# 2019-2020 Pellissippi State Community College
## Welding Technology, A.A.S.

### Required Courses

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Description</th>
<th>Credit Hours</th>
<th>Prerequisite (Corequisite)</th>
<th>Term Offered</th>
<th>Available Online</th>
<th>Grade / Term Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester I (Fall)</strong></td>
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<td></td>
<td>COLL 1000</td>
<td>First Year Seminar</td>
<td>1</td>
<td></td>
<td>Yes</td>
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<tr>
<td></td>
<td>ENGL 1010</td>
<td>English Composition I</td>
<td>3</td>
<td>Satisfactory test scores or completion of corequisite requirements</td>
<td>Yes</td>
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<tr>
<td></td>
<td>MATH 1050</td>
<td>Trigonometric Applications</td>
<td>3</td>
<td>HS algebra I and II and ACT math and reading scores of at least 19 (MATH 0050 if required)</td>
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<tr>
<td></td>
<td>WELD 1380</td>
<td>Welding Safety</td>
<td>3</td>
<td></td>
<td>No</td>
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<td></td>
<td>WELD 1381</td>
<td>Principles of Welding</td>
<td>3</td>
<td></td>
<td>No</td>
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<td></td>
<td>WELD 1383</td>
<td>Welding Symbology &amp; Blueprint Reading</td>
<td>3</td>
<td>(MATH 1050)</td>
<td>No</td>
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<td><strong>Semester II (Spring)</strong></td>
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<tr>
<td></td>
<td>COMM 2025</td>
<td>Fundamentals of Communication or COMM 2045 Public Speaking</td>
<td>3</td>
<td>(ENGL 1010)</td>
<td>Yes</td>
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<td></td>
<td>ENST 1352</td>
<td>Industrial Science</td>
<td>3</td>
<td>MATH 1010 or MATH 1050 or MATH 1130 or MATH 1530 or MATH 1630 or MATH 1710 or MATH 1720 or MATH 1730 or MATH 1830 or MATH 1910</td>
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<td>WELD 1382</td>
<td>Pattern Development</td>
<td>3</td>
<td>(MATH 1050)</td>
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<td>WELD 1384</td>
<td>Fabrication Techniques I</td>
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<td>WELD 1381</td>
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<td>WELD 2370</td>
<td>Shielded Metal Arc Welding (SMAW)</td>
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<td>WELD 1381</td>
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<td><strong>Semester III (Fall)</strong></td>
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<td>WELD 2371</td>
<td>Gas Metal Arc Welding (GMAW &amp; FCAW)</td>
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<td>WELD 1381</td>
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<td>WELD 2372</td>
<td>Gas Tungsten Arc Welding (GTAW)</td>
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<td>WELD 1381</td>
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<td>WELD 2460</td>
<td>Metallurgy &amp; Materials Testing</td>
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<td>(MATH 1050)</td>
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<td>WELD 2484</td>
<td>Fabrication Techniques II</td>
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<td>WELD 1384</td>
<td>No</td>
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<td><strong>Semester IV (Spring)</strong></td>
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<td></td>
<td>HUM¹ Humanities/Fine Arts Elective</td>
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<td>3</td>
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<td>SBS¹ Social/Behavioral Sciences Elective</td>
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<td>WELD 2120</td>
<td>Pipe Welding</td>
<td>3</td>
<td>WELD 2370 and WELD 2371 and WELD 2372 or consent of program coordinator</td>
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<td>WELD 2360</td>
<td>Non-Destructive Testing, Codes &amp; Inspection</td>
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<td>WELD 2460</td>
<td>No</td>
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<td>WELD 2490</td>
<td>Welding Capstone or WELD 2491 Welding Internship</td>
<td>4</td>
<td>Course must be taken during final semester or with consent of program coordinator</td>
<td>No</td>
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</table>

**Total Credit Hours Needed for Graduation: 60-61**

¹HUM/FA / SBS
See the list of General Education electives below.
2019-2020 General Education Electives by Category

- This is a General Education course transferable within the Tennessee Board of Regents System.
- ★ This course is directly equivalent to a course at the University of Tennessee, Knoxville.

### Communication
- COMM 2025 - Fundamentals of Communication ♦
- COMM 2045 - Public Speaking ♦ ★
- ENGL 1010 - English Composition I ♦ ★
- ENGL 1020 - English Composition II ♦ ★

### Humanities/Fine Arts
- ART 2010 - Art History Survey I ♦ ★
- ART 2020 - Art History Survey II ♦ ★
- ENGL 2035 - Introduction to Fiction ♦ ★
- ENGL 2055 - African-American Literature ♦ ★
- ENGL 2110 - Early American Literature ♦ ★
- ENGL 2120 - Modern American Literature ♦ ★
- ENGL 2150 - Appalachian Literature ♦
- ENGL 2210 - Early British Literature ♦ ★
- ENGL 2220 - Modern British Literature ♦ ★
- ENGL 2310 - Early World Literature ♦ ★
- ENGL 2320 - Modern World Literature ♦ ★
- ENGL 2510 - Introduction to Poetry ♦ ★
- ENGL 2520 - Introduction to Drama ♦ ★
- ENGL 2860 - Introduction to Film ♦ ★
  *(ENGL 2860 will not fulfill a literature elective.)*
- MUS 1030 - Music Appreciation ♦ ★
- MUS 1035 - History of Jazz ♦
- PHIL 1030 - Introduction to Philosophy ♦ ★
- PHIL 1040 - Introduction to Ethics ♦ ★
- PHIL 1300 - Critical Thinking ♦ ★
- PHIL 1500 - Philosophy & Film ♦
- PHIL 2200 - Introduction to World Religions ♦ ★
- PHO 1200 - History of Photography ♦
- THEA 1030 - Introduction to Theatre ♦ ★

### Mathematics
- MATH 1010 - Math for General Studies ♦ ★
- MATH 1050 - Trigonometric Applications ♦
- MATH 1130 - College Algebra ♦ ★
- MATH 1530 - Introductory Statistics ♦ ★
- MATH 1630 - Finite Mathematics ♦ ★
- MATH 1710 - Precalculus Algebra ♦ ★
- MATH 1720 - Precalculus Trigonometry ♦ ★
- MATH 1730 - Precalculus ♦ ★
- MATH 1830 - Applied Calculus ♦ ★
- MATH 1910 - Calculus I ♦ ★

### Natural Sciences
- BIOL 1110 - General Biology I ♦ ★
- BIOL 1120 - General Biology II ♦ ★
- BIOL 2010 - Human Anatomy & Physiology I ♦ ★
- BIOL 2020 - Human Anatomy & Physiology II ♦ ★
- BIOL 2310 - General Botany I ♦ ★
- BIOL 2320 - General Botany II ♦ ★
- CHEM 1010 - Introductory Chemistry I ♦ ★
- CHEM 1020 - Introductory Chemistry II ♦ ★
- CHEM 1050 - Concepts of Chemistry ♦
- CHEM 1110 - General Chemistry I ♦ ★
- CHEM 1120 - General Chemistry II ♦ ★
- GEOL 1040 - Physical Geology ♦ ★
- GEOL 1050 - Historical Geology ♦ ★
- GEOL 1300 - Environmental Science W/Lab ♦ ★
- PHYS 1070 - Concepts of Physics ♦
- PHYS 2010 - Non-Calculus Physics I ♦ ★
- PHYS 2020 - Non-Calculus Physics II ♦ ★
- PHYS 2110 - Calculus Based Physics I ♦ ★
- PHYS 2120 - Calculus Based Physics II ♦ ★

### Social/Behavioral Sciences
- AAST 2200 - African-American Studies ♦ ★
- ANTH 1230 - Introduction to Cultural Anthropology ♦ ★
- ECON 2100 - Principles of Macroeconomics ♦ ★
- ECON 2200 - Principles of Microeconomics ♦ ★
- GEOG 1000 - Introduction to Geography ♦
- PHED 1100 - Concepts of Wellness ♦
- POLS 1010 - Introduction to Political Science ♦ ★
- POLS 1030 - American Government ♦ ★
- PSYC 1030 - Introduction to Psychology ♦ ★
- PSYC 2100 - Psychology of Human Development ♦ ★
- PSYC 2120 - Social Psychology ♦
- PSYC 2130 - Lifespan Psychology ♦ ★
- PSYC 2210 - Biological Basis of Behavior ♦
- SOCI 1010 - Introduction to Sociology ♦ ★
- SOCI 1040 - Social Problems ♦ ★
- WGST 2050-Introduction to Women/Gender Studies ♦ ★

Revised: March 28, 2019 for AAS Checklists