# Welding Technology
## Associate of Applied Science degree

**Program Coordinator:** Shawn Gannon  **E-mail:** shawn.gannon@kctcs.edu  **Phone:** 859-246-6777
**Program Website:** https://bluegrass.kctcs.edu/education-training/program-finder/welding-technology.aspx

**Student Name:**  **Student ID:**

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

| First Semester | Credit Hours | Term | Grade | Prerequisites | Notes |
|---|---|---|---|---|---|
| WLD 100 Oxy-Fuel Systems | 2 | | | Coreq: WLD 101 | |
| WLD 101 Oxy-Fuel Systems Lab | 2 | | | Coreq: WLD 100 | |
| WLD 120 Shielded Metal Arc Welding | 2 | | | Coreq: WLD 121 | Students must be enrolled in WLD 120, WLD 121 and WLD 123 during the same semester. |
| WLD 121 Shielded Metal Arc Welding Fillet Lab | 3 | | | Coreq: WLD 120 | |
| WLD 123 Shielded Metal Arc Welding Groove with Backing Lab | 3 | | | | |
| MAT 116 Technical Mathematics OR MAT 110 Applied Mathematics OR MA 111 Contemporary Mathematics OR MAT 150 College Algebra | 3 | | | | MAT 116 is recommended. |
| **Total Semester Credit Hours** | **15** | | | | |

| Second Semester | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
|---|---|---|---|---|---|
| WLD 130 Gas Tungsten Arc Welding | 2 | | | Coreq: WLD 131 | Students must be enrolled in WLD 130, WLD 131 and WLD 133 during the same semester. |
| WLD 131 Gas Tungsten Arc Welding Fillet Lab | 3 | | | Coreq: WLD 130 | |
| WLD 133 Gas Tungsten Arc Welding Groove Lab | 3 | | | | |
| WLD 170 Blueprint Reading for Welding | 2 | | | Coreq: WLD 171 | |
| WLD 171 Blueprint Reading for Welding Lab | 3 | | | Coreq: WLD 170 | |
| Computer / Digital Literacy | 0 – 3 | | | | Computer literacy course or competency exam |
| **Total Semester Credit Hours** | **13 – 16** | | | | |

| Third Semester | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
|---|---|---|---|---|---|
| WLD 140 Gas Metal Arc Welding | 2 | | | Coreq: WLD 141 | Students must be enrolled in WLD 140, WLD 141 and WLD 143 during the same semester. |
| WLD 141 Gas Metal Arc Welding Fillet Lab | 3 | | | Coreq: WLD 140 | |
| WLD 143 Gas Metal Arc Welding Groove Lab | 3 | | | | |
| WLD 220 Welding Certification | 2 | | | Coreq: WLD 221 | |
| WLD 221 Welding Certification Lab | 3 | | | Coreq: WLD 220 | |
| WLD 298 Welding Practicum OR WLD 299 Cooperative Education Program | 1 – 4 | | | Consent of Instructor | |
| Technical Elective | 3 | | | | |
| **Total Semester Credit Hours** | **17 – 20** | | | | |

| Fourth Semester | Cr. Hrs. | Term | Grade | Prerequisites | Notes |
|---|---|---|---|---|---|
| ENG 101  Writing I | 3 | | | | |
| Heritage or Humanities course | 3 | | | | |
| Natural Sciences course | 3 | | | | |
| PSY 110 General Psychology OR SOC 101 Introduction to Sociology | 3 | | | | |
| COM 181 Basic Public Speaking OR COM 252 Introduction to Interpersonal Communications | 3 | | | | |
| **Total Semester Credit Hours** | **15** | | | | |
| **Total Degree Credit Hours** | **60 – 66** | | | | |

**Graduation Requirements:**  ☐ 25% or more of Total Degree 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 |
| Other courses approved by the Welding Technology Program Coordinator | 1 – 3 | |

## Embedded Credentials

| Credential | Title | Requirements | Total Credit Hours |
|---|---|---|---|
| Diploma | Combination Welder | ENG 101, MAT 110 or MA 111 or MAT 116 or MAT 150, Computer/Digital Literacy, 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, WLD 220, WLD 221, WLD 298, WLD 299, Technical Elective | 42 |
| 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 151 | 2 |

**Diploma Requirements:**
- ☐ **25% or more of Total Diploma Credit Hours must be earned at BCTC**
- ☐ **Cumulative GPA must be 2.0 or higher**

**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**