****

**Welding Technology – Combination Welder**

**Diploma**

**Program Coordinator: Shawn Gannon E-mail:** [**shawn.gannon@kctcs.edu**](mailto:shawn.gannon@kctcs.edu) **Phone: 859-246-6777**

**Program Website:** [**https://bluegrass.kctcs.edu/education-training/program-finder/welding-technology.aspx**](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. |
| ENG 101 Writing I | 3 |  |  |  |  |
| **Total Semester Credit Hours** | **18** |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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** |  |  |  |
| **Total Diploma Credit Hours** | **48 – 54** |  |  |  |

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

**Graduation Requirements:**

**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 |
| 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 120 and WLD 121) or (WLD 130 and WLD 131) or (WLD 140 and 141), WLD 170, and WLD 171 | 7 |
| Certificate | Welder Helper | (WLD 120 and WLD 121) or (WLD 130 and WLD 131) or (WLD 140 and 141), | 5 |

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

**Certificate Requirements:**