

## 國立金門大學日間部學士班工業工程與管理學系課程規劃表

National Quemoy University Bachelor's Program - Department of Industrial Engineering and Management Curriculum Plan

115學年度入學新生適用

Applicable for Freshmen Admitted in Academic Year 2026

本學系學生畢業時至少應修滿 129 學分，包括

修訂歷程

|                                  |            |  |                                        |
|----------------------------------|------------|--|----------------------------------------|
| 共同必修 8 學分                        | 通識課程 16 學分 |  | 中華民國115年03月25日114學年度第2學期第1次系統課程規劃委員會訂定 |
| 院必修 6 學分                         | 系必修 63 學分  |  | 中華民國115年06月3日115學年度第2學期第1次校級課程規劃委員會通過  |
| 專業選修 36 學分(包括 9 學分可選修非本學系所開設之課程) |            |  |                                        |

|        |                   | 一年級                                                  |   | 上學期                  |   | 下學期 |    | 二年級                                                        |   | 上學期   |    | 下學期 |                                                     | 三年級                                                                   |   | 上學期   |    | 下學期                                               |                                                   | 四年級                                                                    |   | 上學期   |   | 下學期 |   | 四年合計 |   |   |     |
|--------|-------------------|------------------------------------------------------|---|----------------------|---|-----|----|------------------------------------------------------------|---|-------|----|-----|-----------------------------------------------------|-----------------------------------------------------------------------|---|-------|----|---------------------------------------------------|---------------------------------------------------|------------------------------------------------------------------------|---|-------|---|-----|---|------|---|---|-----|
|        |                   | 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 |   |     |   |      |   |   |     |
| 共同必修   |                   | 通識(General Education)                                |   | 依本校「學生修習通識教育課程須知」規定。 |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   | 16   |   |   |     |
|        |                   | 體育(Physical Education)                               |   | 依本校「體育課程實施辦法」規定。     |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   | 0    |   |   |     |
|        |                   | 國文(一)Chinese(I)                                      | 2 | 2                    |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   | 8    |   |   |     |
|        |                   | 英文(一)English(I)                                      | 2 | 2                    |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 國文(二)Chinese(II)                                     |   |                      | 2 | 2   |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        | 英文(二)English (II) |                                                      |   | 2                    | 2 |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
| 共同必修總計 |                   |                                                      |   | 4                    | 4 | 4   | 4  |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   | 8    |   |   |     |
| 專業必修   | 院必修               | 管理學<br>Principle of Management                       | 2 | 2                    |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   | 6    |   |   |     |
|        |                   | 計算機概論<br>Information to computer                     | 2 | 2                    |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 經濟學<br>Economics                                     |   |                      | 2 | 2   |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        | 院必修總計             |                                                      |   |                      | 4 | 4   | 2  | 2                                                          |   | 0     |    | 0   |                                                     | 0                                                                     |   | 0     |    | 0                                                 |                                                   | 0                                                                      |   | 0     |   | 0   |   |      |   |   |     |
|        | 系必修               | 微積分(一)<br>Calculus I                                 | 3 | 3                    |   |     |    | 工程統計(一)<br>Engineering Statistics (I)                      | 3 | 3     |    |     |                                                     | 品質管理<br>Quality Management                                            | 3 | 3     |    |                                                   |                                                   | 實務專題(二)<br>Special Topics in Industrial Engineering and Management(II) | 3 | 3     |   |     |   | 63   |   |   |     |
|        |                   | 設計與工程圖學<br>Design and Engineering Graphics           | 3 | 3                    |   |     |    | 工作研究<br>Motion and Time Study                              | 3 | 3     |    |     |                                                     | 設施規劃<br>Facilities Planning                                           | 3 | 3     |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 工業工程概論<br>Introduction to Industrial Engineering     | 3 | 3                    |   |     |    | 專業英文<br>Professional English                               | 3 | 3     |    |     |                                                     | 人因工程<br>Ergonomics                                                    |   |       | 3  | 3                                                 |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 微積分(二)<br>Calculus II                                |   |                      | 3 | 3   |    | 線性代數<br>Linear Algebra                                     | 3 | 3     |    |     |                                                     | 系統模擬<br>System Simulation                                             |   |       | 3  | 3                                                 |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 程式語言<br>Programming Language                         |   |                      | 3 | 3   |    | 作業研究<br>Operation Research                                 |   |       | 3  | 3   |                                                     | 實務專題(一)<br>Special Topics in Industrial Engineering and Management(I) |   |       | 3  | 3                                                 |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 服務與製造概論<br>Introduction to Service and Manufacturing |   |                      | 3 | 3   |    | 生產計劃與管理<br>Production Planning and Management              |   |       | 3  | 3   |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 會計學<br>Accounting                                    |   |                      | 3 | 3   |    | 工程統計(二)<br>Engineering Statistics (II)                     |   |       | 3  | 3   |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    | 工程經濟<br>Engineering Economics                              |   |       | 3  | 3   |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     |                                                     |                                                                       |   |       |    |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
| 系必修總計  |                   |                                                      |   | 9                    | 9 | 12  | 12 |                                                            | 0 |       | 12 | 12  | 12                                                  | 12                                                                    |   | 0     |    | 6                                                 | 6                                                 | 9                                                                      | 9 |       | 0 |     | 3 | 3    | 0 | 0 | 63  |
| 專業必修總計 |                   |                                                      |   | 13                   |   | 14  |    |                                                            | 0 |       | 12 |     | 12                                                  |                                                                       |   | 0     |    | 6                                                 |                                                   | 9                                                                      |   |       | 0 |     | 3 |      | 0 |   | 69  |
| 專業選修   |                   | 資訊安全與倫理<br>Information Security and Ethics           | 2 | 2                    |   |     |    | 成本會計<br>Cost Accounting                                    | 3 | 3     |    |     | 作業研究應用<br>Operation Research Applications           | 3                                                                     | 3 |       |    |                                                   | 全面品質管理<br>Total Quality Management                | 3                                                                      | 3 |       |   |     |   | 98   |   |   |     |
|        |                   | 人工智慧導論<br>Introduction to Artificial Intelligence    | 2 | 2                    |   |     |    | 客戶關係管理<br>Customer Relationship Management                 | 2 | 2     |    |     | 專案管理<br>Project Management                          | 3                                                                     | 3 |       |    |                                                   | 可靠度工程<br>Reliability Engineering                  | 3                                                                      | 3 |       |   |     |   |      |   |   |     |
|        |                   | 行銷管理<br>Marketing Management                         |   |                      | 2 | 2   |    | 資料結構<br>Data structure                                     | 3 | 3     |    |     | 企業資源規劃<br>Enterprise Resource Planning              | 3                                                                     | 3 |       |    |                                                   | 永續工程與管理<br>Sustainable Engineering and Management | 3                                                                      | 3 |       |   |     |   |      |   |   |     |
|        |                   | 心理學<br>Psychology                                    |   |                      | 2 | 2   |    | 物聯網實務與應用<br>Practice and Application of Internet of Things | 3 | 3     |    |     | 物料與供應鏈管理<br>Materials and Supply Chain Management   | 3                                                                     | 3 |       |    |                                                   | 製造策略規劃<br>Manufacturing Strategy Planning         | 3                                                                      | 3 |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    | 服務系統設計<br>Design of Service System                         |   |       | 3  | 3   | 電子商務<br>Electronic Commerce                         | 3                                                                     | 3 |       |    |                                                   | 機器學習<br>Machine Learning                          | 3                                                                      | 3 |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    | 財務管理<br>Financial management                               |   |       | 2  | 2   | 網路程式與應用<br>Network Programming and Applications     | 3                                                                     | 3 |       |    |                                                   | 專業實習(一)<br>Professional Practice I                | 3                                                                      | 3 |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    | 工業安全<br>Industrial Safety                                  |   |       | 2  | 2   | 田口方法<br>Taguchi Method                              |                                                                       |   | 3     | 3  | 科技管理<br>Technology Management                     |                                                   |                                                                        | 3 | 3     |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    | 資料庫管理系統<br>Database Management System                      |   |       | 3  | 3   | 六標準差<br>6 Sigma                                     |                                                                       |   | 3     | 3  | 自動化生產系統<br>Automatic Production System            |                                                   |                                                                        | 3 | 3     |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     | 精實生產<br>Lean Production                             |                                                                       |   | 3     | 3  | 雲端與數位內容管理<br>Cloud and Digital Content Management |                                                   |                                                                        | 3 | 3     |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     | 決策分析<br>Decision Analysis                           |                                                                       |   | 3     | 3  | 專業實習(二)<br>Professional Practice II               |                                                   |                                                                        | 3 | 3     |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     | 服務創新與管理<br>Service Innovation and Management        |                                                                       |   | 3     | 3  |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     | 資料探勘<br>Data Mining                                 |                                                                       |   | 3     | 3  |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   |                                                      |   |                      |   |     |    |                                                            |   |       |    |     | 半導體製程概論<br>Introduction to Semiconductor Processing |                                                                       |   | 3     | 3  |                                                   |                                                   |                                                                        |   |       |   |     |   |      |   |   |     |
|        |                   | 專業選修總計                                               |   |                      |   | 8   |    |                                                            |   |       |    | 21  |                                                     |                                                                       |   |       |    | 39                                                |                                                   |                                                                        |   |       |   | 30  |   |      |   |   | 98  |
|        |                   | 學期總計                                                 |   |                      |   | 43  |    |                                                            |   |       | 45 |     |                                                     |                                                                       |   |       | 54 |                                                   |                                                   |                                                                        |   | 33    |   |     |   |      |   |   | 175 |

備註：

"Remark :

1. 學生必須修畢共同必修課程8學分、通識課程16學分、院必修6學分、專業必修63學分、專業選修至少36學分(包括9學分可選修非本系所開設之專業課程)，始得畢業，畢業學分最低為129學分，且須通過「本校學生英文及資訊能力畢業門檻及輔導辦法」及本系學生畢業規定始可畢業。

1. 8 credits of common required courses, 16 credits of general education courses, 6 credits of required courses, 63 credits of major required courses and at least 36 credits of major elective courses (9 credits of exclusive major courses are acceptable) are necessarily gained, totally at least 129 credits for graduation; in addition, "Undergraduate English Language Proficiency Policy and Guidance Rules" and relevant requirements from each department should be fulfilled and be complied with as well.

2. 實務專題(一)、實務專題(二)以分組授課或專業實習之方式進行學術性或實務性的專題研討。

2. 'Special Topics in Industrial Engineering and Management(I)' and 'Special Topics in Industrial Engineering and Management(II)' are conducted in dividing students in several groups or by professional internship programs for discussion on academic and practical issues.

3. 專業實習(一)、專業實習(二)依本校「日間部大學部專業實習課程開設準則」及本系「學生實習要點」規定辦理。

3. 'Professional Practice (I)' and 'Professional Practice (II)' are conducted under "Open Standards of Professional Internship Relevant Courses for Day Schools" and "Internship Conducting Directions" of IEU.