

Welding Technology

Semester Course Outline • 2023 – 2024

18 Months (4 Semesters) • Revised: 1/20/23

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 71.5

* Optional exit point for Diploma • 9 Months (2 Semesters) • Credits Required: 34.5



First Year – Fall Semester

| Course Number | Course Title | Clock Hours | Credits |
|---------------|---|-------------|---------|
| WLD 105 | Oxyacetylene Safety | 28 | 1 |
| WLD 110 | Proper Use of the Cutting Torch | 14 | .5 |
| WLD 111 | Shop Orientation Maintenance and Safety | 28 | 1 |
| WLD 113 | Shielded Metal Arc Welding I | 42 | 1.5 |
| WLD 114 | Ferrous Metallurgy | 14 | .5 |
| WLD 115 | Shielded Metal Arc Welding II | 105 | 3.75 |
| WLD 120 | Metal Fabrication | 28 | 1 |
| WLD 123 | Blueprint Reading | 28 | 1 |
| WLD 161 | Gas Tungsten Arc Welding | 84 | 3 |
| AED 100 | Automated External Defibrillator | 14 | .5 |
| CSC 102 | Windows Application for Technicians | 45 | 3 |
| Total | | 430 | 16.75 |

First Year – Spring Semester

| Course Number | Course Title | Clock Hours | Credits |
|---|--------------------------|-------------|---------|
| WLD 140 | Flux-Cored Arc Welding | 28 | 1 |
| WLD 141 | Gas Metal Arc Welding A | 42 | 1.5 |
| WLD 143 | Gas Metal Arc Welding B | 84 | 3 |
| WLD 145 | Gas Metal Arch Welding C | 84 | 3 |
| WLD 147 | Gas Metal Arch Welding D | 119 | 4.25 |
| WLD 151 | Shop Math | 56 | 2 |
| • Selected Communications Course (Choose one) CMST 101 – Fundamentals of Speech * (CSS 100 – Career Search Strategies .5 credit) COMM 101 – Communications and Career Strategies ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit) | | 45 | 3 |
| Total | | 458 | 17.75 |

Elective Course: With the instructor's approval, SCT 100 – Solar Car Team may be substituted for up to 6 credits of course work or taken as an additional elective.

* **Exit point for Diploma Option:** An exit point is intended for those students who do not pursue the Associate of Applied Science (A.A.S.) Degree. These students will receive a diploma.

Semester Course Outline • 2023 – 2024**Second Year – Fall Semester**

| Course Number | Course Title | Clock Hours | Credits |
|--|--------------------------------------|-------------|---------|
| WLD 200 | Custom Welding Applications I | 140 | 5 |
| WLD 203 | Advanced Arc Welding Technologies I | 84 | 3 |
| WLD 206 | Advanced Arc Welding Technologies II | 56 | 2 |
| WLD 212 | Welding Capstone Project I | 84 | 3 |
| WLD 214 | Robotic Programming and Welding | 28 | 1 |
| ● Selected Mathematics Course (Choose one) MATH 100 – Applied General Math MATH 101 – Intermediate Algebra MATH 114 – College Algebra * | | 45 | 3 |
| ● Selected Social Science Course (Choose one) ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics I * ECON 202 – Principles of Macroeconomics II * SOC 100 – Introduction to Sociology * | | 45 | 3 |
| Total | | 482 | 20 |

Second Year – Spring Semester

| Course Number | Course Title | Clock Hours | Credits |
|---------------|--|-------------|---------|
| WLD 207 | Advanced Arc Welding Technologies III | 140 | 5.5 |
| WLD 210 | Custom Welding Applications II | 140 | 5 |
| WLD 215 | Welding Capstone Project II | 84 | 3 |
| WLD 217 | Advanced Robotic Programming and Welding | 14 | .5 |
| PSYC 100 | Psychology of Human Relations | 45 | 3 |
| Total | | 437 | 17 |

Elective Course: With the instructor's approval, SCT 100 – Solar Car Team may be substituted for up to 6 credits of course work or taken as an additional elective.

- Students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk (*) can be transferred directly to the university system and may be substituted for recommended courses on the outline. Students should speak with an advisor before doing so.

Students who select to take transferable communications course CMST 101 or ENGL 101, must also register for CSS 100 – Career Search Strategies for .5 credit. This curriculum is required for all Lake Area Tech graduates and is included in the COMM 101 course but is separate from the university system.