## 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

114學年度入學新生通用 Applicable for Freshmen Admitted in Academic Year 2025

|   |                     | 本學系學生畢業時至少  | 應      | 修注                        | 满 1     | 129                | 學分,包括                                 |                 |                       |      |          |   |       |                   |                  |                   | Applicable for Freshmen Ad                                     |                 | d in A             | cadem         | sc Year 2 |     |
|---|---------------------|---|--------|---------------------------|---------|--------------------|---------------------------------------|-----------------|-----------------------|------|----------|---|-------|-------------------|------------------|-------------------|--|-----------------|--------------------|---------------|-----------|-----|
|   |                     | Graduation Requirement: A minimum of<br>共同必修 <u>8</u> 學分    | luding | <u>通</u> 端課程 <u>16</u> 學分 |         |                    |                                       |                 |                       |      |          |   |       | 罗利屋在              |                  |                   |  |                 |                    |               |           |     |
|   |                     | General Core Curriculum: 8 credits<br>院 必 修 <u>6</u> 學分     |        |                           |         |                    | General Education Courses: 16 credits | 系 必 修 <u></u>   |                       |      | - 6      | 63 學分   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   |                     | College Required Courses: 6 credits<br>專業選修 <u>36</u> 學分(包括 | 9.5    | 是分                        | 可       | 選任                 | 答非本學系所開設之認                            | Dep             | rtment l              | tequ | ired     | Courses: 63 credits   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   |                     | Professional Electives: 36 credits (including               | up to  | 9 cree                    | dits fr |                    | her departments)                      |                 |                       | 下手   | <b>季</b> | 三年級   | 上     | - 期               | 下學               | - 期               | 四年級  | Ŀ               | 學期                 | 下學            | 期四点       |     |
|   |                     | First Year  |        | nester<br>時報<br>Hr        |         | nester<br>時報<br>Hr | Second Year                           | Sen<br>學分<br>Cr | ester<br>時數 學<br>Hr ( | 期分   | 李欽       | Third Year  | 學分    | ester<br>時載<br>Hr | Seme<br>學分<br>Cr | ester<br>時載<br>Hr | Fourth Year  | Sen<br>學分<br>Cr | nester<br>計載<br>Hr | 多<br>學分<br>Cr | ster 1    | tal |
| 共同<br>必修<br>General Required Courses                |                     | 通識<br>General Education                                     | 依      |                           |         |                    | 修習通識教育課程辦法」規定。Follow the univer       |                 |                       |      |          |   |       |                   |                  |                   |  |                 |                    |               |           | 6   |
|   |                     | 體育<br>Physical Education<br>國文(一)Chinese(I)                 | 依2     | _                         | _       | 實育                 | 果程實施辦法」規定。Follow th                   | e uni           | versity's             | Phy  | /sical   | Education Curriculum Guidelines" – 0 c                              | redit |                   |                  |                   |  |                 | ı                  |               | -         | 0   |
|   |                     | 英文(一)English(I)   | 2      | _                         |         |                    |                                       |                 |                       |      |          |   |       |                   |                  |                   |  |                 |                    |               | Ι,        | 8   |
|   |                     | 國文(二)Chinese(II)<br>英文(二)English (II)                       |        |                           | 2       |                    |                                       |                 |                       | +    |          |   |       |                   |                  |                   |  |                 |                    |               |           |     |
| 共同必<br>Sub  |                     |   | 4      | 4                         | 4       | 4                  |                                       |                 |                       |      |          |   |       |                   |                  |                   |  |                 |                    |               |           | 8   |
|   | 院必修                 | 管理學<br>Principle of Management                              | 2      | 2                         |         |                    |                                       |                 |                       |      |          |   |       |                   |                  |                   |  |                 |                    |               |           |     |
| 事業 <b>治传</b><br>Professional<br>Required<br>Courses | College<br>Required | 計算機概論<br>Introduction to Computer<br>經濟學                    | 2      | 2                         | -       |                    |                                       |                 |                       |      |          |   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   | 院必修總計               | Economics   | 4      |                           | 2       | 2                  | 0                                     | 0               |                       |      |          |   | 0     |                   | 0                |                   | 0  | 0               |                    | 0             |           | _   |
|   | Subtotal            | 微積分(一)  |        |                           |         | 2                  | 工程統計(一)                               |                 |                       | ,    |          | 品質管理  | -     | Н                 | U                |                   | 實務專題(二)  | H               | L                  | U             | +         | 6   |
|   |                     | 伝教ガ(一)<br>Calculus I  | 3      | 3                         |         |                    | Engineering Statistics (I)            | 3               | 3                     |      |          | ou 東北珠<br>Quality Management  | 3     | 3                 |                  |                   | Special Topics in Industrial<br>Engineering and Management(II) | 3               | 3                  | Ц             |           |     |
|   |                     | 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                        | 3      | 3                         |         |                    | 專業英文                                  | 3               | 3                     |      |          | 人因工程  |       |                   | 3                | 3                 |  |                 |                    |               |           |     |
|   |                     | Engineering<br>微緒分(二)                                       |        |                           |         |                    | Professional English<br>線性代數          |                 |                       |      | $\dashv$ | Ergonomics<br>系統模擬  |       |                   |                  |                   |  |                 |                    |               |           |     |
|   | 象必修<br>Department   | Calculus II   |        |                           | 3       | 3                  | Linear Algebra                        | 3               | 3                     |      |          | System Simulation   |       |                   | 3                | 3                 |  |                 |                    |               |           |     |
|   |                     | 程式語言<br>Programming Language                                |        |                           | 3       | 3                  | 作業研究<br>Operations Research           |                 | 1                     | 3    | 3        | 實務專題(一)<br>Special Topics in Industrial<br>Engineering and          |       |                   | 3                | 3                 |  |                 |                    |               |           |     |
|   |                     | 服務與製造概論<br>Introduction to Service and                      |        |                           | 3       | 3                  | 生產計劃與管理<br>Production Planning and    |                 | -                     | ,    | 3        | Linguistania and  |       |                   |                  |                   |  |                 |                    |               |           |     |
|   |                     | Manufacturing<br>會計學  |        |                           | L       |                    | Management<br>工程統計(二)                 |                 |                       | +    |          |   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   |                     | Accounting  |        |                           | 3       | 3                  | Engineering Statistics (II)           |                 | 3                     | ,    | 3        |   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   |                     |   |        |                           |         |                    | 工程經濟<br>Engineering Economics         |                 | 1                     | 3    | 3        |   |       |                   |                  |                   |  |                 |                    |               |           |     |
|   | 象必修總計<br>Subtotal   |   | 9      | 9                         | 12      | 12                 | 0                                     | 12              | 12 1                  | 2    | 12       | 0   | 6     | 6                 | 9                | 9                 | 0  | 3               | 3                  | 0             | 0 6       | 13  |
| 專業必<br>Sub  |                     |   | 13     |                           | 14      |                    | 0                                     | 12              | 1                     | 2    |          | 0   | 6     |                   | 9                |                   | 0  | 3               |                    | 0             | 6         | 59  |
|   |                     | 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>Operations Research<br>Applications                       | 3     | 3                 |                  |                   | 全面品質管理<br>Total Quality Management                             | 3               | 3                  |               |           |     |
|   |                     | 人工智慧等論<br>Introduction to Artificial Intelligence           | 2      | 2                         |         |                    | 客戶關係管理<br>Customer Relationship       | 2               | 2                     |      |          | 專業管理<br>Project Management  | 3     | 3                 |                  |                   | 可靠度工程<br>Reliability Engineering                               | 3               | 3                  |               |           |     |
| 專業選修<br>Professional<br>Electives                   |                     | 行銷管理  |        |                           |         |                    | Management<br>資料結構                    |                 |                       | +    |          | 企業資源規劃  |       |                   |                  |                   | 永續工程與管理  |                 |                    |               |           |     |
|   |                     | Marketing Management  |        |                           | 2       | 2                  | Data Structure                        | 3               | 3                     |      |          | Enterprise Resource Planning<br>物料與供應鍵管理                            | 3     | 3                 |                  |                   | Sustainable Engineering and<br>Management<br>製造策略規劃            | 3               | 3                  |               |           |     |
|   |                     | 心理學<br>Psychology   |        |                           | 2       | 2                  | 服務系統設計<br>Design of Service System    |                 | :                     | 3    | 3        | Materials and Supply Chain<br>Management                            | 3     | 3                 |                  |                   | Manufacturing Strategy and<br>Planning                         | 3               | 3                  |               |           |     |
|   |                     |   |        |                           |         |                    | 財務管理<br>Financial management          |                 |                       | 2    |          | 電子商務<br>Electronic Commerce   | 3     | 3                 |                  |                   | 機器學習<br>Machine Learning                                       | 3               | 3                  |               |           |     |
|   |                     |   |        |                           |         |                    | 工業安全                                  |                 |                       | 2    |          | 物聯網實務與應用<br>Practical Applications of the                           | 3     | 3                 |                  |                   | 專業實習(一)  | 3               | 3                  |               |           |     |
|   |                     |   |        |                           |         |                    | Industrial Safety<br>資料庫管理系統          |                 | ·                     | -    |          | Internet of Things<br>網路程式與應用                                       | 3     | 3                 |                  |                   | Professional Practice I  | 3               | 3                  |               |           | _   |
|   |                     |   |        |                           |         |                    | Database Management<br>System         |                 | :                     | 3    | 3        | Network Programming and<br>Applications                             | 3     | 3                 |                  |                   | 科技管理<br>Technology Management                                  |                 |                    | 3             | 3         |     |
|   |                     |   |        |                           |         |                    |                                       |                 |                       |      |          | 田口方法<br>Taguchi Method  |       |                   | 3                | 3                 | 自動化生產系統<br>Automated Production Systems                        |                 |                    | 3             | 3         |     |
|   |                     |   |        |                           | H       |                    |                                       |                 | H                     | l    |          | 六標準差  |       |                   | 3                | 3                 | 雲端與數位內容管理<br>Cloud and Digital Content                         |                 |                    | 3             | 3         | _   |
|   |                     |   |        |                           |         |                    |                                       |                 | $\vdash$              | 1    |          | Six Sigma   |       |                   |                  | _                 | Management<br>經照專題   |                 |                    |               |           |     |
|   |                     |   |        |                           |         |                    |                                       |                 | Ш                     |      |          | 精實生產<br>Lean Production   |       |                   | 3                | 3                 | Special Topics on Professional<br>Certifications               |                 |                    | 3             | 3         |     |
|   |                     |   |        |                           |         |                    |                                       |                 |                       |      |          | 決策分析<br>Decision Analysis   |       |                   | 3                | 3                 | 專業實習(二)<br>Professional Practice II                            |                 |                    | 3             | 3         |     |
|   |                     |   |        |                           |         |                    |                                       |                 | H                     | t    |          | 服務創新與管理<br>Service Innovation and                                   |       |                   | 3                | 3                 |  |                 |                    |               |           | _   |
|   |                     |   |        |                           |         |                    |                                       |                 | $\vdash$              | -    |          | Management<br>資料採勤  |       |                   |                  |                   |  |                 |                    | H             | +         |     |
|   |                     |   |        |                           |         |                    |                                       |                 |                       |      |          | Data Mining   |       |                   | 3                | 3                 |  |                 |                    |               |           |     |
|   |                     |   |        |                           |         |                    |                                       |                 |                       |      |          | 半導體製程概論<br>Introduction to Semiconductor<br>Manufacturing Processes |       |                   | 3                | 3                 |  |                 |                    |               |           |     |
| 專業選修  | 總計 Subtotal         |   |        | 1                         | 8       | 1                  |                                       |                 | 18                    | -    |          | Manufacturing Processes   |       | 42                |                  |                   |  |                 | 3                  | 3             | 10        | 01  |
|   | * Subtotal          | 43  | -      |                           |         |                    | 42                                    | -               |                       |      |          |   |       |                   | _                |                   | 36   |                 |                    |               |           | 78  |

- 儒註:
  1.學生必須修事共同必修課程8學分,通識課程16學分,院必修6學分,專業必修63學分,專業巡修至少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櫃及輔導辦法,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. 常務專題(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封。
  2. 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「目間部大學部專業實習課程開發專則」及本系「學生實營委點」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 IEM.