

ASSOCIATE OF SCIENCE IN WELDING TECHNOLOGY (AS)

In Workflow

1. IT Chair (brianu@cos.edu)
2. IT Dean (jonnas@cos.edu)
3. Curriculum Coordinator Technical Review (sarahha@cos.edu)
4. Articulation Officer (mainouh@cos.edu)
5. Academic Resources Specialist (danielal@cos.edu)
6. IT Representative (travisa@cos.edu)
7. Financial Aid Rep (amandac@cos.edu)
8. Distance Education Coordinator (eliseb@cos.edu)
9. LIBR Representative (emilyc@cos.edu)
10. Curriculum Coordinator Regen (sarahha@cos.edu)
11. Christopher Huff (christopherhu@cos.edu)
12. Vice President of Academic Affairs (jessew@cos.edu)
13. IT Curriculum Committee Subgroup Vote (davidhey@cos.edu; quinnm@cos.edu; jessicabo@cos.edu)
14. Curriculum Coordinator CC Slate Prep (sarahha@cos.edu)
15. Curriculum Committee Slate Vote (danielal@cos.edu)
16. Curriculum Committee Action Item (danielal@cos.edu)
17. Academic Senate President (juana@cos.edu)
18. Board of Trustees (danielal@cos.edu)
19. Chancellor's Office (danielal@cos.edu)

Approval Path

1. Mon, 05 Jan 2026 16:14:20 GMT
Brian Unruh (brianu): Approved for IT Chair
2. Mon, 05 Jan 2026 20:56:26 GMT
Jonna Schengel (jonnas): Approved for IT Dean
3. Mon, 26 Jan 2026 18:52:52 GMT
Sarah Harris (sarahha): Approved for Curriculum Coordinator Technical Review
4. Mon, 26 Jan 2026 20:23:07 GMT
Mainou Her (mainouh): Approved for Articulation Officer
5. Tue, 27 Jan 2026 22:01:20 GMT
Daniel Alvarado (danielal): Approved for Academic Resources Specialist
6. Thu, 29 Jan 2026 19:19:38 GMT
Travis Asher (travisa): Approved for IT Representative
7. Tue, 03 Feb 2026 16:40:38 GMT
Amanda Cota (amandac): Approved for Financial Aid Rep
8. Wed, 04 Feb 2026 22:50:01 GMT
Elise Baker (eliseb): Approved for Distance Education Coordinator
9. Thu, 05 Feb 2026 15:55:26 GMT
Emily Campbell (emilyc): Approved for LIBR Representative
10. Thu, 05 Feb 2026 17:33:10 GMT
Sarah Harris (sarahha): Approved for Curriculum Coordinator Regen
11. Thu, 05 Feb 2026 18:28:38 GMT
Christopher Huff (christopherhu): Approved for christopherhu
12. Wed, 25 Feb 2026 21:49:43 GMT
Jesse Wilcoxson (jessew): Approved for Vice President of Academic Affairs
13. Tue, 03 Mar 2026 18:29:33 GMT
2/3 votes cast.
Yes: 100% No: 0%
Quinn MacPherson (quinnm): Approved for IT Curriculum Committee Subgroup Vote
14. Fri, 06 Mar 2026 16:57:32 GMT
Sarah Harris (sarahha): Approved for Curriculum Coordinator CC Slate Prep



15. Fri, 10 Apr 2026 20:09:03 GMT

Sarah Harris (sarahha): Approved for Curriculum Committee Slate Vote

Votes Cast: 2

| | |
|-----|------|
| Yes | 100% |
| No | 0% |

Full Voting Results

| User | Vote |
|------------------|------|
| Quinn MacPherson | Yes |
| David Heywood Jr | Yes |

History

1. Mar 15, 2018 by clmig-jwehrheim
2. Apr 2, 2018 by Daniel Alvarado (danielal)
3. Nov 2, 2018 by Daniel Alvarado (danielal)
4. Nov 2, 2018 by Daniel Alvarado (danielal)
5. Nov 2, 2018 by Daniel Alvarado (danielal)
6. Jan 11, 2022 by Randy Emery (randye)
7. Mar 8, 2022 by Daniel Alvarado (danielal)
8. Apr 13, 2023 by Christopher Huff (christopherhu)
9. Mar 13, 2024 by Christopher Huff (christopherhu)
10. Jan 3, 2025 by Daniel Alvarado (danielal)
11. Jan 8, 2025 by Daniel Alvarado (danielal)

Date Submitted: Tue, 30 Dec 2025 23:41:39 GMT

Viewing: Associate of Science in Welding Technology (AS)

Last approved: Wed, 08 Jan 2025 21:00:35 GMT

Last edit: Wed, 22 Apr 2026 21:23:31 GMT

Changes proposed by: christopherhu

Proposer and Co-Contributor(s):

Proposer:

| Name: | Email: |
|------------|-----------------------|
| Chris Huff | christopherhu@cos.edu |

General

Credit Status:

Credit

Program Award:

Associate of Science

Effective Term:

Fall 2027

Department:

Welding

Program Title

Associate of Science in Welding Technology (AS)

Program Goal:

CTE



Secondary Program Goal

Local

Distance Ed Program:

Yes

DE Percentage

1 - 49%

Catalog Description:

This degree prepares students for entry-level employment in the field of Welding through the study of fabrication, metal transfer and the use of different shielding gases. Students will acquire skills in metallurgy, blueprint design and creation, multi-position metal transfer, well-joint design and application, and basic material science.

Career and Transfer Opportunities:

Career Opportunities

Upon successful completion of this degree, students will be prepared for careers or employment in the following fields: Welding and metal fabrication careers in the manufacturing and construction industries. Welding related maintenance and repair positions in the food processing industries. Welding inspection and quality control in the manufacturing and construction industries.

Note

This degree is not designed for transfer; however, the courses included in this degree may be transferable and apply to other degrees designed for transfer.

Program Outcomes

Program Outcomes:

Program Outcomes

- Adjust, operate and troubleshoot shielded metal arc welding, gas welding, gas tungsten arc welding, oxyfuel welding and cutting apparatuses to industry standards.
- Choose the correct joint prep process for the weld metal joints and complete that joint prep to industry standards.
- Perform groove, lap, fillet and seam welds using SMAW, GTAW and OFW apparatuses to industry standards.
- Produce simple effective orthographic drawings used for cutting, fit-up and welding of metal weldments. These drawings shall include the use of the American Welding Society welding symbols. All drawings shall be done to industry standards.
- Perform basic welding inspection and quality control tasks used in the manufacturing, construction and food processing industries.

Program Requirements:

Requirements

| Code | Title | Units |
|---|---|-------|
| GENERAL EDUCATION AND SUBJECT REQUIREMENTS | | 25 |
| College of the Sequoias Associate Degree General Education (COS-GE) | | |
| + | | |
| REQUIRED MAJOR COURSES | | 22 |
| WELD 162 | Shielded Metal Arc Welding | 4 |
| WELD 171 | Gas Metal Arc Welding | 4 |
| WELD 172 | Gas Tungsten Arc Welding | 4 |
| WELD 181 | Blueprint Reading/Metallurgy | 3 |
| WELD 200 | Welding Fundamentals | 4 |
| WELD 276 or AGTC 210 | Metal Fabrication Agriculture Project Construction | 3 |
| + | | |
| RESTRICTED ELECTIVES | | 3-4 |
| Select 3-4 units from the following courses: | | |
| WELD 104 | Metal Sculpture | 3 |
| WELD 105 | Metalcraft Welding & Forging | 3 |



| | | |
|---|-------------------------------|------|
| WELD 273 | Stainless Steel Weld / Repair | 4 |
| WELD 274 | Aluminum Welding | 4 |
| WELD 275 | Welding Codes/Certification | 4 |
| + | | |
| ELECTIVES | | 9-10 |
| Select additional degree applicable courses numbered 1-299 to achieve 60 units. | | |
| = | | |
| TOTAL | | 60 |

The Associate Degree requirements include completion of the:

1. Required Major and Restricted Elective courses with a minimum grade of "C" or better for each course (Required Major and Restricted Elective courses may be substituted with the approval of the Division Chair),
2. General Education requirements, and
3. A minimum of 60 units of degree-applicable courses numbered 001-299. At least 12 units must be taken in residence at College of the Sequoias, with a "C" (2.0) average (see Associate Degree Requirements (<https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Ffuturecatalog.cos.edu%2Fassociate-degree-requirements%2F&data=05%7C02%7Cdanielal%40cos.edu%7Ccdf509fcb0541525de708dd2e8e1629%7Ca1ac1160f96f4e1abad8aa9c4be537ae%7C0%7C0%7C638717909975534704%7CUnknown%7CTWFpGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMilslkFOljoiiTWFpbiIldUljoyfQ%3D%3D%7C0%7C%7C%7C&sdata=vY%2FtRcsJbw0k6zi04fyP1rWRAAgk6JFJOIWK6ohdDVI%3D&reserved=0>) for additional details).

Units for Degree Major or Area of Emphasis (Min):

25

Units for Degree Major or Area of Emphasis (Max):

26

Total Units for Degree (Min):

60

Total Units for Degree (Max):

60

State Requirements:

TOP Code:

095650 - * Welding Technology

Projected Annual Completers:

8

Net Annual Labor Demand (CTE only):

1264

Faculty Workload:

2

New Faculty Positions:

0

New Faculty Justification:

Because of the high demand and high wages paid to qualified and certified welders, the availability of qualified adjuncts is extremely limited. If the program is to grow as recommended by the advisory committee, the need is critical for a full-time welding instructor.

New Equipment:

0

New Equipment Justification:

Based on Advisory committee and industry input, the introduction of welding quality control to our welding program has been validated. This growth effort will require the development of a Welding Quality Control training lab.

**New/Remodeled Facilities:**

0

New/Remodeled Facilities Justification:

The program will use the current facilities and equipment.

Library Acquisitions:

na

Library Acquisitions Justification:

Library resources are adequate to meet the needs of this program.

Next Curriculum Review Date:

03/2028

Place of Program in Curriculum/Similar Programs:

The welding program is unique here at COS. It offers classes that would be helpful to many other majors such as automotive, construction technology, maintenance technology, HVAC and agriculture.

Similar Programs at other colleges in Service Area:

Welding programs are offered at Reedley College and Fresno City College.

Compliance:**Based on Model Curriculum (if applicable):**

N/A

Licensing or Accreditation Standards:

N/A

Student Selection and Fees:

Students are enrolled in all welding courses per the standard enrollment process and pay the current fees.

Attachments:**LMI and/or Employer Survey**

Welding - AS - LMI - 2018.pdf

Welding LMI, 2020.pdf

Welding LMI, 2022.pdf

095650_Welding Technology_June 2025).pdf

Welding LMI-2025.pdf

Local Advisory Committee Members

Advisory Committee 2020-21 .pdf

Advisory Committee Members 21-22.docx

2025_advisory minutes_members (1).pdf

Local Advisory Committee Meeting Minutes

Advisory meeting Feb20 (1).pdf

Advisory Committee Minutes.docx

2025_advisory minutes (1).pdf

Database**Effective Catalog**

2026-2027

Proposal Type

Non-Substantial

**CIP Code:**

480508 - Welding Technology/Welder.

Banner Program Code:

AS-WELD

GE Patterns:

COS GE
CSU GE
IGETC CSU
IGETC UC GE

Justification/Rationale:

Two year review

Deletion of obsolete course (WELD 161) and addition of new course WELD 200 which replaced it.

Reviewer Comments

Sarah Harris (sarahha) (Mon, 26 Jan 2026 18:52:47 GMT): Updated net annual labor demand and attached LMI

Sarah Harris (sarahha) (Fri, 06 Mar 2026 16:57:23 GMT): Updated effective term as fall 26 deadline has passed.

Sarah Harris (sarahha) (Fri, 10 Apr 2026 20:10:02 GMT): Note - moved from slate to action per faculty request, so that item can be amended in committee to add WELD 277 to the list of restricted electives.

Key: 152