



## **Describe Department/Unit**

### **Connection to College Mission**

It is the mission of the Industrial Arts Department to provide courses and instruction that will meet the academic, vocational, and general education needs of our students, college, and communities. We provide instruction leading to Associate degrees and certificates in multiple occupational areas including: Welding, Industrial Process Technician, and Machine Tools, along with Forklift operator certifications. The programs in the Industrial Arts Department provide life-long learning and support to students in their academic, technical, and vocational pursuits. The goal of our programs is to foster in students a lifelong desire to learn, a passion to excel, and a commitment to contribute actively to their local community. Students graduating from the department's programs will be prepared to enter the job market in entry level positions with a variety of focus including but not limited to: construction, mining, manufacturing, drafting, welding, fabrication and machine shops, electronics, railroads, automotive, as well as the aircraft, marine, aerospace, and renewable energy industries.

## **Report on Improvements Made and Gaps Identified in the Prior Year**

### **Student Equity**

#### **Actions Taken**

The department has seen substantial growth in 2024-2025. Enrollments as a whole are 321 compared to the previous year of 241. A good portion of this growth comes from the Welding program in Tehachapi. We have been able to offer a few extra courses at the Tehachapi campus.

Overall completion is 96% and success rates are 88%. The completion and success rates are both up by 5% compared to last year.

## Gaps Identified

The African American completion rate is up 26% compared to last year. The success rate is lower compared to the college at only 60%, however the African American population is up from the previous year by 12%.

The department is under represented in the female and Hispanic population.

The success rate in Tehachapi is 6% less than the Ridgecrest population.

## Outcomes Assessment

### Loop-Back Improvements Made

None

### Schedule of Assessments

#### **AERO C101X Aircraft Mechanic Technician General I (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C102X Aircraft Mechanic Technician General II (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C103X Aircraft Mechanic Technician Airframe I (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C104X Aircraft Mechanic Technician Airframe II (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C105X Aircraft Mechanic Technician Airframe III (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C106X Aircraft Mechanic Technician Airframe IV (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

#### **AERO C107X Aircraft Mechanic Technician Powerplant I (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C108X Aircraft Mechanic Technician Powerplant II  
(Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C109X Aircraft Maintenance Technician Powerplant III  
(Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C110X Aircraft Maintenance Technician Powerplant IV  
(Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C111X Physics for Aviation (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C112X Introduction to Avionics (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**AERO C113X Introduction to Aircraft Structures, Blueprints,  
and Manufacturing Documents (Effective Fall 2024)**

Not Due to Be Assessed This Year or Last Year

**DRFT C108 Reading Technical Drawings (Effective Spring 2022)**

Will Assess This Year

**HEAV C802 Forklift Certification (Effective Fall 2024)**

Will Assess This Year

**INDE C060 Mathematical Applications for Trades (Effective  
Summer 2021)**

Assessed Last Year

**MCTL C107 Tool and Equipment Operation (Effective Spring  
2022)**

Will Assess This Year

**PTEC C101X Introduction to Process Technology (Effective Fall  
2021)**

Assessed Last Year

**PTEC C110X Industrial Safety, Health, and Environment  
(Effective Fall 2021)**

Assessed Last Year

**WELD C101 Oxyacetylene Welding (Effective Fall 2024)**

Will Assess This Year

**WELD C102 Shielded Metal Arc Welding (Effective Fall 2024)**

Will Assess This Year

**WELD C200 Gas Metal Arc Welding (Effective Fall 2024)**

Will Assess This Year

**WELD C203 Gas Tungsten Arc Welding (Effective Fall 2024)**

Will Assess This Year

**WELD C204 Pipe Welding (Effective Spring 2025)**

Will Assess This Year

**WELD C210 Welding Fabrication (Effective Spring 2025)**

Will Assess This Year

**Outcomes Assessment: Results of Last Year's Assessments**

**SLO for course INDE C060 Mathematical Applications for Trades (Effective Summer 2021) — None Demonstrate proper use of measuring instruments such as micrometers and calipers to determine the precision and accuracy of measurements.**

Passed

**SLO for course INDE C060 Mathematical Applications for Trades (Effective Summer 2021) — None Solve trade-related word problems using algebra, geometry, and trigonometry.**

Passed

**SLO for course INDE C060 Mathematical Applications for Trades (Effective Summer 2021) — None Use a scientific calculator to calculate ratios, solve proportions, and solve problems involving proportions.**

Passed

**SLO for course PTEC C101X Introduction to Process Technology (Effective Fall 2021) — None Apply industry concepts and principles to draw conclusions about the roles and responsibilities of a process technician in an industry setting.**

Passed

**SLO for course PTEC C101X Introduction to Process Technology (Effective Fall 2021) — None Explain the applications and usage of the various equipment found in the processing industry.**

Passed

**SLO for course PTEC C101X Introduction to Process Technology (Effective Fall 2021) — None Identify and summarize the important aspects of regulatory agencies in the industry.**

Passed

**SLO for course PTEC C110X Industrial Safety, Health, and Environment (Effective Fall 2021) — None Apply important industry concepts and principles to draw conclusions about the roles and responsibilities of a process technician in an environmental setting.**

Passed

**SLO for course PTEC C110X Industrial Safety, Health, and Environment (Effective Fall 2021) — None Identify and analyze regulatory agencies within the industries including their roles and how they affect the environment.**

Passed

**SLO for course PTEC C110X Industrial Safety, Health, and Environment (Effective Fall 2021) — None Identify and understand process system equipment hazards and their characteristics within the industry.**

Passed

## **Outcomes Assessment: Missed Targets**

## **Program Review**

**Name: Industrial Technology**

**Year of Last Program Review**

2024

**Actions Taken in the Prior Year to Address Strategies**

HEAV C802 has been offered on a few separate occasions offering students an industry recognized forklift license.

**Strategies Still to be Addressed**

The department members are working to become Certified Welding Inspectors (CWI). This is a very lengthy and rigorous process.

Change the name of the department from Industrial Arts to Industrial Technology. There has been some confusion with students that we offer artistic classes. We are teaching students a trade and don't want there to be any confusion.

## **Last Year's Initiatives**

### **Name: Begin offering fluxcore D1.1 structural tests**

#### **Action Plan**

Purchase larger diameter fluxcore wire in order to offer destructive tests consistent with the American Welding Society (AWS).

Obtain weld procedure specifications (WPS) from the AWS.

#### **Lead Measure of Success**

Purchase of larger diameter fluxcore wire. The larger diameter wire is needed based on the metal thicknesses students will be using.

Accessing AWS website to obtain WPS for this particular test.

#### **Lag Measure of Success**

Offering test.

#### **Initiative Status**

Completed

#### **Summarize actions taken on this initiative**

This has been completed and implemented in the WELD C210 course.

### **Name: Become certified to offer an OSHA 10 course**

#### **Action Plan**

Department Chair and Faculty member will seek to take necessary courses in order to offer an OSHA 10 course. This came out of our advisory committee meeting.

#### **Lead Measure of Success**

Research courses needed in order to be an authorized instructor for this course.

#### **Lag Measure of Success**

Enroll in and complete courses.

## **Initiative Status**

In Progress

### **Summarize actions taken on this initiative**

There are two courses that are needed to be completed in order to offer OSHA 10 certification. We have completed one of the two.

### **Name: Begin offering a forklift certification course**

#### **Action Plan**

This was an initiative from last year continuing this year. The curriculum has been written and approved by CIC. Once the course is approved, we will begin offering it.

#### **Lead Measure of Success**

Having this course approved at the state level

#### **Lag Measure of Success**

Offering course to students

## **Initiative Status**

Completed

### **Summarize actions taken on this initiative**

The course has been approved and offered twice so far with 100% student success.

## **Initiatives for Next Academic Year**

### **Complete last class to become certified to offer an OSHA 10 safety course**

**Is this a multi-year Initiative?** N

#### **Specific Action Steps to be Taken**

There are two courses that need to be completed in order to become certified to offer OSHA 10. The first course is complete. The second course still needs to be taken by faculty members.

### **Early Observational Data, or "Lead" Measure(s)**

Register and successfully complete the course.

**Do you request help developing these instruments?** N

### **Institutional Performance Data, or "Lag" Measure(s)**

Completing courses and becoming licensed to begin offering this certification to students. This has been requested by the department's advisory committee.

### **Person Responsible**

Faculty

**What unit gap or institutional goal does this address?**

It addresses a 2- or 5- year program review strategy

### **Become an authorized weld certification testing site**

**Is this a multi-year Initiative?** N

### **Specific Action Steps to be Taken**

Contacting various weld test facilities to begin the conversation to allow our site to become an authorized testing facility. This would open up many more job opportunities for students.

### **Early Observational Data, or "Lead" Measure(s)**

Making contact with testing facilities

**Do you request help developing these instruments?** N

### **Institutional Performance Data, or "Lag" Measure(s)**

Becoming authorized as a proctor site for non-destructive and destructive weld tests.

### **Person Responsible**

Faculty

**What unit gap or institutional goal does this address?**

It addresses a strategic plan goal or objective



## **Begin offering AERO courses**

**Is this a multi-year Initiative?** N

### **Specific Action Steps to be Taken**

The curriculum for the AERO courses have been completed. The department has had meetings with industry members and are working towards offering these courses. We are currently working with Edwards Air Force base and Mojave Space port to find the best central location to begin offering these courses. The specific steps to be taken in order to offer these courses include:

Finalizing a location to offer the courses

Purchasing job specific tool sets

Hiring adjunct faculty

### **Early Observational Data, or "Lead" Measure(s)**

Continue working with industry members to locate the best facility to offer courses. Edwards Air Force base is currently working on a grant to build a new building strictly for this program and has offered Cerro Coso the opportunity to share this site.

Research and purchase all tooling that will be needed to train students.

Working with HR to post job openings in order to begin screening applicants.

**Do you request help developing these instruments?** N

### **Institutional Performance Data, or "Lag" Measure(s)**

Offering courses.

### **Person Responsible**

Faculty Chair

### **What unit gap or institutional goal does this address?**

It addresses a strategic plan goal or objective

## **Requested Resources**

### **#47 Facilities: Outlet covers in the welding booths**

**Is this a one-time request or an on-going request?** One-Time

**Amount Requested** Unknown

**Is this request supported in your initiatives or elsewhere?** No

#### **Description/Explanation**

When students are grinding in their welding booths, sparks can easily enter the outlets, since they are inside the welding booths. We have had this happen before and this trips the breaker. Outlet covers would prevent this from being an issue.

#### **Supporting Facts/Data**

**Impact on the Department/Unit**

**Impact on Operational Efficiency**

This would prevent downtime and potential equipment malfunctions.

### **#48 Facilities: Remove exhaust unit from the North wall of WW147. This will make room for new equipment.**

**Is this a one-time request or an on-going request?** One-Time

**Amount Requested** None

**Is this request supported in your initiatives or elsewhere?**  
None

#### **Description/Explanation**

The department would like to purchase new equipment for the Welding program and put the new equipment in place of the old exhaust unit that has been out of service for at least 15 years.

## **Supporting Facts/Data**

### **Impact on the Department/Unit**

### **Impact on Operational Efficiency**

## **Faculty Position Requests**

### **Industrial Arts Welding Faculty**

#### **Locations**

EKC Tehachapi

#### **Justification**

The Welding program has seen substantial growth in Tehachapi. Enrollments have more than doubled in the last couple of years. We are currently only able to offer two classes per semester in Tehachapi due to our instructor there being an adjunct. This is making it difficult for students to complete their certificates quickly. The department also has plans to expand to Mojave and potentially Boron. This new faculty member would serve all of these locations.

## **Classified Position Requests**

**N/A**

#### **Locations**

#### **Justification**

We are not requesting any classified staff this year.

#### **Salary Grade**

#### **Number of Months per Year**

#### **Number of Hours per Week**

#### **Salary Amount**

Industrial Arts AUP Budget Request Worksheet for FY27

Fund	Org Description	Account Description	Program Description	Activity	Location	2025	2025	2026	2027	Notes	Increase	If requesting increase of %5 or more			
						Adopted Budget	Actual Expenses	Adopted Budget	Request			In planning document	Data?	Relevance?	Operational Efficiency?
		Industrial Arts Departm/ Non-Inst Supplies & Materials	Welding Technology		CI	\$ 300.00	\$ -	\$ 300.00	\$ 300.00						
GU001		Industrial Arts Departm/ Maint & Repairs Supplies	Welding Technology		CI	\$ 1,000.00	\$ -	\$ 1,500.00	\$ 1,500.00		no				
GU001		Industrial Arts Departm/ Other Services & Expenses	Industrial/Manufacturing Tech		CI	\$ -	\$ 320.00		\$ 320.00		no				
LR001		Industrial Arts Departm/ Inst Supplies & Materials	Welding Technology		CI	\$ 45,000.00	\$ 45,431.11	\$ 45,000.00	\$ 45,000.00		no				
LR001		Industrial Arts Departm/ Inst Supplies & Materials	Welding Technology		CT			\$ 10,000.00	\$ 10,000.00		no				