

日間部 111 學年度資工系四技備註修正表

| 修正後   | 修正前  |
|---|--|
| 刪除  | 5.須完成 20 跨系學分(不含院必修及本系專業必修與選修)。  |
| 5. 畢業年級相當於國內高級中等學校二年級之國外或香港、澳門同類同級學校畢業生，以同等學歷修讀本校學士學位者，最低畢業學分：140 學分；必修學分：94 學分；選修學分：46 學分(選修學分含跨系選修學分)，惟於本系專業選修學分不得低於 34 學分，可延長修業年限三年。 | 6.畢業年級相當於國內高級中等學校二年級之國外或香港、澳門同類同級學校畢業生，以同等學歷修讀本校學士學位者，最低畢業學分：140 學分；必修學分：94 學分；選修學分：46 學分(選修學分含跨系選修學分)，惟於本系專業選修學分不得低於 34 學分，可延長修業年限三年。 |
| 6.學生四年級下學期應修習校外實習課程，相關辦法依「本校資訊工程系學生校外實習教學實施要點」辦理。   | 7.學生四年級下學期應修習校外實習課程，相關辦法依「本校資訊工程系學生校外實習教學實施要點」辦理。  |
| 7.表列選修課程僅供參考，依實際狀況調整。   | 8.表列選修課程僅供參考，依實際狀況調整。  |
| 8.本系學生必須於大三下學期以及大四上學期修習實務專題課程，若修習未通過者，仍需於後續之學期中加選本系之實務專題課程，直至修習通過滿兩學期之實務專題課程為止，方可認定通過實務專題(一)與實務專題(二)課程之修習。                              | 9.本系學生必須於大三下學期以及大四上學期修習實務專題課程，若修習未通過者，仍需於後續之學期中加選本系之實務專題課程，直至修習通過滿兩學期之實務專題課程為止，方可認定通過實務專題(一)與實務專題(二)課程之修習。                             |
| 9.四年級上學期校外實習選修 9 學分，科目名稱為資訊實務，僅限參與校外實習者選修。  | 10.四年級上學期校外實習選修 9 學分，科目名稱為資訊實務，僅限參與校外實習者選修。  |
| 10.軟體工程學程、人工智慧微學程之所有選修學分皆可承認列入系專業選修學分。  | 11.軟體工程學程、人工智慧微學程之所有選修學分皆可承認列入系專業選修學分。   |

資工系課務規劃委員會

資工系主任 陳美支

工程學院院長 劉崇治

111學年度日間部 資訊工程系 四技課程規劃表

| 第一學年(111)             |            |     |    |     | 第二學年(112) |                       |            |     |    | 第三學年(113) |    |                       |            |     |    |     |    |
|-----------------------|------------|-----|----|-----|-----------|-----------------------|------------|-----|----|-----------|----|-----------------------|------------|-----|----|-----|----|
|                       | 科目         | 上學期 |    | 下學期 |           |                       | 科目         | 上學期 |    | 下學期       |    |                       | 科目         | 上學期 |    | 下學期 |    |
|                       |            | 學分  | 時數 | 學分  | 時數        |                       |            | 學分  | 時數 | 學分        | 時數 |                       |            | 學分  | 時數 | 學分  | 時數 |
| 校<br>必<br>修           | 體育         | 0   | 2  | 0   | 2         | 校<br>必<br>修           | 分類通識       | 2   | 2  | 2         | 2  | 校<br>必<br>修           |            |     |    |     |    |
|                       | 分類通識       | 2   | 2  | 2   | 2         |                       | 分類通識       | 2   | 2  |           |    |                       |            |     |    |     |    |
|                       | 分類通識       | 2   | 2  | 2   | 2         |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | 小計         | 4   | 6  | 4   | 6         |                       | 小計         | 4   | 4  | 2         | 2  |                       | 小計         | 0   | 0  | 0   | 0  |
| 院<br>必<br>修           | 微積分(一)(二)  | 3   | 3  | 3   | 3         | 院<br>必<br>修           | 科技英文(三)(四) | 2   | 2  | 2         | 2  | 院<br>必<br>修           | 人工智慧       | 3   | 3  |     |    |
|                       | 物理(一)(二)   | 2   | 2  | 2   | 2         |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | 應用中文(一)(二) | 2   | 2  | 2   | 2         |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | 科技英文(一)(二) | 2   | 2  | 2   | 2         |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | C程式設計(一)   | 3   | 3  |     |           |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | 工程倫理       |     |    | 2   | 2         |                       |            |     |    |           |    |                       |            |     |    |     |    |
|                       | 小計         | 12  | 12 | 11  | 11        |                       | 小計         | 2   | 2  | 2         | 2  |                       | 小計         | 3   | 3  | 0   | 0  |
| 系<br>專<br>業<br>必<br>修 | 計算機概論      | 2   | 2  |     |           | 系<br>專<br>業<br>必<br>修 | Java程式設計   | 3   | 4  |           |    | 系<br>專<br>業<br>必<br>修 | 作業系統       | 2   | 3  |     |    |
|                       | 基礎數位實務     | 2   | 2  |     |           |                       | 數位邏輯設計與實習  | 3   | 4  |           |    |                       | Python程式應用 | 3   | 3  |     |    |
|                       | C程式設計(二)   |     |    | 3   | 4         |                       | 資料結構       | 3   | 3  |           |    |                       | 軟體工程       |     |    | 3   | 3  |
|                       | 多人多工系統實務   |     |    | 2   | 3         |                       | 電腦網路       | 3   | 4  |           |    |                       | 計算機架構      |     |    | 2   | 3  |
|                       |            |     |    |     |           |                       | 資料庫系統概論    |     |    | 3         | 3  |                       | 實務專題(一)    |     |    | 1   | 1  |
|                       |            |     |    |     |           |                       | 嵌入式微計算機系統  |     |    | 2         | 3  |                       |            |     |    |     |    |
|                       |            |     |    |     |           |                       | 資訊數學       |     |    | 3         | 3  |                       |            |     |    |     |    |
|                       | 小計         | 4   | 4  | 5   | 7         |                       | 小計         | 12  | 15 | 8         | 9  |                       | 小計         | 5   | 6  | 6   | 7  |
| 專<br>業<br>選<br>修      |            |     |    |     |           | 專<br>業<br>選<br>修      | 多人多工系統應用   | 2   | 2  |           |    | 專<br>業<br>選<br>修      | 物聯網系統概論    | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 競賽機器人      | 2   | 2  |           |    |                       | 網路安全       | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 資訊科技應用趨勢   | 2   | 2  |           |    |                       | 資料庫實務      | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 辦公室軟體應用    |     |    | 2         | 2  |                       | 網頁程式設計     | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 競賽機器人實務    |     |    | 2         | 2  |                       | 演算法        | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 物件導向程式設計   |     |    | 3         | 3  |                       | 雲端系統管理     | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       | 多媒體概論      |     |    | 3         | 3  |                       | 自媒體實務應用    | 3   | 3  |     |    |
|                       |            |     |    |     |           |                       |            |     |    |           |    |                       | 物聯網系統程式設計  |     |    | 3   | 3  |
|                       |            |     |    |     |           |                       |            |     |    |           |    |                       | 深度學習       |     |    | 3   | 3  |
|                       |            |     |    |     |           |                       |            |     |    |           |    |                       | 行動裝置程式設計   |     |    | 3   | 3  |
|                       |            |     |    |     |           |                       |            |     |    |           |    |                       | 網路安全實務     |     |    | 3   | 3  |

| 第四學年(114)             |            |     |    |     |    |
|-----------------------|------------|-----|----|-----|----|
|                       | 科目         | 上學期 |    | 下學期 |    |
|                       |            | 學分  | 時數 | 學分  | 時數 |
| 校<br>必<br>修           |            |     |    |     |    |
|                       | 小計         | 0   | 0  | 0   | 0  |
| 院<br>必<br>修           |            |     |    |     |    |
|                       | 小計         | 0   | 0  | 0   | 0  |
| 系<br>專<br>業<br>必<br>修 | 實務專題(二)    | 1   | 1  |     |    |
|                       | 校外實習       |     |    | 9   | 9  |
| 系<br>專<br>業<br>必<br>修 | 小計         | 1   | 1  | 9   | 9  |
|                       | 資訊實務(校外實習) | 9   | 9  |     |    |
| 專<br>業<br>選<br>修      | 資料科學       | 3   | 3  |     |    |
|                       | 影像處理       | 3   | 3  |     |    |
|                       | 軟體專案管理     | 3   | 3  |     |    |
|                       | 證照專題       | 2   | 2  |     |    |
|                       | 資料探勘       | 3   | 3  |     |    |
| 物聯網安全                 | 3          | 3   |    |     |    |

| 專業選修課程開課規劃 |    |
|------------|----|
| 學期         | 時數 |
| 第一學年第一學期   | 0  |
| 第一學年第二學期   | 0  |
| 第二學年第一學期   | 2  |
| 第二學年第二學期   | 9  |
| 第三學年第一學期   | 12 |
| 第三學年第二學期   | 12 |
| 第四學年第一學期   | 9  |
| 開課時數總計     | 44 |

科目類別：

共同科目：體育

通識科目：分類通識

專業科目：院必修、專業必修、專業選修

注意事項：

- 本校訂有學生基本能力與畢業門檻實施辦法。
- 學生需修習勞作教育(0學分4小時)，並於第一學年上下二學期實施。
- 一、三年級每學期應修習16~30學分，四年級每學期應修習9~30學分。
- 最低畢業學分：128學分；必修學分：94學分；選修學分：34學分(選修學分含跨系選修學分)；惟於本系專業選修學分不得低於22學分。
- 畢業年級相當於國內高級中等學校二年級之國外或香港、澳門同類同級學校畢業生，以同等學歷修讀本校學士學位者，最低畢業學分：140學分；必修學分：94學分；選修學分：46學分(選修學分含跨系選修學分)，惟於本系專業選修學分不得低於34學分，可延長修業年限三年。
- 學生四年級下學期應修習校外實習課程，相關辦法依「本校資訊工程系學生校外實習教學實施要點」辦理。
- 表列選修課程僅供參考，依實際狀況調整。
- 本系學生必須於大三下學期以及大四上學期修習實務專題課程，若修習未通過者，仍需於後續之學期中加選本系之實務專題課程，直至修習通過滿兩學期之實務專題課程為止，方可認定通過實務專題(一)與實務專題(二)課程之修習。
- 四年級上學期校外實習選修9學分，科目名稱為資訊實務，僅限參與校外實習者選修。
- 軟體工程學程、人工智慧微學程之所有選修學分皆可承認列入系專業選修學分。

資工系課務規劃委員會

支美陳

劉崇治

MUST Curriculum Planning for Undergraduate Students for Academic Years 2022-2025  
Department of Computer Science and Information Engineering

| 1 <sup>st</sup> year(111)     |                                    |              |     |                          | 2 <sup>nd</sup> year(112)      |                               |                                  |              |                 | 3 <sup>rd</sup> year(113) |                             |  |                                |              |     |                          |   |
|-------------------------------|------------------------------------|--------------|-----|--------------------------|--------------------------------|-------------------------------|----------------------------------|--------------|-----------------|---------------------------|-----------------------------|--|--------------------------------|--------------|-----|--------------------------|---|
|                               | Course                             | 1st semester |     | 2 <sup>nd</sup> semester |                                |                               | Course                           | 1st semester |                 | 2 <sup>nd</sup> semester  |                             |  | Course                         | 1st semester |     | 2 <sup>nd</sup> semester |   |
|                               |                                    | Cr.          | hr. | Cr.                      | hr.                            |                               |                                  | Cr.          | hr.             | Cr.                       | hr.                         |  |                                | Cr.          | hr. |                          |   |
| MUST Core Required Courses    | Physical Education                 | 0            | 2   | 0                        | 2                              | MUST Core Required Courses    | Classified general Education     | 2            | 2               | 2                         | 2                           | MUST Core Required Courses             |                                |              |     |                          |   |
|                               | Classified general Education       | 2            | 2   | 2                        | 2                              |                               | Classified general Education     | 2            | 2               |                           |                             |  |                                |              |     |                          |   |
|                               | Classified general Education       | 2            | 2   | 2                        | 2                              |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
|                               | Subtotal                           | 4            | 6   | 4                        | 6                              |                               | Subtotal                         | 4            | 4               | 2                         | 2                           |  | Subtotal                       | 0            | 0   | 0                        | 0 |
| College compulsory courses    | Calculus(I)(II)                    | 3            | 3   | 3                        | 3                              | College compulsory courses    | Technical English(III)(IV)       | 2            | 2               | 2                         | 2                           | College compulsory courses             | Artificial Intelligence        | 3            | 3   |                          |   |
|                               | Physics(I)(II)                     | 2            | 2   | 2                        | 2                              |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
|                               | Applied Chinese(I)(II)             | 2            | 2   | 2                        | 2                              |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
|                               | Technical English(I)(II)           | 2            | 2   | 2                        | 2                              |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
|                               | C Programming(I)                   | 3            | 3   |                          |                                |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
|                               | Ethics for Engineers               |              |     | 2                        | 2                              |                               |                                  |              |                 |                           |                             |  |                                |              |     |                          |   |
| Subtotal                      | 12                                 | 12           | 11  | 11                       | Subtotal                       | 2                             | 2                                | 2            | 2               | Subtotal                  | 2                           | 2                                      | 0                              | 0            |     |                          |   |
| Department compulsory courses | Introduction to Computer Science   | 2            | 2   |                          |                                | Department compulsory courses | Java Programming                 | 3            | 4               |                           |                             | Department compulsory courses          | Operating System               | 2            | 3   |                          |   |
|                               | Practice of Basic Digital Circuits | 2            | 2   |                          |                                |                               | Digital Logic Design and Lab     | 3            | 4               |                           |                             |  | Applications of Python Program | 3            | 3   |                          |   |
|                               | C Programming(II)                  |              |     | 3                        | 4                              |                               | Data Structures                  | 3            | 3               |                           |                             |  | Software Engineering           |              | 3   | 3                        |   |
|                               | Practice of UNIX Operating System  |              |     | 2                        | 3                              |                               | Computer Networks                | 3            | 4               |                           |                             |  | Computer Architecture          |              | 2   | 3                        |   |
|                               |                                    |              |     |                          |                                |                               | Introduction to Database Systems |              | 3               | 3                         |                             |  | Special Topic Project(I)       |              | 1   | 1                        |   |
|                               |                                    |              |     |                          |                                |                               | Embedded Microcomputer System    |              | 2               | 3                         |                             |  |                                |              |     |                          |   |
| Subtotal                      | 4                                  | 4            | 5   | 7                        | Subtotal                       | 12                            | 15                               | 4            | 9               | Subtotal                  | 5                           | 6                                      | 6                              | 7            |     |                          |   |
| Department Elective Courses   |                                    |              |     |                          |                                | Department Elective Courses   | Applications of UNIX OS          | 2            | 2               |                           | Department Elective Courses | Introduction to IoT                    | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Competition Robot              |                               | 2                                | 2            |                 |                           |                             | Network Security                       | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | IT Application Trends          |                               | 2                                | 2            |                 |                           |                             | Practice of Database Management System | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Application of Office Software |                               |                                  | 2            | 2               |                           |                             | Web Programming                        | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Practice of Competition Robot  |                               |                                  | 2            | 2               |                           |                             | Algorithms                             | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Practice of Java Programming   |                               |                                  | 3            | 3               |                           |                             | Mobile Device Programming              | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Website Programming            |                               |                                  | 3            | 3               |                           |                             | Self-media application                 | 3                              | 3            |     |                          |   |
|                               |                                    |              |     |                          | Introduction to Multi-Media    |                               |                                  | 3            | 3               |                           |                             | IoT System Programming                 |                                | 3            | 3   |                          |   |
|                               |                                    |              |     |                          |                                |                               |                                  |              |                 |                           |                             | Smart Agriculture                      |                                | 3            | 3   |                          |   |
|                               |                                    |              |     |                          |                                |                               |                                  |              |                 |                           |                             | Deep Learning                          |                                | 3            | 3   |                          |   |
|                               |                                    |              |     |                          |                                |                               |                                  |              |                 |                           |                             | Network Security Practice              |                                | 3            | 3   |                          |   |
|                               |                                    |              |     |                          |                                |                               |                                  |              |                 |                           |                             | Internet Service Software Engineering  |                                | 3            | 3   |                          |   |
|                               |                                    |              |     |                          |                                |                               |                                  |              | Cloud Computing |                           | 3                           | 3                                      |                                |              |     |                          |   |

| 4 <sup>th</sup> year(114)     |                             |              |     |                          |     |
|-------------------------------|-----------------------------|--------------|-----|--------------------------|-----|
|                               | Course                      | 1st semester |     | 2 <sup>nd</sup> semester |     |
|                               |                             | Cr.          | hr. | Cr.                      | hr. |
| MUST Core Required Courses    |                             |              |     |                          |     |
|                               | Subtotal                    | 0            | 0   | 0                        | 0   |
| College compulsory courses    |                             |              |     |                          |     |
|                               | Subtotal                    | 0            | 0   | 0                        | 0   |
| General education             |                             |              |     |                          |     |
|                               | Subtotal                    | 0            | 0   | 0                        | 0   |
| Department compulsory courses | Special Topic Project(II)   | 1            | 1   |                          |     |
|                               | Off-campus Internship       |              |     | 9                        | 9   |
|                               | Subtotal                    | 1            | 1   | 9                        | 9   |
| Department Elective Courses   | Information Practice        | 3            | 3   |                          |     |
|                               | Data Science                | 3            | 3   |                          |     |
|                               | Image processing            | 3            | 3   |                          |     |
|                               | Software Project Management | 3            | 3   |                          |     |
|                               | Certified Project           | 2            | 2   |                          |     |
|                               | Data Mining                 | 3            | 3   |                          |     |
| Security of IoT               | 3                           | 3            |     |                          |     |

| Item                          | Cr. | hr. |
|-------------------------------|-----|-----|
| MUST Core Required Courses    | 14  | 18  |
| College compulsory courses    | 38  | 36  |
| Department compulsory courses | 38  | 58  |
| Department Elective Courses   | 34  | 34  |
|                               |     |     |
| Total                         | 128 | 140 |

Cr./hr.=Credit/hour

Remarks:

- According to university regulations, students are required to meet the graduation requirement of basic language proficiency and professional skills.
- Students shall take 4 hours Service Education courses (0 credits) in the first and second semester of the first academic year.
- In the first three years, students must take 16-30 credits per semester, and 9-30 credits per semester in the 4<sup>th</sup> year.
- Minimum credits required for graduation: 128 credits including 94 compulsory credits, and at least 34 elective credits (including the interdepartmental elective credits). No fewer than 22 professional elective credits are required.
- Students having graduated from a foreign country, including Hong Kong and Macau, with the equivalent of the second year of high school study of the ROC's high school sophomore level, or with a high school equivalent degree, need to take 140 credits including 94 compulsory credits, and at least 46 elective credits (including inter-departmental elective credits), while elective professional course credits shall not be fewer than 34. The program can be extended up to 3 academic years.
- Students should take off-campus internship courses, and the relevant measures are handled in accordance with the "Implementation of Off-campus Internship Teaching for Students in the Department of Computer Science and Information Engineering".
- Elective courses are subject to change if necessary.
- The Special Topic Project(I) and the Special Topic Project(II) are both compulsory courses in different semesters. In order to graduate, each student must take Special Topic Project credits in two separate semesters.
- The optional off-campus internship in the first semester of the fourth grade is 9 credits. The subject name is Information Practice, which is limited to those who participate in the off-campus internship.
- All courses taken in the Software Engineering Program and Artificial Intelligence Micro Program can be approved as professional elective credits.

資工系課務規劃委員會

資工系 陳美支 主

工程學院 劉崇治 院長