

Mechatronics integrated manufacturing International Industry Talent Education Program

專班名稱:機電整合製造國際產業人才教育專班

| | |
|----------------------------------|--|
| Degree 學位 | 2-Year Post-Baccalaureate Degree / 學士後二年制學士專班 |
| College 學院 | College of Engineering/工程學院 |
| Department 學系 | Department of Mechanical Engineering/機械工程系 |
| Begin Term 開始學期 | Autumn Semester (Enroll in September) / 秋季(9月入學) |
| Introduction Language 授課語言 | Course taught in English/英文授課 |
| Language Proficiency 語言能力 | <p>English proficiency certificate/ proof required</p> <ul style="list-style-type: none"> ● Above CEFR B1 <p>Chinese proficiency certificate/ proof required</p> <ul style="list-style-type: none"> ● Listening and reading at least level A2 in second year. <p>英文能力</p> <ul style="list-style-type: none"> ● 須達 CEFR B1 級(含)以上 <p>入學第 2 年華語文能力測驗(TOCFL) 基礎級(Level 2, 相當於 CEFR A2) 聽、讀 2 項皆須達 A2 級(含)以上</p> |
| Application Documents 申請文件 | <ol style="list-style-type: none"> 1. Application form 2. Personal information collection statement and agreement. 3. The highest-level degree diploma and highest degree's full transcript of records. 4. Language Proficiency Certificate (Certificate of TOEIC 650 or above CEFR B1) 5. One photocopy of complete highest degree transcript 6. Photocopy of passport (if available) 7. Other advantageous documents. (for example: Language ability certificates, autobiography in Chinese or English, certificates of examinations, awards etc.) <ol style="list-style-type: none"> 1. 入學申請表正本 1 份 2. 個人資料蒐集聲明暨同意書 3. 外國學校最高學歷及成績單影本(中、英文以外之語言, 應附中文或英文譯本) 4. 語文能力證明文件(多益 650 分或相當於 CEFR B1 等級以上之英文能力證明) 5. 經認證之英文成績單 |

| | |
|--|--|
| | <p>6. 申請人護照影本 1 份。 其他有利之審查資料。(如：語文證明、中文或英文自傳、證照、獎狀...等)</p> |
| <p>Interview/ Oral Exam 面試/口語 考試</p> | <p>Interview with Collaborating Companies 面試(與合作企業)</p> |
| <p>Written Exam 筆試</p> | <p>None 無</p> |
| <p>Additional Notes 補充說明</p> | <p>Obligations 1. Students receiving industry-academia scholarships from the National Development Fund, Taiwan are obligated to stay and work in Taiwan for a corresponding period based on the number of years they received the scholarship. 2. Those receiving a one-year industry-academia scholarship have a one-year obligation to stay and work in Taiwan, while those receiving a two-year industry-academia scholarship have a two-year obligation to stay and work in Taiwan.</p> <p>領取獎學金義務 學生領取國發基金產學獎助金的學生，依據領取年限具有相應留臺就業年限的義務。 領取 1 年產學獎助金者，具有 1 年留臺就業義務，領取 2 年產學獎助金者，具有 2 年留臺就業義務。</p> <p>***Note: If the circumstances are under student control, requirement for repayment: If students withdraws from the program midway during the academic term due to personal reasons, such as applying for transfer to another program, changing majors, taking a leave of absence, or returning to their home country, and after counseling from the school, still decides to give up continuing in the program, or if the school, in accordance with its regulations, decides to withdraw or expel the student, the student is required to full repay any industry-academia scholarship funds received. If a student chooses not to work for the collaborating company or in a related industry field after graduation, and despite counseling from the school, the student is required to fully repay any industry-academia scholarship funds received. If a student, after graduating and entering employment, violates company regulations leading to the lawful termination of the employment contract, and despite counseling from the school, the student should repay the industry-academia scholarship funds proportionally based on the number of months not employed; for a period less than one month, it will be counted as one month. During the period of fulfilling the employment obligation after graduation, students are required to work in a position within domestic collaborating companies in Taiwan. They are not allowed to be dispatched to work at overseas branches or be employed by overseas Taiwanese-owned companies. If a student fails to comply with the requirement of domestic employment, they should repay the industry-academia scholarship funds proportionally based on the number of months not</p> |

employed in Taiwan; for a period less than one month, it will be counted as one month.

***屬可歸責於學生之原因，應繳還產學獎助金：

就學期間因個人因素中途退出專班，如申請轉學、轉系、休學返國，經學校輔導後仍放棄繼續就讀專班、或經學校依學則退學、開除學籍等情形，學生應全額返還已領之產學獎助金。

學生學習表現不佳，未通過學校及企業評核標準，並經學校輔導後仍無改善且依學則處以退學、開除學籍等情形，學生應全額返還已領之產學獎助金。

學生畢業後選擇不至合作企業或相關產業領域就業，並經學校輔導後仍無改善者，學生應全額返還已領之產學獎助金。

學生畢業就業後違反公司規定被依法終止勞動契約，並經學校輔導後仍無改善者，學生應依未就業之月數比例返還產學獎助金；不滿一月者，以一月計。

學生於合作企業就業期間未滿受領產學獎助金年限：應依其未就業之月數比例繳還產學獎助金；不滿一月者，以一月計。

***學生畢業後履行就業義務期間，應留臺於國內合作企業任職，不得由合作企業外派至國外分公司任職，或任職於海外臺商企業。如有前述未於國內就業情形，應依未於國內就業之月數比例返還已領之產學獎助金；不滿一月者，以一月計。

Scholarship
獎學金

1. Administrative fees for arrival in Taiwan: One-time subsidy covering pre-arrival health check expense, visa fees, and document verification fees. The maximum amount is NTD\$10,000.
2. One-way flight ticket: One-time subsidy, the airfare is verified based on the economy class one-way ticket for the most direct route to Taiwan. The maximum amount is NTD\$9,000.
3. National Development Fund Scholarship: A maximum of two years of tuition and miscellaneous fee subsidies will be provided.
4. Subsidies are provided based on the actual tuition and fees payable to the school, with annual cap of NTD100,000 and a semester cap of NTD\$50,000.
5. Full tuition fee subsidies are provided in the first year, and the second year tuition fee subsidies are provided based on the merit after reviewing grades and performance in collaboration with the school, and also pass the Chinese proficiency test-listening and reading at least at level A2.
6. Collaboration company provide students with a monthly living allowance NTD\$10,000 during their study period up to 2 years.

1. 初次來臺的相關必要行政費用：採一次性補助，包含來臺前的健康檢查費用、簽證費用及文書驗證費用，以地區分列補助上限為：新南向區域國家及其他國家上限新臺幣 1 萬元、歐美區域國家上限 2 萬 5,000 元(核實報支)。
2. 來臺單程機票：採一次性補助，機票費用以來臺最直接航程之經濟艙單程機票核實請領，新南向區域國家上限為 9,000 元、歐美區域國家上限 3 萬 5,000 元(核實報支)。學校應請學生檢據核銷，並以收據開立當日之臺灣銀行美金對新臺幣匯率計算。
3. 國發基金補助註冊入學後最多 2 年的學雜費：
4. 依學生實際應繳交給學校的學雜費給予補助，每年補助上限 10 萬元（一學期上限為 5 萬元）。

5. 學生入學第一年給予學雜費補助，第二年聽、讀 2 項皆須達 A2 級(含)以上，且需通過學校與合作企業審查成績與表現後，擇優核給學雜費補助。
6. 合作企業提供每個月一萬元獎學金（至多兩年，共計 24 萬元）。

Introduction of the Program
本專班介紹及專班特色

This specialized program is launched in response to the domestic trend of declining birth rates, the demand for advanced technical talents among cooperative enterprises, and the aim to strengthen the national manpower structure. It seeks to expand recruitment of Filipino students, attracting outstanding international students from the Philippines to study in Taiwan. Upon graduation, these students are encouraged to stay and develop their careers within cooperating companies, aligning with the country's population policy needs and Taiwan's industrial layout. This initiative also addresses the urgent need for talents in industries undergoing sustainable transformation, technological upgrades, and especially in the STEM fields. The program is designed with the employment needs of businesses in mind, recruiting international students to study in Taiwan. Enterprises are involved throughout the recruitment, selection, course teaching, and internship training processes, expanding the cultivation of STEM field technical talents. This approach aims to jointly cultivate and retain talents.

本專班因應國內少子女化、合作企業中對於高階技術人才需求及強化國內人力結構，擴大招收菲律賓國籍學生，吸引菲律賓優秀的國際生來臺就學，並於畢業後留合作企業發展就業，配合我國人口政策需求與臺灣產業布局，並對應國內產業永續轉型技術升級及 STEM 領域人才需求迫切，故開設本專班。本專班以企業用人需求為導向，招收國際學生來臺就學，企業全程參與招生選才、課程教學及實習培育等，擴大培育 STEM 領域技術人才，達到共同培育人才及留用人才的目標。

Curriculum Planning
課程規劃

1. Credits required for graduation from the specialized program
 - (1) Graduation credit requirement: A total of 48 credits, including 31 compulsory credits (of which, 10 credits are for off-campus internships) and 17 elective credits (of which, off-campus internships account for 0 credits).
 - (2) Course planning table (including off-campus internships, if not, there is no need to list it)
1. 畢業學分數：共 48 學分，含必修 31 學分(其中校外實習占 10 學分)、選修 17 學分(其中校外實習占 0 學分)。
2. 修業年限 2 年(含校內課程 1 年、校外實習 1 年)
- (二) 課程規劃表(含校外實習，無則免列)

| Course name 課程名稱 | Course Outline 課程綱要 | Teach hours per week 授課時數 | Required or Elective Course 必選修 | Number of credits 學分數 | Teaching grade 授課年級 |
|--------------------------|--|------------------------------|------------------------------------|--------------------------|------------------------|
| Situational Chinese(I) - | 1. Emphasizes practical vocabulary for daily life, | 3 | Required Course | 3 | 1 st |

| | | | | | | |
|--|---|---|---|----------------------|---|---|
| | <p>Waystage Level 實用生活華語 -基礎級(一)</p> | <p>enhancing learners' understanding and application abilities in real-world situations.</p> <p>2. Eight major themes: personal information and family, daily life, shopping and business activities, food and culture, living and environment, leisure and entertainment, travel and transportation, lifestyle trends.</p> <p>1. 著重生活實用詞彙，提升學習者對於真實情境的理解能力與應用能力。</p> <p>2. 八大主題:個人資料與家庭、日常生活、購物與商業行為、飲食與文化、居住與環境、休閒與娛樂、旅行與交通、生活時尚。</p> | | 必 | | <p>semester of 1st grade 一上</p> |
| | <p>Chinese for Workplace Waystage Level 職場溝通華語 -基礎級</p> | <p>1. Focuses on practical workplace vocabulary, boosting learners' comprehension and application skills in authentic situations.</p> <p>2. Themes: Self-introduction, work tasks, overtime, taking leaves, company policies, emergency situations, worshipping the Earth God, and year-end parties.</p> <p>1. 著重職場實用詞彙，提升學習者對於真實情境的理解能力與應用能力。</p> <p>2. 主題:你是誰-自我介紹、你要做什麼-工作內</p> | 3 | Required Course 必 | 3 | <p>1st semester of 1st grade 一上</p> |

| | | | | | |
|--|---|---|----------------------|---|---|
| | 容、加班、請假、公司規定、臨時狀況、拜土地公、吃尾牙。 | | | | |
| Graphics 圖學 | This course is aimed at developing the ability to read and create various engineering drawings. 本課程針對培養各種工程圖之識圖和製圖能力。 | 3 | Required Course 必 | 3 | 1 st semester of 1 st grade 一上 |
| Mechanism 機構學 | This course enables students to understand the composition, function, and motion characteristics of mechanisms. 本課程能使學生了解機構的組成、功能、運動等特性。 | 3 | Elective Course 選 | 3 | 1 st semester of 1 st grade 一上 |
| Automatic control 自動控制 | Educate students on the theory of automatic control and the technologies required for automation. 讓學生了解自動控制的理論以及自動控制所需之技術。 | 3 | Elective Course 選 | 3 | 1 st semester of 1 st grade 一上 |
| Introduction to Mechanical Engineering 機械工程概論 | Understand the current status and development trends in mechanical engineering, including cutting-edge research and industrial practices. 瞭解機械工程現況及發展趨勢，包括尖端研究與產業實務。 | 2 | Required Course 必 | 2 | 1 st semester of 1 st grade 一上 |
| Industrial Management 工業管理 | Enable students to understand business and management functions, and to engage in management practices efficiently and effectively. 使學生了解企業功能及管理功能以及能有效率及有 | 2 | Elective Course 選 | 2 | 1 st semester of 1 st grade 一上 |

| | | | | | |
|---|---|---|----------------------|---|---------------------------------|
| | 效能的從事管理實務。 | | | | |
| Situational Chinese(II) - Waystage Level 實用生活華語-基礎級(二) | <p>1. Focuses on practical vocabulary for daily life, enhancing learners' understanding and application skills in real-world scenarios.</p> <p>2. Eight major themes: education and learning, health and personal care, interpersonal relationships, work and society, technology and innovation, festivals and customs, history and culture, geography and global perspectives.</p> <p>1. 著重生活實用詞彙，提升學習者對於真實情境的理解能力與應用能力。</p> <p>2. 八大主題:教育與學習、健康與身體照護、人際關係、工作與社會、科技與創新、節慶與習俗、歷史與人文、地理與國際眺望。</p> | 3 | Required Course 必 | 3 | 2nd semester of 1st grade 一下 |
| Chinese Listening and Reading Comprehension -Level 2 華語文能力測驗聽力閱讀-基礎級 | <p>1. Chinese Language Proficiency Test Basic Level 1000 Words.</p> <p>2. Strengthen grammar, practice and review a thousand words simultaneously, mock exams to familiarize students with the test format.</p> <p>3. Ten major themes: personal information, housing and family, environment, daily life, leisure and entertainment, food and dining, relationships with others, health and personal care, travel, shopping, education.</p> <p>1. 華語文能力測驗基礎級 1000 詞。</p> | 3 | Required Course 必 | 3 | 2nd semester of 1st grade 一下 |

| | | | | | |
|--|--|---|----------------------|---|---------------------------------|
| | <p>2.加強語法，同時練習與複習一千詞，模擬測驗使學生熟悉測驗方式。</p> <p>3.十大主題: 個人資料、房屋與家庭、環境，日常生活、休閒娛樂、飲食、與他人關係、健康及身體照顧、旅行、購物、教育。</p> | | | | |
| Computer Aided Drawing 電腦輔助製圖 | <p>Educate students on the knowledge of AutoCAD software and its applications.</p> <p>使學生瞭解 AutoCAD 軟體相關知識及其應用。</p> | 3 | Required Course 必 | 3 | 2nd semester of 1st grade 一下 |
| Mechanical component Design 機械元件設計 | <p>Introduce students to the principles of mechanical component design and its applications.</p> <p>讓學生了解機械元件設計的原理以及讓學生了解機械元件設計的應用。</p> | 3 | Elective Course 選 | 3 | 2nd semester of 1st grade 一下 |
| Mechanical Manufacture 機械製造 | <p>Familiarize students with the theories and methods of mechanical manufacturing and its industrial applications.</p> <p>讓學生了解機械製造的理論與方法以及機械製造在工業上的應用。</p> | 3 | Elective Course 選 | 3 | 2nd semester of 1st grade 一下 |
| Computer aided design 電腦輔助設計 | <p>Enable students to understand the basic principles of computer-aided design and manufacturing (CAD/CAM) and to apply related technologies.</p> <p>使學生了解理解電腦輔助設計與製造之基本原理及具備電腦輔助設計與製造相關技術之應用。</p> | 3 | Elective Course 選 | 3 | 2nd semester of 1st grade 一下 |
| Mechanical Engineering Seminar 機械工程專題 | <p>Through group discussions on specific topics, help students understand the applications related to</p> | 1 | Required Course 必 | 1 | 2nd semester of 1st |

| | | | | | | |
|---------------------|--|--|----|----------------------|---|---------------------------------|
| | 討論 | mechanical engineering. 藉由分組討論專題主題讓學生了解機械工程相關的應用。 | | | | grade 一下 |
| | Corporate internship I 企業實習(一) | Conduct professional practical training according to the requirements of cooperating companies. 依合作廠商要求，進行專業實務訓練。 | 40 | Required Course 必 | 5 | 1st semester of 2nd grade 二上 |
| | Corporate internship II 企業實習(二) | Conduct professional practical training according to the requirements of cooperating companies. 依合作廠商要求，進行專業實務訓練。 | 40 | Required Course 必 | 5 | 2nd semester of 2nd grade 二下 |
| 未來的遠景 Future map | <p>Students should work in Taiwan after graduation for at least 2 years in a collaborating company. *** Collaborating Companies</p> <p>1. DYMA ADVANCE TECHNOLOGY CORP (16 staff)</p> <p>本所畢業生需進入合作企業在台工作至少兩年 ***合作企業:</p> <p>2. 恩茂科技股份有限公司 (16 個職位)</p> | | | | | |
| 網站連結 Website | 報名網站： https://intactbase.ksu.edu.tw/ | | | | | |
| 專班聯繫人 Contact | <p>Department: Department of Mechanical Engineering Name: Horng, Thin-Lin Tel.: 0919-112341 Fax: Email: hortl@mail.ksu.edu.tw</p> <p>單位：機械工程系 姓名: 洪興林 電話: 0919-112341 傳真: Email: hortl@mail.ksu.edu.tw</p> | | | | | |