



# Program Map Welding Technology - Welding Inspection

**Degree:** Associate of Applied Science (AAS)  
**Certificate:** Level 1 (C1)



## DESIGN, MANUFACTURING, CONSTRUCTION & APPLIED TECHNOLOGY

**Program Description:** This is an example course sequence for students interested in Welding Technology - Welding Inspection. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate of Applied Science (AAS) degree in Welding Technology - Welding Inspection Specialization.

This option prepares the student for the challenging and diverse field of welding inspection. Graduates who are qualified can take the AWS QC-1 National Certified Welding Inspector examination administered by the American Welding Society.

**Contact:**  
Troy DeFrates  
tdefrate@austincc.edu  
512-223-6634

**Department Website:**  
sites.austincc.edu/welding/

*Use this Program Map to choose courses with your college advisor and track your progress towards milestones and completion of program.*

Pre-Degree Requirements		
Program Specific	Reading and Writing Placement <i>Placements based on TSI. Not required for certificates.</i>	Mathematics Placement <i>Placements based on TSI Not required for certificates.</i>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Basic Developmental Courses</li> <li><input type="checkbox"/> ESOL Courses</li> <li><input type="checkbox"/> INRW Courses</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> MATD-0332 - Basic Math Skills</li> <li><input type="checkbox"/> MATD-042x/032x – ALEKS Sequence</li> <li><input type="checkbox"/> MATD-0385/0485 – Developing Mathematical Thinking <i>Not prerequisite for MATH-1314/1324</i></li> <li><input type="checkbox"/> MATD-0370 – Elementary Algebra</li> <li><input type="checkbox"/> MATD-0390 – Intermediate Algebra</li> <li><input type="checkbox"/> <i>Take MATD-0370 and 0390 to prepare for MATH-1314/1324</i></li> </ul>

D=Degree  
C1=Level 1 Certificate  
C2=Level 2 Certificate

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

*Plans can be modified to fit the needs of part-time students by adding more semesters*

C1	D	Semester 1	CR	Advising Notes
	●	POFT 1171 - College to Career Success	1	All first-time Austin Community College (ACC) students with fewer than 12 SCH of successful college credit must take a Student Success course in their first semester at ACC.
●	●	WLDG 1428 - Introduction to Shielded Metal Arc Welding (SMAW)	4	
●	●	WLDG 1430 - Introduction to Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW)	4	
●	●	WLDG 1413 - Introduction to Blueprint Reading for Welders	4	
	●	MATH 1332 - College Mathematics	3	OR select from the Mathematics section of the Core Curriculum Course List. If you plan to attend a 4-year college, you should take MATH 1314.
			<b>16</b>	<b>Program Semester Hours / Meet with your advisor</b>
		Semester 2		
	●	WLDG 1337 - Introduction to Welding Metallurgy	3	
●	●	WLDG 1457 - Intermediate Shielded Metal Arc Welding (SMAW)	4	Prerequisite: WLDG 1428.
●	●	WLDG 1434 - Introduction to Gas Tungsten Arc (GTAW) Welding	4	

	•	ENGL 2311 - Technical and Business Writing	3	OR select from the appropriate section of the Core Curriculum Course List. If you plan to attend a 4-year college, you should take ENGL 1301.
			<b>14</b>	<b>Program Semester Hours / Meet with your advisor</b>
		<b>Semester 3</b>		
	•	WLDG 2179 - Welder Qualification <b>OR</b>	1	Prerequisite: WLDG 1457. It is also recommended that students complete WLDG 1435 and WLDG 2453 before or at the same time as WLDG 2179.
	•	Welding Restricted Elective	4	Select any WLDG rubric course not already required.
•	•	WLDG 2471 - Structural Connections	4	Student must take WLDG 1413 and WLDG 1457 before or at the same time as WLDG 2471. <b>ACHIEVEMENT:</b> Completion of Structural Welding Level 1 Certificate
•	•	NDTE 1405 - Introduction to Ultrasonics	4	Co-requisite: WLDG 1427.
•	•	WLDG 1427 - Welding Codes and Standards	4	Co-requisite: NDTE 1405.
	•	SPCH 1321 - Business and Professional Communication	3	OR select SPCH 1311, SPCH 1315, or SPCH 1318.
			<b>16-19</b>	<b>Program Semester Hours / Meet with your advisor</b>
		<b>Semester 4</b>		
•	•	NDTE 2401 - Advanced Ultrasonics	4	Prerequisite: NDTE 1405. Co-requisite: NDTE 2411.
•	•	NDTE 2411 - Preparation for Certified Welding Inspector Exam	4	Capstone course. Prerequisite: WLDG 1427. Co-requisite: NDTE 2401. <b>ACHIEVEMENT:</b> Completion of Inspection Level 1 Certificate
	•	PHIL 1301 - Introduction to Philosophy	3	OR select from the appropriate section of the Core Curriculum Course List.
	•	HIST 1301 - United States History I	3	OR select from the appropriate section of the Core Curriculum Course List. <b>ACHIEVEMENT:</b> Completion of Welding Inspection Associate of Applied Science degree
			<b>14</b>	<b>Program Semester Hours</b>
<b>Total Program Hours: 60-63</b>				

Please always check online at [austincc.edu/catalog](http://austincc.edu/catalog) or meet with your academic or program advisor to ensure that you are viewing the latest and most accurate information.

## Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.

[www.austincc.edu/career](http://www.austincc.edu/career)

[www.austincc.edu/transfer](http://www.austincc.edu/transfer)

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

## Program Map

# Welding Technology - Welding Inspection

**Degree:** Associate of Applied Science (AAS)

**Certificate:** Level 1 (C1)

Career & Transfer Resources Updated 8/18/17

## Career Information

### Common Job Titles

Inspectors, Testers, Sorters, Samplers, and Weighers, Welders, Cutters, and Welder Fitters, Aluminum Welder, Fabrication Welder, Fabricator, Fitter/Welder, Maintenance Welder, Mig Welder, Sub Arc Operator, Welder, Welder-Fitter, Welder/Fabricator

### Regional Labor Market Information

Welders, Cutters, and Welder Fitters: New workers generally start around \$27,419. Normal pay for Welders, Cutters, and Welder Fitters is \$37,113 per year, while highly experienced workers can earn as much as \$62,128. Over the last year, 33 companies have posted 230 jobs for Welders, Cutters, and Welder Fitters in this region. There are currently 1,970 Welders, Cutters, and Welder Fitters that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/welder-cutter-and-welder-fitter>

Inspectors, Testers, Sorters, Samplers, and Weighers: New workers generally start around \$23,431. Normal pay for Inspectors, Testers, Sorters, Samplers, and Weighers is \$36,225 per year, while highly experienced workers can earn as much as \$58,056. Over the last year, 84 companies have posted 473 jobs for Inspectors, Testers, Sorters, Samplers, and Weighers in this region. There are currently 3,769 Inspectors, Testers, Sorters, Samplers, and Weighers that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/inspector-tester-sorter-sampler-or-weigher>

**Career and labor market research tools** (see Quick Reference Guide at <http://www.austincc.edu/career>):

EMSI: <https://austincc.emsicc.com/>, Bureau of Labor Statistics: <http://www.bls.gov/ooh/>, O\*NET: <https://www.onetonline.org/>

**Career Resources:** ACC's career services website provides information on career exploration and employment at <http://www.austincc.edu/career>. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

## Transfer Information

The Associate of Applied Science in Welding Technology- Welding Inspection prepares students to directly enter the workforce in the field of welding inspection. A Bachelor of Applied Arts and Sciences (BAAS) is a degree option for students in AAS programs who want to transfer and complete a 4-year degree.

**Transfer Guides:** *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of what courses will count toward a bachelor's degree are made by the receiving transfer institution.*

**The University of Texas at Tyler:** <http://www.uttyler.edu/academics/undergraduate-majors/industrial-technology-degree.php>

**Tarleton State University:** <http://www.tarleton.edu/degrees/bachelors/baas-manufacturing-industrial-management/index.html>

**Texas State University:** <http://www.owls.txstate.edu/undergraduate-degrees/applied-arts-sciences.html>

**Concordia University Texas:** <http://www.concordia.edu/academics/college-of-business-and-communication/baas-in-business.html>

**Texas A&M University Central Texas:** <https://www.tamuct.edu/degrees/undergraduate/business-management.html>

**Texas Tech University:** [https://www.depts.ttu.edu/universitystudies/prospective\\_students/baas.php](https://www.depts.ttu.edu/universitystudies/prospective_students/baas.php)

**Additional Transfer Resources:** ACC's transfer website provides information on additional colleges & universities:

<http://www.austincc.edu/transferguides>. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.