

Air Conditioning/Refrigeration Technology AOT Degree

Available: Shoals Campus
 Advisors: B. Hall (5251) bhall@nwsc.edu
 J. Hackworth (5236/5335) joehackworth@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

All entering students are required to complete ORT 100 unless transferred from another university or college.

Semester Hours

Area I:	Written Composition 3 English Composition I and/or Technical Writing
Area II:	Humanities and Fine Arts 3
Area III:	Natural Science and Mathematics 9 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.
Area IV:	History, Social and Behavioral Sciences 3 Courses may be taken from the disciplines of history, economics, geography, political science, psychology, and sociology.

Minimum General Requirements 18

Major Requirements Semester Hours

ACR 111 Refrigeration Principles 3
ACR 112 HVACR Service Procedures 3
ACR 113 Refrigeration Piping Practices 3
ACR 119 Fundamentals of Gas Heating Systems 3
ACR 123 HVACR Electrical Components 3
ACR 126 Commercial Heating Systems 3
ACR 132 Residential Air Conditioning 3
ACR 135 Mechanical/Gas/Safety Codes 3
ACR 148 Heat Pump Systems I 3
ACR 181 Parallel Refrigeration 3
ACR 203 Commercial Refrigeration 3
ACR 205 System Sizing and Air Distribution 3
ACR 209 Commercial Air Conditioning Systems 3
ACR Elective 6
Total Major Requirements 45

Minor Requirements

<i>Electrical Technology</i>	309999 AET
ELT 111 Concepts of Direct Current 5	
ELT 112 Concepts of Alternating Current 5	
ELT Elective 2	
Total Minor Requirements 12	

Minor Requirements

<i>Welding</i>	309999 AWT
WDT 111 Cutting Processes Theory 2	
WDT 151 Cutting Processes Lab 2	
WDT 112 Shielded Metal Arc Fillet Theory 2	
WDT 152 Shielded Metal Arc Fillet Welding 3	
WDT Elective 3	
Total Minor Requirements 12	

General Requirements 18

Total Requirements for AOT Degree 75

*Computer competency skills are embedded within one or more courses required in this curriculum.

Air Conditioning/Refrigeration Technology Career Certificate 150501 ACR

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The health, comfort, and productivity of any nation is dependent upon air conditioning and refrigeration equipment. Air conditioning has become a necessity rather than a luxury in today's homes, offices, public buildings, and industries.

The Air Conditioning/Refrigeration Technology Program covers the practical application of planning, installing, and servicing heating, air conditioning and refrigeration equipment in residential and commercial establishments.

The increased use of air conditioning and refrigeration in homes and work environments provides growing job opportunities in transportation, food preservation, manufacturing, space programs, medical services, and many others.

Transfer Students: Students may receive up to one semester for clock hours and credit units earned at another institution.

All entering students are required to complete ORT 100 unless transferred from another university or college.

	Semester		
	Theory	Lab	Hours
COM 100 Introductory Technical English I	3	0	3
MAH 101 Introductory Mathematics I	2	2	3
ACR 111 Refrigeration Principles	2	3	3
ACR 112 HVACR Service Procedures	2	3	3
ACR 113 Refrigeration Piping Practices	1	5	3
ACR 119 Fundamentals of Gas Heating Systems	1	5	3
ACR 121 Principles of Electricity for HVACR	2	3	3
ACR 122 HVACR Electrical Circuits	2	3	3
ACR 123 HVACR Electrical Components	2	3	3
ACR 126 Commercial Heating Systems	2	3	3
ACR 132 Residential Air Conditioning	2	3	3
ACR 135 Mechanical/Gas/Safety Codes	2	3	3
ACR 148 Heat Pump System I	1	5	3
ACR 181 Parallel Refrigeration	2	3	3
ACR 203 Commercial Refrigeration	1	5	3
ACR 205 System Sizing and Air Distribution	2	3	3
ACR 209 Commercial Air Conditioning	2	3	3
ACR Elective			6

Total Semester Credit Hours 57

**Transfer Credit: Students may receive up to one semester of Advanced Placement for Career Technical coursework completed at another institution.

Art Associate in Arts Degree 240101 ART

Available: Phil Campbell and Shoals Campuses
 Advisors: B. Crowe (6305/5433) bcrowe@nwsc.edu
 J. Frederick (6294/5494) jfrederick@nwsc.edu

This program has been developed as a guideline for those students planning to major or minor in art. Students planning to major or minor in art should consult the university to which they plan to transfer and plan their program of study in consultation with the Art Department.

All entering students are required to complete ORI 101 unless transferred from another university or college.

	Semester Hours
Area I: Written Composition 6 **ENG 101 and 102	6
Area II: Humanities and Fine Arts 12 *Literature: ENG 271 and 272, ENG 251 and 252 or ENG 261 and 262 ... 6 SPH 107 3 Elective: Choose one course from among ART 100, MUS 101, PHL 206*, THR 120, Foreign Language* 3	12
Area III: Natural Sciences and Mathematics 11 Science: Choose two core courses from among BIO 103, 104; CHM 104, 105, 111, 112; PHS 111, 112; PHY 201, 202; PHY 213, 214 8 Math: Choose one from MTH 110 or MTH 112 (or above) MTH 113, 120, 125, 126, 227, 237, 238 3	11
Area IV: History, Social and Behavioral Science 12 *History: HIS 121 and 122 or HIS 201 and 202 6 Social and Behavioral Sciences: Choose two courses from among ECO 231, 232; GEO 100; POL 211, PSY 200, 210; SOC 200, 210 6	12
Area V: Pre-Professional, Pre-Major, and Elective Courses 19-23 ART 113, 114, 121, 127, 299 13 CIS 146 or demonstrated equivalent computer competency skills. Elective courses appropriate to individual student and transfer institution. PED can be used as a general elective 6-9	19-23
Total Semester Transfer Hours 60-64	60-64

* See note 2 on page 44.

**Keyboarding skills are essential for the successful completion of English 101.