[Welding Technology – Combination Welder](https://bluegrass.kctcs.edu/education-training/program-finder/welding-technology.aspx)

Diploma

Coordinator: Shawn Gannon (shawn.gannon@kctcs.edu) 859-246-6777

Student Name: Student ID:

*Students must meet college readiness benchmarks as identified by the Council on Postsecondary Education or remedy the identified skill deficiencies.*

Semester 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| WLD 110 Cutting Processes ORWLD 100 Oxy-fuel Cutting Systems | 2 |  |  | WLD 110 Coreq: WLD111 WLD 100 Coreq: WLD101 |  |
| WLD 111 Cutting Processes ORWLD 101 Oxy-fuel Cutting Systems Lab | 2 |  |  | WLD 111 Coreq: WLD110 WLD101 Coreq: WLD100 |  |
| WLD 120 Shielded Metal Arc Welding | 2 |  |  | WLD 120 Coreq: WLD121 AND WLD 123 |  |
| WLD 121 Shielded Metal Arc Weld Fillet Lab | 3 |  |  |  |  |
| WLD 123 Shield Metal Groove/Backing Lab | 3 |  |  |  |  |
| MAT 116 Technical Mathematics ORMAT 110 Applied Mathematics ORMAT 146 Contemporary Mathematics ORMAT 150 College Algebra | 3 |  |  |  |  |
| ENG 101 Writing I | 3 |  |  |  |  |
| Total Semester Credit Hours | 18 |  |  |  |  |

Semester 2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| WLD 130 Gas Tungsten Arc Welding | 2 |  |  | WLD 130 Coreq: WLD 131 AND WLD 133 |  |
| WLD 131 Gas Tungsten Arc Weld Fillet Lab | 3 |  |  |  |  |
| WLD 133 Gas Tung. Arc Weld Groove Lab | 3 |  |  |  |  |
| WLD 170 Blueprint Reading for Welding | 2 |  |  | WLD 170 Coreq: WLD171 |  |
| WLD 171 Blueprint Reading for Welding Lab | 3 |  |  |  |  |
| Computer / Digital Literacy | 0 – 3 |  |  |  | See note |
| Total Semester Credit Hours | 13 – 16 |  |  |  |  |

Semester 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Courses | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
| WLD 140 Gas Metal Arc Welding | 2 |  |  | WLD 140 Coreq: WLD 141 AND WLD 143 |  |
| WLD 141 Gas Metal Arc Welding Fillet Lab | 3 |  |  |  |  |
| WLD 143 Gas Metal Arc Welding Groove Lab | 3 |  |  |  |  |
| WLD 220 Welding Certification | 2 |  |  |  |  |
| WLD 221 Welding Certification Lab | 3 |  |  |  |  |
| WLD 298 Welding Practicum ORWLD 299 Cooperative Education Program | 1 – 4 |  |  | Consent of Instructor |  |
| Technical Elective | 3 |  |  |  | See list |
| Total Semester Credit Hours | 17 – 20 |  |  |  |  |
| Total Diploma Credit Hours | 48 – 54 |  |  |  |  |

**Graduation Requirements:**

* 25% or more of Total Diploma Credit Hours must be earned at BCTC.
* Cumulative GPA must be 2.0 or higher.

Advisor Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor Contact \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Additional Information**

Computer / Digital Literacy requirements can be satisfied by completion of one of the following courses: CAD 103, CIT 105, DLC 100, EDU 204, IMD 100, OST 105, VCC 125 or VCC 150, or by competency exam.

**Technical Elective Courses**

|  |  |  |
| --- | --- | --- |
| Course | Cr. Hrs. | Prerequisites |
| WLD 145 Gas Metal Arc Welding Aluminum Lab | 1 | WLD 140 |
| WLD 147 Flux Cored Arc Welding Lab | 1 | WLD 140 |
| WLD 151 Basic Welding A | 2 | WLD 140 |
| WLD 161 Submerged Arc Welding Lab | 1 | WLD 140 |
| WLD 229 Shielded Metal Arc Welding Pipe Lab B | 3 | WLD 225 |
| WLD 239 Orbital Tube Welding | 1 | WLD 130 and WLD 131 |
| WLD 251 Welding Automation Lab | 1 – 6 | Coreq: WLD 140 and WLD 141 |
| WLD 253 Pipe Fitting and Template Development Lab | 1 |  |
| WPP 200 Workplace Principles | 3 |  |
| BEX 100 Basic Electricity for Non-Majors | 3 | Coreq: BEX 101 |
| BEX 101 Basic Electricity Lab for Non-Majors | 2 | Coreq: BEX 100 |
| \*This list is not all inclusive. Other courses may be approved at the discretion of the Welding Program Coordinator. | 1 – 3 |  |

**Embedded Credentials**

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| --- | --- | --- | --- |
| Credential | Title | Requirements | Total Cr. Hours |
| Certificate | ARC Cutter | WLD 110, WLD 111 | 5 |
| Certificate | ARC Welder | WLD 100, WLD 101, WLD 120, WLD 121, WLD 130, WLD 131, WLD 140, WLD 141, WLD 170, WLD 171 | 24 |
| Certificate | AWS National Skills Standards Level I | WLD 100, WLD 101, WLD 120, WLD 121, WLD 123, WLD 130, WLD 131, WLD 133, WLD 140, WLD 141, WLD 143, WLD 170, WLD 171 | 33 |
| Certificate | Gas Metal Arc Welder  | WLD 100, WLD 101, WLD 140, WLD 141, WLD 143, WLD 170, WLD 171 | 17 |
| Certificate | Gas Tungsten Arc Welder | WLD 100, WLD 101, WLD 130, WLD 131, WLD 133, WLD 170, WLD 171 | 17 |
| Certificate | Gas Welder | WLD 100, WLD 101 | 4 |
| Certificate | Production Line Welder | WLD 100, WLD 101, WLD 120, WLD 121, WLD 130, WLD 131, WLD 140, WLD 141 | 19 |
| Certificate | Shielded Metal Arc Welder | WLD 100, WLD 101, WLD 120, WLD 121, WLD 123, WLD 170, WLD 171 | 17 |
| Certificate | Tack Welder | WLD 151, WLD 170, WLD 171 | 7 |
| Certificate | Welder Helper | WLD 120, WLD 121 | 5 |

**Certificate Requirements:**

* 25% or more of Total Certificate Credit Hours must be earned at BCTC.
* Grade of C or higher in each course required for certificate.

*Reviewed by: Shawn Gannon Effective Term: Fall 2021*

 *Review Date: 03-10-2021*