

Industrial Systems Technology **Associate in Applied Science Degree**

Air Conditioning and Refrigeration Option

470303 IAR

Available: Shoals Campus

Advisors: J. Hackworth (5335) joehackworth@nwscc.eduS. Harrison (5250) sam@nwscc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology. A student who graduates in the program should be able to install and maintain all types of HVAC units.

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

General Education Requirements	Semester Hours
ENG 101 English Composition I	3
ENG 130 Technical Report Writing or SPH107 Fundamentals of Public Speaking	3
MTH 103 Introduction to Technical Mathematics	3
MTH 118 Technical Mathematics	3
PHY 115 Technical Physics	4
HIS 201 United States History I	3
ART 100 Art Appreciation or MUS 101 Music Appreciation	3
Total General Education Requirements	22

Major Requirements

INT 120 Concepts of Direct Current	5
INT 122 Concepts of Alternating Current	5
INT 130 Concepts of Digital Electronics	5
ILT 175 Computer Fundamentals	3
INT 158 Industrial Wiring I	3
INT 206 Industrial Motors I	3
INT 184 Introduction to Programmable Logic Controllers ..	3
ACR 111 Principles of Refrigeration	3
ACR 119 Fundamentals of Gas Heating Systems	3
ACR 126 Commercial Heating Systems	3
ACR 127 HVACR Electric Motors	3
ACR 148 Heat Pump Systems I	3
ACR 149 Heat Pump Systems II	3
ACR 203 Commercial Refrigeration	3
ACR 209 Commercial Air Conditioning Systems	3
ACR 210 Troubleshooting Air Conditioning Systems	3
Total Major Requirements	54

Total Semester Credit Hours 76

Industrial Systems Technology:

Career Certificate - page 94

Short-Term Certificate - page 106

Industrial Systems Technology **Associate in Applied Science Degree**

Electrical Option

470303 IMO

Available: Shoals Campus

Advisors: R. Garner (5254) wgarner@nwscc.eduS. Harrison (5250) sam@nwscc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology with a total focus on electrical. A student who graduates in the program should be able to install and maintain all types of plant electrical systems.

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

General Education Requirements	Semester Hours
ENG 101 English Composition I	3
ENG 130 Technical Report Writing or SPH107 Fundamentals of Public Speaking	3
MTH 103 Introduction to Technical Mathematics	3
MTH 118 Technical Mathematics	3
PHY 115 Technical Physics	4
HIS 201 United States History I	3
ART 100 Art Appreciation or MUS 101 Music Appreciation	3
Total General Education Requirements	22

Major Requirements

INT 120 Concepts of Direct Current	5
INT 122 Concepts of Alternating Current	5
INT 123 Concepts of Solid State Electronics	5
INT 130 Concepts of Digital Electronics	5
ILT 175 Computer Fundamentals	3
INT 158 Industrial Wiring I	3
INT 161 Blueprint Reading for Industrial Technicians	3
INT 118 Fundamentals of Industrial Hydraulics and Pneumatics	3
INT 184 Introduction to Programmable Logic Controllers ..	3
INT 206 Industrial Motors I	3
INT 207 Industrial Automatic Controls	3
INT 211 Industrial Motors II	3
INT 113 Industrial Motor Control I	3
INT 213 Industrial Motor Control II	3
INT 284 Advanced Programmable Logic Controllers	3
Total Major Requirements	53

Total Semester Credit Hours 75

Industrial Systems Technology:

Career Certificate - page 94

Short-Term Certificate - page 106

Industrial Systems Technology

Associate in Applied Science Degree

Mechanical Option

470303 IMO

Available: Shoals Campus
 Advisors: R. Garner (5254) wgarner@nwsc.edu
 S. Harrison (5250) sam@nwsc.edu
 T. Maupin (5247) tmaupin@nwsc.edu

This degree is designed to offer students entry level skills in the field of Industrial Systems Technology. A student who graduates in the program should be able to install and maintain all types of plant equipment.

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

General Education Requirements	Semester Hours
ENG 101 English Composition I	3
ENG 130 Technical Report Writing or SPH107 Fundamentals of Public Speaking	3
MTH 103 Introduction to Technical Mathematics	3
MTH 118 Technical Mathematics	3
PHY 115 Technical Physics	4
HIS 201 United States History I	3
ART 100 Art Appreciation or MUS 101 Music Appreciation	3
Total General Education Requirements	22

Major Requirements

INT 102 Industrial Maintenance Cutting/Welding	2
INT 106 Elements of Industrial Mechanics	3
INT 113 Industrial Motor Control I	3
INT 117 Principles of Industrial Mechanics	3
INT 118 Fundamentals of Industrial Hydraulics and Pneumatics	3
INT 120 Concepts of Direct Current	5
INT 121 Industrial Hydraulics Troubleshooting	3
INT 122 Concepts of Alternating Current	5
INT 127 Principles of Industrial Pumps and Piping Systems	3
INT 130 Concepts of Digital Electronics	5
INT 134 Principles of Industrial Maintenance Welding and Metal Cutting Techniques	3
INT 158 Industrial Wiring I	3
INT 161 Blueprint Reading for Industrial Technicians	3
INT 184 Introduction to Programmable Logic Controllers ..	3
INT 206 Industrial Motors I	3
ILT 175 Computer Fundamentals	3
Total Major Requirements	53

Total Semester Credit Hours 75

Industrial Systems Technology:
Career Certificate - page 94
Short-Term Certificate - page 106

Office Administration

Associate in Applied Science Degree

This degree is designed for students who wish to seek employment upon completing the prescribed curriculum. However, many of these courses may be used in transfer to four-year institutions with business programs.

Accounting Option

520401 OAO

Available: Phil Campbell and Shoals Campuses
 Advisors: K. Swinney (6254/5235) kswinney@nwsc.edu
 T. McClinton (5212) mcclinton@nwsc.edu
 D. South (5211) dsouth@nwsc.edu

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

General Education Requirements	Semester Hours
CIS 146 Microcomputer Applications	3
OAD 110 Computer Navigation or CIS 249 Microcomputer Operating systems	3
ECO 231 Principles of Macroeconomics or ECO 232 Principles of Microeconomics	3
***ENG 101 English Composition I	3
ENG 102 English Composition II	3
MTH 116 Mathematical Applications	3
Humanities or Fine Arts Elective	3
Total General Education Requirements	21

Major Requirements

ACT 249 Payroll Accounting	3
BUS 241 Principles of Accounting I or ACT 141 Basic Accounting Principles	3
BUS 242 Principles of Accounting II or ACT 142 Advanced Accounting Principles	3
*OAD 101 Beginning Keyboarding	3
OAD 103 Intermediate Keyboarding	3
OAD 104 Advanced Keyboarding	3
OAD 126 Advanced Word Processing	3
OAD 130 Electronic Calculations	3
OAD 133 Business Communications	3
OAD 134 Career and Professional Development	3
OAD 135 Financial Record Keeping	3
OAD 138 Records/Information Management	3
OAD 217 Office Management	3
OAD 218 Office Procedures	3
Total Major Requirements	42

OAD Electives

Choose four courses from among:
 OAD 125, 131, 200, 231, 233, 242

Total Semester Credit Hours 75

*OAD 100 prerequisite required unless student has had at least one course of high school keyboarding. OAD elective may be substituted for OAD 101 if student has two years of high school keyboarding and a working knowledge of Microsoft Word or permission of instructor.

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

Office Administration:
Career Certificate - page 95