

## Precision Design and Manufacturing Program, CSU

1. **Program title:** Precision Design and Manufacturing Program (two-year bachelor's degree, taught in English).
2. **Program Features:**
  - (1) In response to the demand in Taiwan's precision machinery sector, integrating related technologies to cultivate talents, aiming to train students from Philippines who have obtained a diploma from a technical school.
  - (2) The duration of study is two years, belonging to a two-year bachelor's degree program. The fourth semester includes an off-campus internship, and graduation requires completing at least 72 credits. In the second year, Chinese Language Proficiency Test (TOCFL) must be A2 in the second year of admission.
  - (3) The course content integrates industry trends and the needs of collaborating companies, designing professional practical courses to cultivate students' knowledge and practical skills in precision machinery.
  - (4) The collaborating companies offer internship opportunities in related fields such as CNC machine technicians and equipment engineer assistants. These companies include I Domain Industrial Co., Ltd., Young Ching Industry Co., Ltd., Jih Feng Enterprise Co., Ltd., and Chiang & Sons Enterprise Co., Ltd.
3. **Institution:** Cheng Shiu University/Department of Mechanical Engineering/ Two-year bachelor's degree program/ Fall semester 2024
4. **Curriculum Guideline:** Including course language, curriculum content (university curriculum and internship)
  - (1) Courses Language: Taught in English, supplemented by Chinese.
  - (2) Curriculum Content:

First Year		Second Year	
First Semester	Second Semester	Third Semester	Fourth Semester
General Courses: 9 Credits/ 18 Course hours (Credits/Course hours)			
Chinese Teaching I (5/10)	Chinese Teaching II (2/4)	Chinese for Specific Purpose (2/4)	
Required Course: 48 Credits/ 50 Course hours (Credits/Course hours)			
Mechanics of Materials (3/3)	Computer-aided Drawing and Practice ▲ (3/3)	Computer-Aided Manufacturing and Practice (4/4)	Internship 9 Credits/720 Internship hours

Engineering Material (3/3)	Numerical Control Machining and Practice (3/3)	Automation Technology and Practice (4/4)	
Mechanical Workshop Practice (2/4)	Programming Controller Application and Practice (3/3)	Computer-aided Mechanism Design and Practice ▲(3/3)	
Precision Measurement and Inspection Practice (3/3)	Engineering Material Testing and Practice (3/3)		
Mechanical Engineering Drawing and Practice ▲(3/3)			
Manufacturing Engineering (2/2)			
Elective Course: Minimum 18 Credits (Credits/Course hours)			
	Industrial Wiring internship (3/3)	Engineering Statistics and Quality Control (3/3)	
	Pneumatic Control and Practice (3/3)	Photovoltaic System Construction Practice (3/3)	
	Mechanical Component Design and Practice (3/3)	Mechatronics Practice (3/3)	
	Introduction of CNC Machine Design (3/3)	Reverse Engineering and Practice (3/3)	
	Microcomputer Interfacing Practice (3/3)	Welding Engineering and Application (3/3)	
General Courses		9 credits	
Required course		48 credits (include internship which consists of 9 credits)	
Elective course		At least 18 credits must be completed	
Total minimum credits		72 credits	
Note		▲Computer Lab	

**5. Entry Requirement:**

Admission requirement: The English Language Proficiency level must be at least CEFR level B1 or above. Chinese Language Proficiency Test (TOCFL) must be A2 in the second year of admission. (Both listening and reading must be level A2 or above)

**6. Requirement for graduation:**

Credits: 72 credits, including general course 9 credits, required courses 48 credits (include internship which consists of 9 credits) and elective courses minimum 18 credits.

**7. Post-Graduation Employment Obligations:**

The obligation period for students hired corresponds to the duration of receiving the corporate living allowance. For instance, those receiving a 2-year living allowance from the industry are obligated to work for 2 years.

If student successfully passes assessments conducted by both the school and the industry, completes their academic requirements, and obtains a degree, the collaborating industries have the right to hire and provide suitable positions and salary not less than the minimum wage. The employment should align with the vacancies provided by the industry and the competency requirements for the positions as outlined below:

No.	Collaborating Company	Job/Positions		Skill Requirement
1	I Domain Industrial Co., Ltd.	CNC Machine Technicians	10	CNC Machining Operator 、 Toolpath Programming Techniques 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
		Welding Technicians	15	Basic Mechanical Knowledge 、 Occupational Health and Safety Course
		Professional Laser Cutting Machine and Press Brake Technicians	9	Technical Drawing and Computer-Aided Design 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
		Electromechanical Technicians	6	Basic Electrical Distribution Knowledge 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
2	Young Ching Industry Co., Ltd.	Assistant Equipment Engineer	2	Basic Electrical Distribution Knowledge 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
		Assistant Electromechanical Engineer	3	Basic Electrical Distribution Knowledge 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course

3	Jih Feng Enterprise Co., Ltd.	Assistant Equipment Engineer	2	Basic Electrical Distribution Knowledge 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
4	Chiang & Sons Enterprise Co., Ltd.	CNC Machine Technicians	3	Operation of CNC Machining Centers and Related Machinery 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
		Professional Machine Technician	2	Technical Drawing and Computer-Aided Design 、 Basic Mechanical Knowledge 、 Occupational Health and Safety Course
<b>total</b>	4 companies	52 job openings		

### 8. Tuition Fee and Scholarships:

- (1) Tuition and Miscellaneous Fee: Please refer to the Tuition and Miscellaneous Fees of the University for details.

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- (2) Include the first and second year of National Development Fund Scholarships qualifications.

Unit	Content	Limit	Note
National Development Fund	Administrative fees for arrival in Taiwan	The maximum amount is NTDS\$ 10,000.	One-time subsidy covering pre-arrival health check expenses, visa fees, and document verification fees.
	One-way flight ticket	The maximum amount is NTDS\$ 9,000.	One-time subsidy, the airfare is verified based on the economy class one-way ticket for the most direct route to Taiwan.
	Industry-Academia Collaboration Scholarship	First Year: Tuition and miscellaneous fees are provided to students in their first year of enrollment.	1. Subsidies will be granted based on the actual tuition and miscellaneous fees payable by students to the school, with an

Unit	Content	Limit	Note
		<p>Second Year: For student who reach TOCFL A2 or above and after reviewing the scores and performance by the school and collaborating industry, tuition and miscellaneous fee subsidies will be awarded based on merit.</p>	<p>annual maximum subsidy of NTDS 100,000 (One semester maximum of NTDS 50,000).</p> <p>2. A maximum of two years of tuition and miscellaneous fee subsidies will be provided.</p> <p>3. Obligations for staying in Taiwan for employment will apply based on the number of years the scholarship is received. Specifically, recipients of the scholarship for one year will have a one-year obligation to stay in Taiwan for employment, and those receiving the scholarship for two years will have a two-year obligation to stay in Taiwan for employment.</p>
University	Study Scholarship	<p>Reduce computer and internet usage fees by NTDS 1,200. Reduce accommodation fees by NTDS 5,750.</p>	<p>The accommodation fee waiver is only available for those who apply for on-campus accommodation.</p>

(3) Industry-Academia Collaboration Scholarship Requirement

Student who withdraws from the specialized program or fails to fulfill employment contract after graduation, the repayment principles for the scholarships as follows:

1. If the circumstances are not under student control, there is no requirement for repayment:
  - (1) Due to the operational adjustment, the original collaborating industry ceases to provide living allowance to student during their learning and student is unable to achieve additional support from other industry, leading the student's withdrawal from the specialize program.
  - (2) Due to the operational adjustment, the original collaborating company has no job vacancies available for employment upon the student's graduation, and despite the school's efforts in providing career guidance and facilitating job placement, the student is unable to secure suitable employment opportunities.
  - (3) If the collaborating company, during the student's employment period, encounters situations as specified in Article 14, Paragraph 1 of the Labor Standards Act, leading the student to terminate the contract, and despite the school's efforts in providing career guidance and facilitating job placement, the student is still unable to find a suitable company for subsequent employment.
  - (4) Student's death, severe illness, or an unforeseen accident preventing them from continuing their studies or employment, a certified document issued by a teaching hospital rated at or above the level of accreditation by the Ministry of Health and Welfare, stating the student's inability to continue education or employment, or in cases where significant family upheaval due to an accident prevents the student from pursuing education or employment, as verified by the school.
2. If the circumstances are under student control, requirement for repayment:
  - (1) Withdrawal from the specialized program during the academic period due to personal reasons such as applying for transfer, changing majors, absence, or returning to one's home country. Even after guidance provided by the school, if the student chooses to leave the specialized program or if the school, in accordance with its regulations, initiates withdrawal or expulsion.
  - (2) Poor academic performance, failure to meet the evaluation standards set by both the school and the collaborating industry. Even after school guidance, student fails improve, and in accordance with the school regulations, the student faces withdrawal or expulsion. In such cases, the student is required to repay the previously received industry-academia scholarships.
  - (3) After graduation, student chooses not to pursue employment with the collaborating industry or in the relevant industrial field, or if, after employment, the student violates company regulations leading to lawful termination of the labor contract, and after school guidance, no improvement is observed, the student is obligated to repay the received

industry-academia funding.

- (4) If a student, during the employment period with the collaborating industry, does not complete the specified duration for receiving industry-academia scholarship, repayment should be made based on the proportion of the remaining months unemployed; for periods less than one month, one month's repayment is required.

**9. Living allowance requirement:**

(1) Living Allowance:

Unit	Content	Limit	Note
Collaborating companies of the program	Living Allowance	During the student's academic period and before participating in the internship, the monthly stipend is set at NTDS\$ 10,000 per person.	After graduation, students are obligated to seek employment in Taiwan. Industries who provide subsidies have the right to prioritize the employment of these students, aiming to expedite the recruitment of the necessary mid-to-high-level talents.
	Internship Allowance	During the off-campus internship period, each person will receive a monthly internship allowance not less than the minimum wage, with overtime pay calculated separately.	

(2) Living Allowance Requirement:

Student who withdraws from the specialized program or fails to fulfill employment contract after graduation, the repayment principles for the living allowance as follows:

1. If the circumstances are not under student control, there is no requirement for repayment:
  - (1) Due to the operational adjustment, the original collaborating industry ceases to provide living allowance to student during their learning and student is unable to achieve additional support from other industry, leading the student's withdrawal from the specialize program.
  - (2) Due to the operational adjustment, the original collaborating company has no job vacancies available for employment upon the student's graduation.
  - (3) If the collaborating company, during the student's employment period, encounters situations as specified in Article 14, Paragraph 1 of the Labor Standards Act, leading the student to terminate the contract, no repayment is needed.

- (4) Student's death, severe illness, or an unforeseen accident preventing them from continuing their studies or employment, a certified document issued by a teaching hospital rated at or above the level of accreditation by the Ministry of Health and Welfare, stating the student's inability to continue education or employment, or in cases where significant family upheaval due to an accident prevents the student from pursuing education or employment, as verified by the school.
2. If the circumstances are under student control, requirement for repayment:
    - (1) Withdrawal from the specialized program during the academic period due to personal reasons such as applying for transfer, changing majors, absence, or returning to one's home country. Even after guidance provided by the school, if the student chooses to leave the specialized program or if the school, in accordance with its regulations, initiates withdrawal or expulsion.
    - (2) Poor academic performance, failure to meet the evaluation standards set by both the school and the collaborating industry. Even after school guidance, student fails improve, and in accordance with the school regulations, the student faces withdrawal or expulsion.
    - (3) Student is not employed to the collaboration industry 3 months after graduation.
    - (4) If a student, during the employment period with the collaborating industry, does not complete the specified duration for receiving industry-academia living allowance, repayment should be made based on the proportion of the remaining months unemployed; for periods less than one month, one month's repayment is required.



一、專班名稱：精密設計製造專班(2 年制學士專班,英文授課)

二、專班特色：

- (一)因應臺灣精密機械領域需求，整合相關技術培育人才，旨在訓練菲律賓已獲得技術學校學歷的學生。
- (二)修業年限為兩年，屬於二年制學士專班，其中第四學期安排校外實習，畢業需完成至少72學分。第二年需要通過華語文能力測驗(TOCFL)達到 A2基礎級水準。
- (三)課程內容結合產業趨勢與合作公司需求，規劃專業實務課程，培育學生精密機械相關知識與實務技能。
- (四)合作企業提供 CNC 機台技術員、設備工程師助理等相關領域的實習機會，包括壹東實業股份有限-公司、永觀工業股份有限公司、繼鋒企業有限公司及姜記企業股份有限公司。

三、開班學校/系所/學制：

正修科技大學/機械工程系/二年制學士專班/2024 年秋季班

四、課程規劃：包含授課語言、課程內容(含校內課程、校外實習之安排)

(一)授課語言：英文授課為主，中文為輔。

(二)課程內容：

第一年		第二年	
第 1 學期	第 2 學期	第 3 學期	第 4 學期
通識基礎課程:共 9 學分/18 小時 (學分數/授課時數)			
華語文教學(一) (5/10)	華語文教學(二) (2/4)	專業華語 (2/4)	
專業必修:共 48 學分/50 小時 (學分數/授課時數)			
材料力學 (3/3)	電腦輔助繪圖與實作 <sup>▲</sup> (3/3)	電腦輔助製造與實作 (4/4)	校外實習 (9/720 實習時)
工程材料 (3/3)	數值控制加工與實作 (3/3)	自動化技術與實作 (4/4)	
機械工廠實作 (2/4)	可程式控制器應用與實作 (3/3)	電腦輔助設計與實作 <sup>▲</sup> (3/3)	
精密測量與實作 (3/3)	工程材料實驗與實作 (3/3)		

機械製圖與實作 ▲(3/3)			
製造工程(2/2)			
專業選修:至少選 18 學分 (學分數/授 課時數)			
	工業配線實習 (3/3)	工程統計與品質管 制(3/3)	
	氣壓控制與實作 (3/3)	太陽光電設置及實 習(3/3)	
	機械元件設計與實 作(3/3)	機電整合與實作 (3/3)	
	工具機概論 (3/3)	逆向工程與實作 (3/3)	
	微電腦介面實作 (3/3)	焊接工程與應用 (3/3)	
通識基礎課程		9 學分	
專業必修		48 學分(其中校外實習占 9 學分)	
專業選修		至少修 18 學分	
最低畢業學分數		72 學分	
備註		▲為電腦課	

## 五、入學資格：

語言能力要求：學生入學前英文能力須達 CEFR B1 級(含)以上(入學第 2 年華語文能力聽、讀 2 項建議須達 A2 級(含)以上)。

## 六、畢業門檻：

本專班課程安排包括通識基礎必修課程 9 學分，專業理論及實作必修課程 39 學分；專業理論及實作選修課程 18 學分，校外實習必修課程 9 學分，學生畢業門檻需滿足 72 學分。

## 七、畢業後履行就業義務：

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。

學生如通過學校及企業評核，完成學業取得學位，合作企業具聘用權，應提供適合職缺及不低於基本薪資之待遇，留用並聘僱學生。配合企業所提供的職缺及該職缺所需的職能要求如下：

編號	專班合作 企業名稱	職務需求/人數	專業能力
1	壹東實業 股份有限公司	CNC 機台技術員	10 CNC 加工機操作、 刀具路徑編程技術、 基本機械常識、 職業安全衛生課程
		焊接技術員	15 基本機械常識、 職業安全衛生課程
		專業雷射切割機與折床 機台技術員	9 圖學及電腦繪圖、 基本機械常識、 職業安全衛生課程
		機電技術員	6 基本配電知識、 基本機械常識、 職業安全衛生課程
2	永觀工業 股份有限公司	設備工程師助理	2 基本配電知識、 基本機械常識、 職業安全衛生課程
		機電工程師助理	3 基本配電知識、 基本機械常識、 職業安全衛生課程
3	繼鋒企業 有限公司	設備工程師助理	2 基本配電知識、 基本機械常識、 職業安全衛生課程
4	姜記企業 股份有限公司	CNC 機台技術員	3 CNC 加工機及相關機械操 作、 基本機械常識、 職業安全衛生課程
		專業機台技術員	2 圖學及電腦繪圖、 基本機械常識、 職業安全衛生課程
合計	4 家	52 個職缺	

#### 八、獎助金說明：

(一)學雜費收費基準：請參考本校學雜費收費標準

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(二)錄取之學生，經審核通過將由國發基金提供產學獎助金。獎助金包括：

獎 / 補助單位	獎/補助項目	獎/補助額度上限	說明
國發基金	初次來臺之相關必要行政費用	新南向區域國家及其他國家來臺，上限新臺幣 10,000 元。	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。
	單程機票	新南向區域國家上限為新臺幣 9,000 元。	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。
	產學獎助金	<p>第一年： 學生入學第一年給予學雜費補助。</p> <p>第二年： 華語文能力測驗 (TOCFL) 需達 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>1. 依學生實際應繳交給學校學雜費給予補助，每年補助上限 10 萬元(一學期上限 5 萬元)。</p> <p>2. 最多補助 2 年學雜費。</p> <p>3. 依據領取年限具有相應留臺就業年限的義務。即領取 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>
本校	學習助學金	<p>減免電腦與網路使用費新臺幣 1,200 元。</p> <p>減免住宿費用新臺幣 5,750 元。</p>	住宿費用減免僅提供申請校內住宿者。

(三)學生如中途退出專班或畢業後未履約就業者，所受領之產學獎助金必須依規定之原則繳還。原則如下：

1. 屬不可歸責於學生之原因，無須繳還產學獎助金：

- (1) 原合作企業因營運調整，於學生在學期間停止提供生活津貼，又學生經學校媒合仍無法覓得其他企業願意續予補助生活津貼，致學生中途退出專班者。
- (2) 原合作企業因營運調整，於學生畢業時無職缺可聘用，又學生經學校進行就業輔導及媒合其他企業仍無法覓得適合企業聘僱者。
- (3) 合作企業於學生就業期間有勞動基準法第十四條第一項規定

情形，致學生提出終止契約，又學生經學校進行就業輔導及媒合，仍無法覓得適合企業接續聘僱者。

- (4) 學生死亡、因重大疾病或意外事故不能繼續就學或就業，經衛生福利部新制醫院評鑑合格之教學醫院以上層級，開立認定無法繼續就學或就業證明者，或因事故致家庭巨變無法繼續就學或就業，經學校查證屬實者。

2. 屬可歸責於學生之原因，應繳還產學獎助金：

- (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。
- (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，或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，學生應返還已領之產學獎助金。
- (4) 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。

## 九、生活津貼說明：

### (一)生活津貼：

獎/補助單位	獎/補助項目	獎/補助額度上限	說明
專班 合作企業	生活津貼	學生就學期間，企業每月提供 <u>1 萬元</u> 生活津貼。	畢業後即具有留臺就業義務，提供獎助津貼之企業具有優先留用聘僱學生的權利，以加速補足所需中高階人才。
	實習津貼	校外實習期間每人每月提供不低於最低薪資的實習津貼，加班費另計。	

### (二)生活津貼繳還原則：

學生如因中途退出專班或畢業後未履約就業，所受領企業生活津貼之繳還原則如下：

1. 屬不可歸責於學生之原因，無須繳還生活津貼：
- (1) 企業若因營運調整，於學生在學期間停止提供學生生活津貼，屬不可歸責於學生之原因，企業不得向學生追回已請領之生活津貼。

- (2) 合作企業因營運調整，於學生畢業時無職缺可聘用。
  - (3) 合作企業於學生就業期間有勞動基準法第十四條第一項規定情形，致學生提出終止契約時，學生免償還已受領之生活津貼。
  - (4) 學生死亡、因重大疾病或意外事故不能繼續就學或就業，經衛生福利部新制醫院評鑑合格之教學醫院以上層級，開立認定無法繼續就學或就業證明者，或因事故致家庭巨變無法繼續就學或就業，經學校查證屬實並通報企業者，得免履行就業義務及免償還受領之生活津貼。
2. 屬可歸責於學生之原因，得於合約內容載明追回條件情況下，由企業向學生追回生活津貼：
- (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。
  - (2) 學生學習表現不佳，未通過學校及企業評核標準，經學校輔導後仍無改善，致企業不予聘用者。
  - (3) 學生畢業後3個月內，未至合作企業就業。
  - (4) 學生於合作企業就業期間未滿受領生活津貼年限：應依其未就業之月數比例償還生活津貼；不滿一月者，以一月計。