

Automation Engineer Special Class 專班名稱:自動化工程師專班	
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 Electrical Engineering/ 電機工程系
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 ● 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
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 6. 申請人護照影本 1 份。

	7. 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)
Interview/ Oral Exam 面試/口語 考試	Interview with Collaborating Companies 面試(與合作企業)
Written Exam 筆試	None 無
Additional Notes 補充說明	<p>Obligations</p> <ol style="list-style-type: none"> 1. 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. 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>領取獎學金義務</p> <ol style="list-style-type: none"> 1. 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。 2. 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>***Note: If the circumstances are under student control, requirement for repayment:</p> <ol style="list-style-type: none"> 1. 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 fully repay any industry-academia scholarship funds received. 2. 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. 3. 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. 4. 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

	<p>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 employed in Taiwan; for a period less than one month, it will be counted as one month.</p> <p>***屬可歸責於學生之原因，應繳還產學獎助金：</p> <ol style="list-style-type: none"> 1. 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。 2. 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。 3. 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。 4. 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。 5. 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。 <p>***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。</p>
<p>Scholarship 獎學金</p>	<ol style="list-style-type: none"> 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. <ol style="list-style-type: none"> (1) 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. (2) 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. 4. Collaboration company provide students with a monthly living allowance NTD\$10,000 during their study period up to 2 years. <ol style="list-style-type: none"> 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

	<p>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。</p> <p>3. 國發基金補助註冊入學後最多 2 年的學雜費：</p> <p>(1) 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）。</p> <p>(2) 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。</p> <p>4. 合作企業提供每個月一萬元獎學金（至多兩年，共計 24 萬元）。</p>
<p>Introduction of the Program 本專班介紹及專班特色</p>	<p>Due to the decreasing domestic child population and the demand for mid-to-high-level technical talents by the cooperative companies: Chi Mei Food Co., Ltd and Medtecs International Co., Ltd . This special class has expanded its enrollment of Filipino students, attracting outstanding international students from the Philippines to study in Taiwan and stay in Taiwan after graduation.</p> <p>These two cooperative enterprises are both high-quality large-scale enterprises that are based in Taiwan. Based on the actual production line needs, these two cooperative enterprises urgently need to cultivate engineering talents for motor automation control and application in automated production equipment. We expect that Filipino students recruited by this special class will have two years of practical study in electrical engineering (Chinese language and professional practical courses in the first year at school, and internship in Taiwan in the second year in the cooperative enterprises Mei Food Co., Ltd. and Medtecs International Co., Ltd.), and stay in Taiwan to work in these two cooperative enterprises after graduation.</p> <p>本專班因應國內少子女化、合作企業奇美食品股份有限公司及美德向邦醫療國際股份有限公司對中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，並於畢業後留臺發展就業。</p> <p>此兩家合作企業皆為以臺灣為生產據點的優質大型企業，基於實際生產線需求，此兩家合作企業急需培育電機自動化控制並應用於自動化生產設備之工程人才。期許經由本專班招收的菲律賓國籍學生，在本專班進行兩年的電機實務學習（一年級在學校修習華語與專業實務課程、二年級在合作企業:奇美食品股份有限公司及美德向邦醫療國際股份有限公司的台灣場域實習為主），畢業後留臺於此兩家合作企業工作。</p>
<p>Curriculum Planning 課程規劃</p>	<p>1. Number of credits required for graduation of this special class</p> <p>(1) Number of credits for graduation: 48 credits in total, including 22 credits of compulsory courses (10 credits of off-campus internships) and 26 credits of elective courses</p> <p>(2) Years of study: 2 years (including 1 year of on-campus courses and 1 year of off-campus internship)</p> <p>(一) 專班之畢業應修學分數</p> <p>1. 畢業學分數：共48學分，含必修22學分(其中校外實習占10學分)、選修26學分(其中校外實習占0學分)</p>

2. 修業年限：

2年(含校內課程1年、校外實習1年)

(二) Course planning table 課程規劃表

Course name 課程名稱	Course Outline 課程綱要	Teach hours per week 授課時數	Required or Elective Course 必修	Number of credits 學分數	Teaching grade 授課年級
Situational Chinese(I) - Waystage Level 實用生活華語 - 基礎級(一)	<p>1. Focus on practical vocabulary in daily life. Improve learners' ability to apply in real situations</p> <p>2. Eight major themes: personal information and family, daily life, shopping and business behavior, food and culture, living and environment, leisure and entertainment, travel and transportation, and lifestyle.</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>	3	Required Course 必修	3	1 st semester of 1 st grade 一上
Chinese for Workplace Waystage Level 職場溝通華語 - 基礎級	<p>1. Focus on practical vocabulary in workplace. Improve learners' ability to apply in real situations</p> <p>2. Topic: Who are you - self-introduction, what do you want to do - work content, overtime, ask for</p>	3	Required Course 必修	3	1 st semester of 1 st grade 一上

		<p>leave, company regulations, temporary situations, worshipping</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-工作內容、加班、請假、公司規定、臨時狀況、拜土地公、吃尾牙。</p>				
	<p>Basic electricity and practice. 基礎電學及實習</p>	<p>This course introduces basic electricity, resistance, simple resistor circuits, voltage division and current shunt theorems, conductors and insulators. Besides, this course also provides practical training with oscilloscopes, DC power supplies, signal generators and other instruments.</p> <p>本課程介紹基本電量、電阻、簡單電阻電路、分壓及分流定理、導體與絕緣體的知識，並配合示波器、直流電源供應器、訊號產生器等儀器進行實習訓練。</p>	3	Elective Course 選修	3	1 st semester of 1 st grade 一上
	<p>Electronics and practices 電子學及實習</p>	<p>This course aims to enable students to understand the basic principles of electronic circuits and their application techniques. The content of the lecture is the characteristics and applications of diodes, bipolar junction transistors, field-effect</p>	3	Elective Course 選修	3	1 st semester of 1 st grade 一上

		<p>transistors, and operational amplifiers, frequency response analysis, and the design and stability analysis of feedback amplifiers.</p> <p>本課程主要使學生瞭解電子電路之基本原理及其應用技術。授課內容為二極體、雙載子接面電晶體、場效電晶體、運算放大器的特性及應用，頻率響應分析，回饋放大器的設計與穩定性分析。</p>				
	<p>Introduction of Automation 自動化概論</p>	<p>Explanation of programmable logic control instructions, programming software operation, introduction to electromechanical control, pneumatic/hydraulic components, electrical pneumatic control loops, integration and application of electromechanical control systems.</p> <p>可程式控制器指令解說、編程軟體操作、機電控制及氣/液壓元件和電氣氣壓控制迴路的介紹、機電控制系統的整合及應用</p>	3	Elective Course 選修	3	<p>1st semester of 1st grade 一上</p>
	<p>Introduction of Computers 計算機概論</p>	<p>Computer organization and structure, programming languages, operating systems, data structures and algorithms, computer networks, information security and network applications.</p> <p>計算機組織與結構、程</p>	3	Elective Course 選修	3	<p>1st semester of 1st grade 一上</p>

	式語言、作業系統、資料結構與演算法、電腦網路、資訊安全與網路應用				
Situational Chinese(II) - Waystage Level 實用生活華語 -基礎級(二)	<ol style="list-style-type: none"> 1. Focus on practical vocabulary for daily life. Improve learners' ability to apply in real situations 2. Eight major themes: education and learning, health and physical care, interpersonal relationships, work and society, technology and innovation, festivals and customs, history and humanities, geography and international perspective. <ol style="list-style-type: none"> 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。 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。 	3	Required Course 必修	3	2nd semester of 1st grade 一下
Chinese Listening and Reading Comprehension -Level 2 華語文能力測	<ol style="list-style-type: none"> 1. Chinese language proficiency test: 1000 words in basic level 2. Strengthen grammar and review a thousand words at the same time. Simulate the test to familiarize with the 	3	Required Course 必修	3	2nd semester of 1st grade 一下

	<p>驗聽力閱讀-基礎級</p>	<p>test method</p> <p>3. Ten major themes: personal information, house and family, environment, daily life, leisure and entertainment, food, relationships with others, health and physical care, travel, shopping, education.</p> <p>1. 華語文能力測驗基礎級 1000 詞。 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>				
	<p>Circuit Practice 電路學實務</p>	<p>Characteristics and techniques of electronic components, electronic circuit analysis methods, characteristics and usage techniques of various active components.</p> <p>電子元件的特性與使用技巧、電子電路分析方法、各式主動元件的特性與使用技巧</p>	3	Elective Course 選修	3	2nd semester of 1st grade 一下
	<p>Mechatronics Practice 機電整合實務</p>	<p>This course aims to satisfy the practical needs of cooperative manufacturers, and to cultivate students' professional knowledge and practical skills in mechatronics design and related applications.</p> <p>本課程主要為配合合作</p>	3	Elective Course 選修	3	2nd semester of 1st grade 一下

	廠商實務需求，培育學生在機電整合設計的專業知識與相關應用的實務技能。				
Industrial wiring practice. 工業配線實務	This course is mainly to train students to correctly identify low-voltage industrial power distribution equipment, so that students can achieve industrial wiring technology, fault detection and repair capabilities. 本課程主要為培育學生能正確辨認低壓工業配電設備、使學生可達成工業配線技術配線及故障檢出和排出能力。	3	Elective Course 選修	3	2nd semester of 1st grade 一下
Special topic study 專題研究	Train students to have the basic vocabulary and Chinese grammar of electrical equipment, mechanical equipment and other instruments required in the automation equipment practice, and further introduces the relevant electrical components and electrical symbols. 訓練學生具備自動化設備實務中所需之電機設備、機械設備等儀器的基礎詞彙華語語法，並進一步介紹相關電機元件及電器符號。	3	Elective Course 選修	3	2nd semester of 1st grade 一下
Sharing of workplace practice 職場實務分享	Train students to be familiar with the working fields and operation types of cooperative manufacturers. Enable students to understand the professional knowledge and practical experience	2	Elective Course 選修	2	2nd semester of 1st grade 一下

		of combining professional knowledge of electrical engineering with practical skills in the production process of automation equipment. 訓練學生熟悉合作廠商工作場域與作業型態，讓學生瞭解電機工程專業知識與自動化設備生產流程實務技能結合的專業知識與實務經驗。				
	Off-campus internship I 校外實習(一)	Internship in Taiwan to understand the practical content of planning, the ability to adapt to the environment and independent learning. 在台灣場域實習，認識規劃實務操作內容、適應環境與自主學習的能力	40	Required Course 必修	5	1st semester of 2nd grade 二上
	Off-campus internship II 校外實習(二)	Internship in Taiwan to understand the practical content of planning, the ability to adapt to the environment and independent learning. 在台灣場域實習，認識規劃實務操作內容、適應環境與自主學習的能力	40	Required Course 必修	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> <ol style="list-style-type: none"> 1. Chi Mei Food Co., Ltd (Automation Engineer / 10 staff) 2. Medtecs International Co., Ltd (Automation Engineer / 10 staff) <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> <ol style="list-style-type: none"> 1. 奇美食品股份有限公司 (10 個職位) 2. 美德向邦醫療國際股份有限公司 (10 個職位) 					

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