

**Air Conditioning/Refrigeration Technology Career Certificate** 150501 ACR

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

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](mailto:bcrowe@nwsc.edu)  
 J. Frederick (6294/5494) [jfrederick@nwsc.edu](mailto: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
<b>Total Semester Transfer Hours ..... 60-64</b>	60-64

\* See note 2 on page 44.

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