     |                   |            |
| 第一學期<br>(42學分)  | 共同必修<br>(42學分) | 文學賞識與情意表達(Literature and Emotional Expression)  | 2  | 2   |    |     |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 永續發展與社會責任(Sustainability Development and Social Practice)   | 1  | 1   |    |     |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 生活與商業概況「A」-「C」English for Life and Business I-D   | 3  | 3   | 3  | 3   |    |    |    |    |    |    |    |    |    |    |   | 分組          |   |                    |                     |                   |            |
|   |                | 全民國防教育軍事訓練A1-out Defense Education Military Training  | 0  | 2   | 0  | 2   |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 體能(Physical Education)  | 1  | 2   | 1  | 2   | 1  | 2  | 1  | 2  |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 結文書寫與社會參與(Art Literacy and Social Participation)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 英語聽讀(Aural-Oral English)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   | 分組          |   |                    |                     |                   |            |
|   |                | 英文書寫「A」-「C」Practical English  |    |     |    |     |    |    |    |    |    |    |    |    | 0  | 2  | 0 | 2           | 分組  |                    |                     |                   |            |
|   |                | 社會哲學領域  |    |     |    |     | 3  | 3  |    |    |    |    |    |    |    |    |   |             | 「憲政與法治」、「歷史導讀」課程二擇一課                                    |                    |                     |                   |            |
|   |                | 大學之道(The Goal of University Education)  | 1  | 2   |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 獨立一班  |                    |                     |                   |            |
| 第二學期<br>(42學分)  | 必修<br>(42學分)   | 設計思考(Design Thinking)   |    |     | 1  | 1   |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 勤勞教育(Labor Education)   | 0  | 0.5 | 0  | 0.5 |    |    |    |    |    |    |    |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 合計  | 1  | 2.5 | 1  | 1.5 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0 | 0           | 2   |                    |                     |                   |            |
|   |                | 實習前職場素養訓練(Professionalism Prior to Practical Training)  |    |     |    |     |    |    |    |    | 1  | 1  |    |    |    |    |   |             | 獨立一班  |                    |                     |                   |            |
| 校內<br>共20<br>同學分  | 必修<br>(42學分)   | 上讀自學英文(Self-Study English During Vocational Practice)   |    |     |    |     |    |    |    |    |    |    | 2  |    |    |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 上讀實務英語(一)Practical Training Curriculum (1)  |    |     |    |     |    |    |    |    |    |    |    |    | 4  |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 上讀實務英語(二)Practical Training Curriculum (2)  |    |     |    |     |    |    |    |    |    |    |    |    | 4  |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 上讀實務英語(三)Practical Training Curriculum (3)  |    |     |    |     |    |    |    |    |    |    |    |    | 4  |    |   | 獨立一班        |   |                    |                     |                   |            |
|   |                | 上讀實務英語(四)Practical Training Curriculum (4)  |    |     |    |     |    |    |    |    |    |    |    |    | 4  |    |   | 獨立一班        |   |                    |                     |                   |            |
| 專業必修<br>(45學分)  | 必修<br>(45學分)   | 合計  | 0  | 0   | 0  | 0   | 0  | 0  | 0  | 0  | 1  | 1  | 19 | 0  | 0  | 0  | 0 | 0           | 20  |                    |                     |                   |            |
|   |                | 普通化學實驗(General Chemistry Lab)   | 1  | 3   |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 普通物理實驗(General Physics Lab)   | 1  | 3   |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 普通化學(General Chemistry)   | 3  | 3   |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 普通物理(General Physics)   | 3  | 3   |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 微積分(Calculus)   | 2  | 2   |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 工程數學(Engineering Mathematics)   |    |     | 2  | 2   | 2  | 2  |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 質量平衡(Mass and Energy Balances)  |    |     | 2  | 2   |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 基礎材料實驗(Fundamental Experiments in Materials Science)  |    |     | 1  | 3   |    |    |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 能源材料與製程導論(Introduction to Energy Materials and Processes)   |    |     |    |     | 3  | 3  |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 能源工程概論(Introduction to Energy Engineering)  |    |     |    |     | 3  | 3  |    |    |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 電池製程技術(Battery Process Technology)  |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 數值分析與程式設計(Numerical Analysis and Computer Programming)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 電池材料與分析實驗(Battery Materials and Analysis Practice)  |    |     |    |     |    |    |    |    |    | 3  | 3  |    |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 電池組裝與分析實驗(Battery Assembly and Analysis Practice)   |    |     |    |     |    |    |    |    |    |    | 3  | 3  |    |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 電池極化與分析技術(Battery Testing and Analysis Technology)  |    |     |    |     |    |    |    |    |    |    |    | 3  | 3  |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 實務專題「A」-「C」Special Topics in Practice I-III   |    |     |    |     |    |    | 1  | 2  |    | 1  | 2  |    | 1  | 2  |   | 1           | 2   | 獨立一班               |                     |                   |            |
|   |                | 工程倫理與實務講義(Engineering Ethics and Professional Topics)   |    |     |    |     |    |    |    |    |    |    |    | 1  | 3  |    |   |             |   | 獨立一班               |                     |                   |            |
|   |                | 鋰電光產業實務講義(Lecture on Lithium Battery Industry Practice)   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   | 3           | 3   | 獨立一班               |                     |                   |            |
|   |                | 合計  | 10 | 14  | 5  | 7   | 8  | 8  | 6  | 6  | 7  | 8  | 0  | 0  | 5  | 8  | 4 | 5           |   | 45                 |                     |                   |            |
| 共通選修<br>8學分   | 選讀課程           | 一、閱讀清單冊參考「選讀課程彙總表」。   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   |                    |                     |                   |            |
|   |                | 二、選讀四類選修課：語文類型、人文藝術、社會科學、自然科學。<br>需至少各修畢2學分，且合計至少4學分。   |    |     |    | 2   | 2  |    |    |    |    | 2  | 2  | 4  | 4  |    |   |             |   |                    |                     |                   |            |
| 院系選修<br>8學分   | 院系選修課程         | 基石專題(Corncrston Project)  |    |     | 1  | 3   |    |    |    |    |    |    |    |    |    |    |   |             | 獨立一班  |                    |                     |                   |            |
|   |                | Python語言與應用(Python and its applications)  |    |     | 3  | 3   |    |    |    |    |    |    |    |    |    |    |   |             | 榮譽學程必修  |                    |                     |                   |            |
|   |                | 在奈米光觸媒的環境淨化應用(Green application of nano-photocatalysis)   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 院專專業選修  |                    |                     |                   |            |
|   |                | 鑽石專題(Diamond Project)   |    |     |    |     |    |    |    | 1  | 3  |    |    |    |    |    |   |             | 獨立一班  |                    |                     |                   |            |
| 合計  | 0              | 0   | 4  | 6   | 0  | 0   | 3  | 3  | 1  | 3  | 0  | 0  | 0  | 0  | 0  | 0  |   | 8           |   |                    |                     |                   |            |
| 實務專選修<br>4學分  | 實務專選修課程        | 工業設計與3D數位化成形實務(Industrial Design and 3D Digital Prototyping)  |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 職實務專業選修;榮譽學程必修  |                    |                     |                   |            |
|   |                | 實務專選修導論(Introduction to Special Topics in Practice)   |    |     |    |     |    |    |    | 1  | 2  |    |    |    |    |    |   |             | 職實務專業選修   |                    |                     |                   |            |
|   |                | 合計  | 0  | 0   | 0  | 0   | 0  | 0  | 4  | 5  | 0  | 0  | 0  | 0  | 1  | 3  | 0 | 0           | 5   |                    |                     |                   |            |
|   |                | 光電材料製程實務(Practice of Optoelectronic Materials)  |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 1.銅材2甲;材料專業選修;制程實務<br>2.材料專業選修共四門製程實務課程，必須至少四選二。(GE5-1) |                    |                     |                   |            |
| 材料專業選修<br>一開設64學分   | 材料專業選修課程       | 生醫材料製程實務(Practice of Biomedical Materials)  |    |     |    |     |    | 3  | 3  |    |    |    |    |    |    |    |   |             |   |                    |                     |                   |            |
|   |                | 透視材料製程實務(Practice of Protective Film Materials)   |    |     |    |     |    |    |    | 3  | 3  |    |    |    |    |    |   |             |   |                    |                     |                   |            |
|   |                | 能源材料製程實務(Practice of Energy Materials)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   |                    |                     |                   |            |
|   |                | 材料分析概論(Introduction to Material Analysis)   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 應材2甲;材料專業選修;榮譽學程選修                                      |                    |                     |                   |            |
|   |                | 真空技術與實務(Vacuum Technology and Practice)   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 應材2甲;材料專業選修;榮譽學程選修                                      |                    |                     |                   |            |
|   |                | 材料熱力學(Thermodynamics of Materials)  |    |     |    |     |    |    | 3  | 3  | 3  | 3  |    |    |    |    |   |             | 應材2甲;材料專業選修   |                    |                     |                   |            |
|   |                | 物理冶金(Physical Metallurgy)   |    |     |    |     |    |    | 3  | 3  | 3  | 3  |    |    |    |    |   |             | 應材2甲;材料專業選修   |                    |                     |                   |            |
|   |                | 電腦模擬與機器學習在材料製程之應用<br>(Application of Computer Simulation and Machine Learning in Materials Processes) |    |     |    |     |    |    |    |    |    | 3  | 3  |    |    |    |   |             | 應材2甲;材料專業選修;榮譽學程選修                                      |                    |                     |                   |            |
|   |                | X光繞射導論(Introduction to X-ray Diffraction)   |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應材3甲;材料專業選修        |                     |                   |            |
|   |                | 材料機械性質(Mechanical Properties of Materials)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應材3甲;材料專業選修        |                     |                   |            |
|   |                | 材料物理性質(Physical Properties of Materials)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應材3甲;材料專業選修        |                     |                   |            |
|   |                | 材料選擇與設計(Material Selection and Design)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應材3甲;材料專業選修;榮譽學程選修 |                     |                   |            |
|   |                | 電化學方法與應用實務(Electrochemical Methods and Practical Applications)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應材3甲;材料專業選修        |                     |                   |            |
|   |                | 薄膜製程實驗(Experiments on Thin Film Processing)   |    |     |    |     |    |    |    |    |    |    | 1  | 3  |    |    |   |             |   | 應材4甲;材料專業選修        |                     |                   |            |
|   |                | 電漿製程實驗(Experiments on Plasma Processing)  |    |     |    |     |    |    |    |    |    |    | 1  | 3  |    |    |   |             |   | 應材4甲;材料專業選修        |                     |                   |            |
|   |                | 薄膜製程 Thin Film Processing)  |    |     |    |     |    |    |    |    |    |    |    | 3  | 3  |    |   |             |   | 應材4甲;材料專業選修        |                     |                   |            |
| 電漿製程(Plasma Processing)   |                |   |    |     |    |     |    |    |    |    |    |    | 3  | 3  |    |    |   | 應材4甲;材料專業選修 |   |                    |                     |                   |            |
| 專業選修<br>(專業選修三擇一，至少30學分)  | 專業選修課程         | 奈米檢測分析(Nano-Characterization)   |    |     |    |     |    |    |    |    |    |    |    | 3  | 3  |    |   |             | 應材4甲;材料專業選修;榮譽學程選修                                      |                    |                     |                   |            |
|   |                | 光電薄膜合成製程實驗(Experiments on Optoelectronic Hybrid Thin Films Processing)                                |    |     |    |     |    |    |    |    |    |    |    |    |    | 1  | 3 |             | 應材4甲;材料專業選修   |                    |                     |                   |            |
|   |                | 奈米檢測分析實驗(Experiments on Nano-Characterization)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    | 1 | 3           |   | 應材4甲;材料專業選修        |                     |                   |            |
|   |                | 生醫應用實務(Biomaterials and Practical Applications)   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   | 3           | 3   | 應材4甲;材料專業選修;榮譽學程選修 |                     |                   |            |
|   |                | 分析化學實驗(Analytical Chemistry and Experiment)   |    |     | 3  | 4   |    |    |    |    |    |    |    |    |    |    |   |             |   | 應化1甲;工專業選修;榮譽學程選修  |                     |                   |            |
|   |                | 化學技術實習(Chemical Technology in Practice)   |    |     |    |     | 1  | 4  |    |    |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 高分子化學(Polymer Chemistry)  |    |     |    |     | 3  | 3  |    |    |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 生物化學(Biochemistry)  |    |     |    |     | 3  | 3  |    |    |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 有機化學(Organic Chemistry)   |    |     |    |     | 3  | 3  | 3  | 3  |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 化工產業與人工智慧應用(Chemical Engineering Industry and Artificial Intelligence Application)                    |    |     |    |     |    |    | 1  | 2  |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 高分子實驗(Polymer Experiment)   |    |     |    |     |    |    | 1  | 3  |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 高分子合成(Synthetic Chemistry)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 單元操作與輸送現象(Unit Operation and Transport Phenomena)   |    |     |    |     | 3  | 3  |    | 3  | 3  |    |    |    | 3  | 3  |   |             |   | 應化2甲;工專業選修;榮譽學程選修  |                     |                   |            |
|   |                | 高分子加工製程實務(Polymer Processing and Experiment)  |    |     |    |     |    |    | 3  | 4  |    |    |    |    |    |    |   |             |   | 應化2甲;工專業選修         |                     |                   |            |
|   |                | 合成化學實驗(Synthetic Chemistry Experiment)  |    |     |    |     |    |    |    |    | 1  | 3  |    |    |    |    |   |             |   | 應化3甲;工專業選修         |                     |                   |            |
|   |                | 物理化學實驗(Physical Chemistry Experiment)   |    |     |    |     |    |    |    |    | 1  | 3  |    |    |    |    |   |             |   | 應化3甲;工專業選修         |                     |                   |            |
| 公用設施(Utility Installations)   |                |   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   | 應化3甲;工專業選修  |   |                    |                     |                   |            |
| 開設51學分  | 專業選修課程         | 電化學(Electrochemistry)   |    |     |    |     |    |    |    | 3  | 3  |    |    |    |    |    |   |             |   | 應化3甲;工專業選修;榮譽學程選修  |                     |                   |            |
|   |                | 化工裝置設計(Equipment Design in Chemical Engineering)  |    |     |    |     |    |    |    |    |    |    |    |    | 3  | 3  |   |             |   | 應化4甲;工專業選修         |                     |                   |            |
|   |                | 奈米觸媒技術與應用(Nanocatalytic Technology and Application)   |    |     |    |     |    |    |    |    |    |    |    |    |    |    | 3 | 3           |   | 應化4甲;工專業選修         |                     |                   |            |
|   |                | 化工製圖實務講義(Professional Topics in Chemical Cartography)   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 3   | 3                  | 應化4甲;工專業選修;榮譽學程選修   |                   |            |
|   |                | 產業技術及問題諮詢(Problem Solving and Technical Communication)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   | 3                  | 3                   | 應化4甲;工專業選修;榮譽學程選修 |            |
|   |                | 奈米材料與技術(Nanomaterial and Technology)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   |                    | 3                   | 3                 | 應化4甲;工專業選修 |
|   |                | 工業安全(Industrial Safety)   |    |     | 2  | 2   |    |    |    |    |    |    |    |    |    |    |   |             |   |                    | 應環1甲;環安衛專業選修        |                   |            |
|   |                | 綠色能源概論(Introduction to Green Energy)  |    |     | 3  | 3   |    |    |    |    |    |    |    |    |    |    |   |             |   |                    | 應環1甲;環安衛專業選修;榮譽學程選修 |                   |            |
|   |                | 工業衛生(Industrial Hygiene)  |    |     |    |     | 2  | 2  |    |    |    |    |    |    |    |    |   |             |   |                    | 應環1甲;環安衛專業選修        |                   |            |
|   |                | 環境科學與工程概論(Introduction to Environmental Science and Engineering)                                      |    |     |    |     |    |    | 3  | 3  | 3  | 3  |    |    |    |    |   |             |   |                    | 應環2甲;環安衛專業選修        |                   |            |
|   |                | 環境安全(Construction Safety)   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             |   |                    | 應環2甲;環安衛專業選修        |                   |            |
|   |                | 水質分析實驗(Water Analysis Experiment)   |    |     |    |     |    |    |    |    | 1  | 2  |    |    |    |    |   |             |   |                    | 應環2甲;環安衛專業選修        |                   |            |
|   |                | 環境化學(Environmental Chemistry)   |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   |                    | 應環2甲;環安衛專業選修        |                   |            |
|   |                | 職業安全衛生技術特論(Special topic of occupational safety and health technology)                                |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   |                    | 應環3甲;環安衛專業選修        |                   |            |
|   |                | 環境分析實驗(Instrumental Analysis Experiment)  |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             |   |                    | 應環3甲;環安衛專業選修        |                   |            |
|   |                | 環境微生物實驗(Environmental Microbiology Experiment)  |    |     |    |     |    |    |    |    | 1  | 2  |    |    |    |    |   |             |   |                    | 應環3甲;環安衛專業選修        |                   |            |
| 作業環境監測(Workplace Monitoring)  |                |   |    |     |    |     |    |    | 3  | 3  |    |    |    |    |    |    |   |             | 應環3甲;環安衛專業選修;榮譽學程選修                                     |                    |                     |                   |            |
| 廢棄物處理(Solid Waste Treatment and Disposal)                                     |                |   |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             | 應環3甲;環安衛專業選修;榮譽學程選修                                     |                    |                     |                   |            |
| 工業通風(Industrial Ventilation)  |                |   |    |     |    |     |    |    |    |    | 3  | 3  |    |    |    |    |   |             | 應環3甲;環安衛專業選修  |                    |                     |                   |            |
| 環境監測實驗(Environmental Monitoring Experiment)                                   |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修  |                    |                     |                   |            |
| 環境保護法規(Environmental Protection Regulations)                                  |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修  |                    |                     |                   |            |
| 污水工程(Wastewater Engineering)  |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修;榮譽學程選修                                     |                    |                     |                   |            |
| 大數據在環境工程上的應用(The Application of Data Mining in the Environmental Engineering) |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修;榮譽學程選修                                     |                    |                     |                   |            |
| 空氣污染防治(Fundamentals of Air Pollution)   |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修  |                    |                     |                   |            |
| 環境工程實作實驗(Experiments of Unit Operations on Environmental Engineering)         |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 應環4甲;環安衛專業選修  |                    |                     |                   |            |
| 廢棄物資源化工程(Waste Resourceization Engineering)                                   |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             | 3   | 3                  | 應環4甲;環安衛專業選修;榮譽學程選修 |                   |            |
| 合計  | 5              | 5   | 5  | 6   | 34 | 37  | 36 | 41 | 37 | 43 | 3  | 3  | 33 | 38 | 18 | 23 |   |             | 171   |                    |                     |                   |            |
| 其他<br>至少23<br>學分  | 其他選修           | 其他選修之修習課程不得包含選讀課程，合計至少23學分。(GE5)  |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   |                    |                     |                   |            |
|   |                |   |    |     |    |     |    |    |    |    |    |    |    |    |    |    |   |             |   |                    |                     |                   |            |

7. 畢業生最少修148學分，包含共同必修42學分、基礎課程修分、專業必修84學分、專業選修30學分，其他選修23學分。  
 工讀實施要領(一)(四)及(五)「學習自學英文」為三下必修，另外由選修基礎教學課程。  
 8. 每學期開學前及至27學分，一至二級不得少於16學分，三至四年級不得少於39學分。  
 上學期課程及40節時數以上課，以滿足畢業。  
 9. 其他選修之修習課程不得包含基礎課程，合計至多23學分。  
 10. 畢業選修至少三大領域(材料專業選修、化工專業選修、環安衛專業選修)，必須選一條領域領域課程至少30學分，請依條修讀指引選課。  
 11. 材料專業畢業生共同設6學分，應修至少30學分；其中有四門課程專業課或材料製程實習、生醫材料製程實習、通順材料製程實習、能源材料製程實習必須至至少四選二。  
 12. 化工專業畢業生共同設6學分，應修至少30學分；  
 13. 環安衛專業畢業生共同設5學分，應修至少30學分；