

**Water and Wastewater Management and Technology Short-Term Certificate** 150506 W&M

Available: Shoals Campus  
 Advisors: S. McGouyrk (5246) [stevem@nwsc.edu](mailto:stevem@nwsc.edu)  
 M. Murphy (6246) [docm@nwsc.edu](mailto:docm@nwsc.edu)

This short-term certificate is designed to prepare students for employment in positions related to water and wastewater. Also, see the A.S. Degree program.

**Entering students are required to complete ORI 101. Transfer students are exempt from this requirement.**

	Semester		Hours
	Theory	Lab	
WMT 100 Water Supply and Wastewater Control	3	0	3
WMT 101 Introduction to Water Treatment Processes	3	0	3
WMT 102 Introduction to Wastewater Treatment Processes	3	0	3
WMT 120 Sanitary Chemistry and Biology	3	0	3
WMT 213 Water and Wastewater Instrumentation and Controls	3	0	3
WMT 214 Basic Hydraulics for Water and Wastewater Technology	3	0	3
WMT 290 Industrial Internship I or WMT 291 Municipal Internship I or CIS Elective	0	15	3
<b>Total Semester Credit Hours</b>			<b>21</b>

**Welding AOT Degree**

Available: Shoals Campus  
 Advisors: W. Garner (5254) [wgarner@nwsc.edu](mailto:wgarner@nwsc.edu)  
 J. Hackworth (5335) [joehackworth@nwsc.edu](mailto:joehackworth@nwsc.edu)  
 L. Liles (8072) [lliles@nwsc.edu](mailto:lliles@nwsc.edu)

Students desiring to receive the AOT Award must complete all major certificate courses, one minor certificate course of study, and the required credit hours of general education courses in Areas I, II, III, and IV. Upon completion of all the courses listed, students are eligible to receive the Associate in Occupational Technology Degree. Students desiring to take general education courses for transfer to another institution should consult an advisor for proper general education course selection.

**Core Degree Requirements for the Associate in Occupational Technology Degree**

**Entering students are required to complete ORT 100. Transfer students are exempt from this requirement.**

	Semester Hours
Area I: Written Composition ..... English Composition I and/or Technical Writing	3
Area II: Humanities and Fine Arts	3
Area III: Natural Science and Mathematics ..... A minimum of 3 hours in degree creditable mathematics is required. The additional 6 hours of degree creditable coursework may be taken from disciplines of math, biology, chemistry, physical science, physics, environmental technology and computer science.	9
Area IV: History, Social and Behavioral Sciences ..... Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.	3

**Minimum General Requirements ..... 18**

**Major Requirements ..... Semester Hours**

WDT 108 SMAW Fillet/OFC	3
WDT 109 SMAW Fillet/CAC	3
WDT 110 Industrial Blueprint Reading	3
WDT 115 GTAW Carbon Pipe Theory	3
WDT 119 Gas Metal Arc/Flux Cored Arc Welding Theory	3
WDT 120 Shielded Metal Arc Welding Groove Theory	3
WDT 122 SMAW Fillet/OFC Lab	3
WDT 123 SMAW Fillet/PAC/CAC Lab	3
WDT 124 Gas Metal Arc/Flux Cored Arc Welding Lab	3
WDT 125 Shielded Metal Arc Welding Groove Lab	3
WDT 155 GTAW Carbon Pipe Lab	3
WDT 182 Special Topics	3
WDT 184 Special Topics	1
WDT 217 SMAW Carbon Pipe Theory	3
WDT 218 Certification Theory	3
WDT 228 Gas Tungsten Arc Welding Theory	3
WDT 257 SMAW Carbon Pipe Lab	3
WDT 268 Gas Tungsten Arc Lab	3
<b>Total Major Requirements</b>	<b>48-52</b>