

Advanced Automotive Service Technology Short-Term Certificate

470604 AAS

Available: Shoals Campus
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This short-term certificate prepares students to use electronic service equipment and investigate the areas of specialization. A more intensive career preparation is provided through a combination of classroom instruction and hands-on practice. Curriculum is updated frequently to reflect changing technology and equipment. Knowledge of the basic principles of electronics and electrical systems is included in the program design for automotive service technicians. Successful graduates may become certified by Automotive Service Excellence (ASE) in specific service areas after 2 years of experience and passing a written examination. Completion of an automotive mechanic program in high school, vocational or community college may substitute for 1 year of experience.

Completion of Basic Auto Mechanics is recommended prior to enrollment in Advanced Auto Mechanics. A high school diploma or GED is not required for admission to this program. Students must be at least 16 years of age to enroll.

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

	Semester		
	Theory	Lab	Hours
AUM 210 Electrical and Electronics Systems II	1	4	3
AUM 220 Engine Repair II	1	4	3
AUM 224 Manual Transmission & Transaxle	1	4	3
AUM 230 Auto Transmission & Transaxle	1	4	3
AUM 239 Engine Performance I	1	4	3
AUM 244 Engine Performance II	1	4	3
AUM 246 Automotive Emissions I	1	4	3
AUM 281 Special Topics	1	4	3

Total Semester Credit Hours 24

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

**A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.

Carpentry/Cabinetmaking AOT Degree

Available: Shoals Campus
 Advisors: Charles Hardy (5236) charles.hardy@nwsc.edu
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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 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

CAB 101 Introduction to Cabinetmaking	3
CAB 104 Cabinet Shop Operation	3
CAB 142 Wood Finishing and Spraying	5
CAB 204 Cabinetmaking/Millwork	5
CAB 230 Estimating Costs in Cabinetmaking	2
CAR 112 Floors, Walls, Site Prep	3
CAR 113 Floors, Walls, Site Prep Lab	3
CAR 121 Introduction to Blueprint	3
CAR 131 Roof and Ceiling Systems	3
CAR 133 Roof and Ceiling Systems Lab	3
CAR 211 Construction Specialties or	
CAR 226 Metal Framing	3
CAR 217 Estimating Materials	3
Electives	6
Total Major Requirements	45

Minor Requirements

Business Management and Supervision 309999 CBU
 BUS 241 Principles of Accounting I or
 ACT 141 Basic Accounting Principles 3
 BUS 275 Principles of Management 3
 BUS 285 Principles of Marketing 3
 BUS 279 Small Business Management 3
Total Minor Requirements 12

Minor Requirements

Welding 309999 CCW
 WDT 108 SMAW Fillet/OFC 3
 WDT 109 SMAW Fillet/PAC/CAC 3
 WDT 122 SMAW Fillet/OFC Lab 3
 WDT 123 SMAW Fillet/PAC/CAC Lab 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.

Carpentry/Cabinetmaking 460201 CAR
Career Certificate

Available: Shoals Campus
 Advisors: Charles Hardy (5236) charles.hardy@nwscc.edu
 Joe Hackworth (5335) joehackworth@nwscc.edu

Carpentry/Cabinetmaking, using wood for construction and repair, has been an important craft for centuries. These skills are so important and versatile that they make up the largest group of building trade workers.

Students are exposed to various areas of carpentry/cabinetmaking such as safety, hand tools, blueprint reading, metric measures, stair construction, floor framing, wall and ceiling framing, exterior finish and various types of cabinet building.

Emphasis is placed on learning the true value of good craftsmanship and how to apply this knowledge to benefit the employee and employer. One of the main objectives of the program is to develop the skills, attitudes and ethics needed to become successfully employed.

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

	Semester		
	Theory	Lab	Hours
COM 100 Introductory Technical English I	3	0	3
MAH 101 Introductory Mathematics I	2	2	3
CAB 101 Introduction to Cabinetmaking	1	4	3
CAB 102 Introduction to Lumber	1	6	3
CAB 103 Sizes and Dimensions	1	4	3
CAB 104 Cabinet Shop Operations	3	0	3
CAB 110 Basic Safety and Equipment	1	4	4
CAR 111 Construction Basics or CAR 211 Construction Specialties	3	0	3
CAB 142 Woodfinishing and Spraying	0	4	5
CAB 204 Cabinetmaking/Millwork	1	4	5
CAB 230 Estimating Costs in Cabinetmaking or CAR 217 Estimating	1	2	2
CAR 112 Floors, Walls, Site Prep	3	0	3
CAR 113 Floors, Walls, Site Prep Lab	0	9	3
CAR 121 Introduction to Blueprint	3	0	3
CAR 131 Roof and Ceiling Systems	3	0	3
CAR 133 Roof and Ceiling Systems Lab	0	9	3
CAR 226 Metal Framing	0	6	3
CAR 228 Stairs, Trim, and Moldings or CAR 134 Stairs, Moldings, and Trim	1	4	3

Total Semester Credit Hours 59

*A high school diploma or GED certificate is not required for admission to this program. Students must be at least 16 years old to enroll.

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

**Basic Cabinetmaking
Short-Term Certificate** 480703 CAB

Available: Shoals Campus
 Advisors: Charles Hardy (5236) charles.hardy@nwsc.edu
 J. Hackworth (5335) joehackworth@nwsc.edu

The Cabinetmaking short-term certificate prepares students with the skills and related technical knowledge necessary for employment as a woodworking craftsman. Topics include basic materials and processes, uses and care of tools and equipment, safety, job planning and execution, and wood finishing techniques. Students are taught how to design, construct and install interior casework.

Eye-hand coordination, manual dexterity and physical fitness, and a good sense of balance are important to have. The ability to solve math problems quickly and accurately is also helpful. To advance, cabinetmakers should be able to estimate, with accuracy, long a job should take to complete, and its cost.

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

	Semester		
	Theory	Lab	Hours
CAB 101 Introduction to Cabinetmaking	1	4	3
CAB 102 Introduction to Lumber	1	6	3
CAB 103 Sizes and Dimensions	1	4	3
CAB 104 Cabinet Shop Operations	3	0	3
CAB 110 Basic Safety Tools and Equipment	2	5	4
CAB 142 Woodfinishing and Spraying	2	8	5
CAB 204 Cabinetmaking/Millwork	1	10	5
Total Semester Credit Hours			26

**Basic Carpentry
Short-Term Certificate** 460201 BC

Available: Shoals Campus
 Advisors: Charles Hardy (5236) charles.hardy@nwsc.edu
 J. Hackworth (5335) joehackworth@nwsc.edu

This short-term certificate is designed to prepare students with carpentry skills and related technical knowledge needed for immediate employment in the carpentry profession. Emphasis is placed on safety, employability skills and requirements for successful employment. Students learn to work from blueprints and instructions preparing a layout by measuring, marking, and arranging materials. Hand and power tools are used to cut and shape various materials. The materials are joined with nails, screws, staples, or adhesives.

Carpenters may be involved in various kinds of construction activity, maintenance and installation work, repair work, manufacturing firms, government agencies, wholesale and retail establishments, and schools. Many carpenters are self-employed. It is important to acquire skills in all aspects of carpentry and to have flexibility to perform any kind of carpentry work.

Skilled carpenters need manual dexterity, eye-hand coordination, physical fitness, and a good sense of balance. Carpenters must be able to estimate how long a job should take to complete and its cost.

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

	Semester		
	Theory	Lab	Hours
CAR 112 Floors, Walls, Site Prep	3	0	3
CAR 113 Floors, Walls, Site Prep Lab	0	9	3
CAR 121 Introduction to Blueprinting Reading	3	0	3
CAR 131 Roof and Ceiling Systems	3	0	3
CAR 133 Roof and Ceiling Systems Lab	0	9	3
CAR 134 Stairs, Molding and Trim	2	5	4
CAR 211 Construction Specialities	3	0	3
CAR 217 Estimating Materials	1	5	3
Total Semester Credit Hours			25

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