Welding

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Associate in Applied Science
Professional Technical Program

The Welding Technology program is designed for persons to acquire the technical knowledge and skills required to obtain a career in welding, fabrication, and related occupations. Graduates may qualify for positions in industries such as machinery fabrication, structural fabrication, pipe fabrication, plant maintenance, and trade occupations which require welding skills. Students who complete the first year of the program will gain sufficient training to obtain entry-level employment. The second year of the program will focus on advanced skills in welding applications in specialty areas.

Persons who complete the two-year program of study may earn the Associate in Applied Science degree in Welding Technology with an emphasis in structural welding, industrial production welding or pipe welding. The one-year welding certificate of achievement is available for students who do not wish to complete a two-year degree. Local employers indicate that there are jobs available for students who complete either the certificate or the AAS degree. Interested students must work out their individual programs with a department advisor.

This program has been designed to allow students to enroll at the beginning of each quarter. Students entering the program will progress sequentially through the lab classes; lecture classes are offered during scheduled quarters only.

**Related instruction required for an Associate in Applied Science degree and Certificate of Achievement

| BUS 120 | Human Relations on the Job |
| ENG 112 | Applied Technical Writing |
| FAD 150 | Industrial First Aid |
| MAP 101 | Applied Mathematics (AUT/WLD) |
| SPH 100 | Human Communications |

**First Year
Fall Quarter

| MAP 101 | Applied Mathematics (AUT/WLD) ** | 5 |
| WLD 110 | Welding Theory I | 5 |
| WLD 111 | Welding Process I* | 6 |
| WLD 112 | Thermal Cutting and Welding* | 3 |
| WLD 151 | Technical Drawings Interpretation* | 3 |

| Winter Quarter
FAD 150 | Industrial First Aid** | 2 |
| WLD 120 | Welding Theory II | 5 |
| WLD 121 | Welding Process II | 6 |
| WLD 122 | Gas Metal Arc Welding I | 3 |
| WLD 152 | Welding Layout I | 3 |

| Spring Quarter
WLD 130 | Welding Theory III | 5 |
| WLD 131 | Welding Process III | 6 |
| WLD 132 | Gas Tungsten Arc Welding I (TIG) | 3 |
| WLD 153 | Welding Layout II | 3 |

| Second Year
Fall Quarter
Structural Welding Option
ENG 112 | Applied Technical Writing** | 3 |
| WLD 205 | Weld Test Methods | 4 |
| WLD 212 | Gas Metal Arc Welding II | 3 |
| WLD 241 | Structural Weld Process I | 6 |

Production Welding Option
ENG 112 | Applied Technical Writing** | 3 |
| WLD 205 | Weld Test Methods | 4 |
| WLD 261 | Production Weld Process I | 6 |

Pipe Welding Option
ENG 112 | Applied Technical Writing** | 3 |
| WLD 205 | Weld Test Methods | 4 |
| WLD 281 | Pipe Welding I | 6 |

| Winter Quarter
Structural Welding Option
SPH 100 | Human Communications** | 4 |
| WLD 206 | Welding Codes and Standards | 5 |
| WLD 242 | Structural Welding I | 3 |
| WLD 243 | Structural Weld Process II | 6 |

Production Welding Option
SPH 100 | Human Communications** | 4 |
| WLD 262 | Production Welding I | 3 |
| WLD 263 | Production Weld Process II | 6 |

Pipe Welding Option
SPH 100 | Human Communications** | 4 |
| WLD 206 | Welding Codes and Standards | 5 |
WLD 282  Gas Tungsten Arc Welding II (TIG) .............. 3
WLD 283  Pipe Welding II ........................................ 6

Spring Quarter
Structural Welding Option
BUS 120  Human Relations on the Job** .................. 4
WLD 207  Welding Metallurgy .................................. 4
WLD 244  Submerged Arc Welding .......................... 3
WLD 245  Structural Weld Process III ..................... 6

Production Welding Option
BUS 120  Human Relations on the Job** .................. 4
WLD 207  Welding Metallurgy .................................. 4
WLD 264  Advanced Weld Process ......................... 3
WLD 265  Production Weld Process III ................. 6

Pipe Welding Option
BUS 120  Human Relations on the Job** .................. 4
WLD 207  Welding Metallurgy .................................. 4
WLD 284  Gas Tungsten Arc Welding III (TIG) ........ 3
WLD 285  Pipe Welding III ...................................... 6

Program Elective
Students must meet with their faculty advisor before
enrolling in Work-Based Learning
WLD 190  Skills Improvement ................................. 2-7
WLD 290  Skills Improvement ................................. 2-7
WLD 295  Work-Based Learning ............................... 1-4
WLD 297  Work-Based Learning Seminar .................. 1
*Tech Prep credit available

Note: Skill level improvement classes are not required, but may
be needed to achieve desired skill levels. See the program
advisor.

Certificate of Achievement
The Certificate of Achievement is designed to
provide recognition for the student who does not plan to
complete an Associate in Applied Science degree pro-
gram. This certificate includes related instruction (listed
below) and a minimum of 45 credits in the program.

Welding Technology Certificate of Achievement
BUS 120  Human Relations on the Job** .................. 4
ENG 112  Applied Technical Writing** .................. 3
FAD 150  Industrial First Aid** ......................... 2

MAP 101  Technical Math (AUT/WLD)** ............... 5
SPH 100  Human Communications** ..................... 4
WLD 110  Welding Theory I .................................. 5
WLD 111  Welding Process I* ............................... 6
WLD 112  Thermal Cutting and Welding* ................ 3
WLD 120  Welding Theory II ............................... 5
WLD 121  Welding Process II ............................... 6
WLD 122  Gas Metal Arc Welding I ....................... 3
WLD 132  Gas Tungsten Arc Welding I (TIG) ......... 3
WLD 151  Technical Drawings Interpretation* .......... 3
WLD 152  Welding Layout I .................................. 3
Total Credits .................................................... 55
*Tech Prep credit available

**Related instruction course

Welding - Certificate of Accomplishment
The Certificate of Accomplishment is designed to
provide recognition of completion of certain approved
courses or modules of courses offered through a par-
ticular technical program. This certification is designed
for the occasional and or part-time student who does
not plan to complete an AAS degree or a Certificate of
Achievement.

BBCC upon request by application, may issue a
Certificate of Accomplishment upon successful comple-
tion of the following approved modules with an earned
minimum grade of 2.0 for each course. Individual or
substitute courses may be certified upon approval by the
WLD program advisor.

WLD 110  Welding Theory I ............................... 5
WLD 111  Welding Process I* ............................... 6
WLD 112  Thermal Cutting and Welding* ............ 3
WLD 120  Welding Theory II ............................... 5
WLD 121  Welding Process II ............................... 6
WLD 122  Gas Metal Arc Welding I ....................... 3
WLD 132  Gas Tungsten Arc Welding I (TIG) ......... 3
WLD 151  Technical Drawings Interpretation* .......... 3
WLD 152  Welding Layout I .................................. 3
Total credits .................................................... 37
*Tech Prep credit available