

Social Sciences (6 hours required)

Select one class

HIST 1153	World Civilization I	3
HIST 1163	World Civilization II	3

Select one class

ANTH 2013	Cultural Anthropology	3
GEOG 1133	World Geography	3
PSYC 1403	Introduction to Psychology	3
SOCI 1303	Introduction to Sociology	3

Directed Electives (18 hours required)

Select 18 credit hours not taken to satisfy General Education Core requirements listed above.

NOTE: Acceptance of electives in transfer toward baccalaureate degree requirements at out-of-state institutions is solely at the discretion of the receiving institution. Students planning to transfer elective credit to four-year institutions outside Arkansas should contact the MSCC Registrar's Office or the Admissions Office of the transfer institution before enrolling in an elective to verify transferability to specific institutions.

ANTH 2013	Cultural Anthropology	3
BIOL 1124	Plant Biology & Lab	4
BIOL 1214/1210	Anatomy and Physiology I & Lab	4
BIOL 1224/1220	Anatomy and Physiology II & Lab	4
BIOL 2504	Microbiology	4
CHEM 1314/1310	Chemistry I & Lab	4
CHEM 1324/1320	Chemistry II & Lab	4
CJUS 1003	Introduction to Criminal Justice	3
ECON 2213	Macroeconomics	3
ECON 2223	Microeconomics	3
ENGL 2183	American Literature I	3
ENGL 2193	American Literature II	3
ENGL 2213	Creative Writing	3
GEOG 1133	World Geography	3
HIST 2153	Arkansas History	3
MATH 2103	Survey of Calculus	3
MATH 2115	Calculus I	5
MATH 2124	Calculus II	4
PHIL 2013	Introduction to Philosophy	3
PSCI 1114	Physical Science/Lab	4
PSCI 1224	Earth Science/Lab	4
PSCI 1254	Physics/Lab	4
PSYC 1403	Introduction to Psychology	3
PSYC 2413	Human Development	3
SOCI 1303	Introduction to Sociology	3
SPAN 1113	Spanish I	3
SPAN 1123	Spanish II	3

MSCC Degree Requirements (9-10 hours)

Communication (3 hours)

ENGL 2303 Oral Communication3

Physical Education (2-3 hours required, select 1 class)

HPED 1113 Health and Safety3

HPED 1702 Concepts of Physical Activity

College Success (4 hours required)

COMP 1113 Computer Fundamentals3

CSUR 1101 College Survival Skills1

Recommended Course Sequence

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study. The recommended outline assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College’s academic requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: Students seeking an Associate of Arts who are conditionally admitted must successfully complete, with a cumulative 2.0 GPA, the following twelve (12) hours of core academic courses within the first thirty (30) hours of college-level enrollment (students who fail to do so will not be permitted to enroll in additional courses until these requirements are met):

ENGL 1113 English Composition I POLS 1143 American Government or
MATH 1113 College Algebra/higher math HIST 2123 U.S. History Before 1877 or
ENGL 1123 English Composition II HIST 2133 U.S. History After 1877

1st Year, 1st Semester

COMP 1113 Computer Fundamentals 3
CSUR 1101 College Survival Skills 1
ENGL 1113 English Composition I 3
MATH 1113 College Algebra 3
Physical Education Elective 2/3 **Total 12/13**

1st Year, 2nd Semester

American Government or U.S. History Elective 3
ENGL 1123 English Composition II 3
Fine Arts/Humanities Electives 6
Science Elective..... 4 **Total 16**

2nd Year, 1st Semester

Directed Electives 6
ENGL 2303 Oral Communication 3
Science Elective..... 4
Social Science Elective..... 3 **Total 16**

2nd Year, 2nd Semester

Directed Electives 12
Fine Arts/Humanities Elective 3
Social Science Elective..... 3 **Total 18**

Associate of Arts in Teaching

The Associate of Arts in Teaching is designed to facilitate transfer into baccalaureate education programs (grades P-4 and grades 4-8).

The programs below outline the minimum AAT requirements for graduation from MSCC. The AAT also transfers to other public four-year institutions in Arkansas; however, curriculum requirements may vary by university. Students planning to transfer elsewhere are encouraged to consult the MSCC Registrar or the catalog of their transfer institution in advance regarding degree requirements for transfer to other colleges and universities.

Program Goals

In addition to the General Education Learning Outcomes listed on pages 89-90, Associate of Arts in Teaching students are expected to satisfy the following program goals:

- Acquire a fundamental knowledge of scientific principles and modes of inquiry
- Acquire and appropriately apply a fundamental understanding of child development, educational theory and practice, and learning strategies
- Successfully pass the Praxis I examination which is required for graduation and for initial teaching certification in the state of Arkansas

Note: Graduates must have a final grade point average of 2.65 for their AAT degree to be fully transferable.

Middle Level (Grades 4-8) Language Arts/Social Studies Option – 65 Credit Hours

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. COMP 1113 should be taken during the first semester of enrollment.

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study.

General Education Minimum Core (35 hours)

English (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
ENGL 2303	Oral Communication	3

Mathematics (3 hours)

MATH 1113	College Algebra	3
-----------	-----------------	---

Science (8 hours required)

BIOL 1114	General Biology and Lab	4
PSCI 1214	Physical Science and Lab	4

Fine Arts (3 hours) Choose one

ARTS 1103	Art Appreciation	3
ARTS 1123	Introduction to Theatre	3
MUSC 1103	Music Appreciation	3

Humanities (3 hours)

ENGL 2153	World Literature I	3
-----------	--------------------	---

Social Sciences (9 hours)

POLS 1143	American Government	3
-----------	---------------------	---

Choose one

HIST 1153	World Civilization I	3
-----------	----------------------	---

or

HIST 1163	World Civilization II	3
-----------	-----------------------	---

Choose one

HIST 2123	U. S. History Before 1877	3
-----------	---------------------------	---

or

HIST 2133	U. S. History After 1877	3
-----------	--------------------------	---

MSCC Requirement

CSUR 1101	College Survival Skills	1
-----------	-------------------------	---

Education Core Requirements (18 hours)**Education Courses (6 hours)**

EDUC 2023	Introduction to Education	3
-----------	---------------------------	---

EDUC 2213	Introduction to Educational Technology	3
-----------	----------------------------------------	---

Mathematics (6 hours)

MATH 2113	Math for Teachers I	3
-----------	---------------------	---

MATH 2123	Math for Teachers II	3
-----------	----------------------	---

Required Electives (6 hours)

PSYC 1403	Intro to Psychology	3
-----------	---------------------	---

HIST 2153	Arkansas History	3
-----------	------------------	---

Language Arts/Social Studies Option Requirements (9 hours)

ENGL 2163	World Literature II	3
-----------	---------------------	---

ENGL 2183	American Literature I	3
-----------	-----------------------	---

or

ENGL 2193	American Literature II	3
-----------	------------------------	---

GEOG 1133	World Geography	3
-----------	-----------------	---

Additional requirements for acceptance into the ASU baccalaureate program include satisfactory completion of the PRAXIS I exam (Pre-Professional Skills Test), completion of the Career Awareness Inventory (available in the LSC), a minimum GPA of 2.50 for courses listed in the AAT curriculum, and completion of at least 36 credits hours by the time of application. For more information about admission, see <http://www2.astate.edu/education/>.

Recommended Course Sequence for Mid-Level Language Arts/Social Studies Specialists

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study. The recommended outline assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's academic requirements within the specified time frame.

Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: Students seeking an A.A. in Teaching who are conditionally admitted must successfully complete, with a cumulative 2.0 GPA, the following twelve (12) hours of core academic courses within the first thirty (30) hours of college-level enrollment:

ENGL 1113 English Composition I	POLS 1143 American Government or
MATH 1113 College Algebra	HIST 2123 U.S. History Bef. 1877 or
ENGL 1123 English Composition II	HIST 2133 U. S. History After 1877

Students who fail to do so will not be permitted to enroll in additional courses until these requirements are met.

1st Year, 1st Semester

CSUR 1101 College Survival Skills	1	
ENGL 1113 English Composition I	3	
HIST 1153 World Civilization I		
<i>or</i>		
HIST 1163 World Civilization II	3	
MATH 1113 College Algebra	3	
POLS 1143 American Government.....	3	
PSYC 1403 Intro to Psychology	3	Total 13

1st Year, 2nd Semester

BIOL 1114 General Biology	4	
ENGL 1123 English Composition II	3	
ENGL 2303 Oral Communication	3	
Fine Arts elective	3	
HIST 2123 U. S. History Before 1877		
<i>or</i>		
HIST 2133 U.S. History After 1877	3	Total 16

2nd Year, 1st Semester

EDUC 2213 Introduction to Educational Technology.....	3	
ENGL 2153 World Literature I	3	
ENGL 2183 American Literature I	3	
<i>or</i>		
ENGL 2193 American Literature II	3	
HIST 2153 Arkansas History.....	3	
MATH 2113 Math for Teachers I.....	3	Total 15

2nd Year, 2nd Semester

EDUC 2023	..... Introduction to Education	3	
ENGL 2163	..... World Literature II	3	
GEOG 1133	..... World Geography.....	3	
MATH 2123	..... Math for Teachers II.....	3	
PSCI 1214	..... Physical Science.....	4	Total 16

Middle Level (Grades 4-8) Math/Science Option 63-67 Credit Hours

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. COMP 1113 should be taken during the first semester of enrollment.

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study.

Middle-Level Math/Science Option General Education Minimum Core (35 hours)

English (9 hours required)

ENGL 1113	..... English Composition I	3
ENGL 1123	..... English Composition II.....	3
ENGL 2303	..... Oral Communication	3

Mathematics (3 hours)

MATH 1113 College Algebra	3
-----------	-----------------------------	---

Science (8 hours required)

BIOL 1114	..... General Biology and Lab	4
PSCI 1214	..... Physical Science and Lab.....	4

Fine Arts (3 hours) Choose one

ARTS 1103	..... Art Appreciation	3
ARTS 1123	..... Introduction to Theatre.....	3
MUSC 1103	..... Music Appreciation	3

Humanities (6 hours)

ENGL 2153	..... World Literature I	3
ENGL 2163	..... World Literature II	3

Social Sciences (9 hours)

POLS 1143 American Government.....	3
-----------	--------------------------------	---

Choose one

HIST 1153 World Civilization I	3
-----------	----------------------------------	---

or

HIST 1163 World Civilization II.....	3
-----------	----------------------------------	---

Choose one

HIST 2123 U. S. History Before 1877	3
-----------	---------------------------------------	---

or

HIST 2133 U. S. History After 1877	3
-----------	--------------------------------------	---

MSCC Requirement

CSUR 1101 College Survival Skills 1

Education Core Requirements (18 hours)

Education Courses (6 hours)

EDUC 2023 Introduction to Education 3

EDUC 2213 Introduction to Educational Technology..... 3

Mathematics (6 hours)

MATH 2113 Math for Teachers I..... 3

MATH 2123 Math for Teachers II..... 3

Required Electives (9 hours)

GEOG 1133 World Geography..... 3

HIST 2153 Arkansas History..... 3

PSYC 1403 Intro to Psychology 3

Additional requirements for acceptance into the ASU baccalaureate program include satisfactory completion of the PRAXIS I exam (Pre-Professional Skills Test), completion of the Career Awareness Inventory (available in the LSC), a minimum GPA of 2.50 for courses listed in the AAT curriculum, and completion of at least 36 credits hours by the time of application. For more information about admission, see <http://teachered.astate.edu>.

Recommended Course Sequence for Math/Science Option

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study. The recommended outline assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's academic requirements within the specified time frame.

Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: Students seeking an A.A. in Teaching who are conditionally admitted must successfully complete, with a cumulative 2.0 GPA, the following twelve (12) hours of core academic courses within the first thirty (30) hours of college-level enrollment:

ENGL 1113 English Composition I POLS 1143 American Government or

MATH 1113 College Algebra HIST 2123 U.S. History Bef. 1877 or

ENGL 1123 English Composition II HIST 2133 U. S. History After 1877

Students who fail to do so will not be permitted to enroll in additional courses until these requirements are met.

1st Year, 1st Semester

CSUR 1101 College Survival Skills 1

ENGL 1113 English Composition I 3

HIST 1153 World Civilization I 3

or

HIST 1163 World Civilization II 3

MATH 1113	College Algebra	3	
POLS 1143	American Government.....	3	
PSYC 1403	Intro to Psychology	3	Total 16

1st Year, 2nd Semester

BIOL 1114	General Biology	4	
ENGL 1123	English Composition II.....	3	
ENGL 2302	Oral Communication.....	3	
Fine Arts course.....		3	
HIST 2123	U. S. History Before 1877		
<i>or</i>			
HIST 2133	U.S. History After 1877	3	Total 16

2nd Year, 1st Semester

EDUC 2213	Introduction to Educational Technology.....	3	
ENGL 2153	World Literature I	3	
MATH 2113	Math for Teachers I.....	3	
MATH 2115	Calculus I.....	5	
PSCI 1214	Physical Science & Lab	4	Total 18

2nd Year, 2nd Semester

EDUC 2023	Introduction to Education.....	3	
ENGL 2163	World Literature II	3	
GEOG 1133	World Geography.....	3	
HIST 2153	Arkansas History.....	3	
MATH 2123	Math for Teachers II.....	3	Total 15

AAT P-4 Option (65 hours)

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. COMP 1113 should be taken during the first semester of enrollment.

State Minimum Core (35 hours)

English (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
ENGL 2303	Oral Communication	3

Mathematics (3 hours)

MATH 1113	College Algebra	3
-----------------	-----------------------	---

Science (8 hours required)

BIOL 1114	General Biology & Lab.....	4
PSCI 1214	Physical Science & Lab	4

Fine Arts (3 hours) Choose one

ARTS 1103	Art Appreciation	3
ARTS 1123	Introduction to Theatre.....	3
MUSC 1103	Music Appreciation	3

Humanities (3 hours)

ENGL 2153	World Literature I	3
<i>or</i>		
ENGL 2163	World Literature II	3

Social Sciences (9 hours)

POLS 1143	American Government	3
-----------------	---------------------------	---

Choose one

HIST 1153	World Civilization I	3
<i>or</i>		
HIST 1163	World Civilization II	3

Choose one

HIST 2123	U. S. History Before 1877	3
<i>or</i>		
HIST 2133	U. S. History After 1877	3

MSCC Requirement

CSUR 1101	College Survival Skills	1
-----------------	-------------------------------	---

Education Core Requirements (30 hours)**Education Courses (12 hours)**

EDUC 2023	Introduction to Education	3
EDUC 2213	Introduction to Ed Technology	3
EDUC 2013	Survey of Early Childhood	3
EDUC 2033	Child Growth and Development	3

Mathematics (6 hours)

MATH 2113	Math for Teachers I	3
MATH 2123	Math for Teachers II	3

Required Electives (11 hours)

GEOG 1133	Geography	3
HIST 2153	Arkansas History	3
HPED 1702	Concepts of Physical Activity	2
PSYC 1403	Intro to Psychology	3

Additional requirements for acceptance into the ASU baccalaureate program include satisfactory completion of the PRAXIS I exam (Pre-Professional Skills Test), completion of the Career Awareness Inventory (available in the LSC), a minimum GPA of 2.50 for courses listed in the AAT curriculum, and completion of at least 36 credits hours by the time of application. For more information about admission, see <http://www2.astate.edu/education>.

Recommended Course Sequence

The following outline of requirements should be used as a planning worksheet. Students should check course descriptions and prerequisites in planning their courses of study. The recommended outline assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's academic requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: Students seeking an A.A. in Teaching who are conditionally admitted must successfully complete, with a cumulative 2.0 GPA, the following twelve (12) hours of core academic courses within the first thirty (30) hours of college-level enrollment:

ENGL 1113 English Composition I	POLS 1143 American Government or
MATH 1113 College Algebra	HIST 2123 U.S. History Before 1877 or
ENGL 1123 English Composition II	HIST 2133 U. S. History After 1877

Students who fail to do so will not be permitted to enroll in additional courses until these requirements are met.

Recommended Course Sequence for P-4 Option

1st Year, 1st Semester

CSUR 1101..... College Survival Skills	1	
ENGL 1113..... English Composition I.....	3	
ENGL 2303..... Oral Communications	3	
HIST 1153..... World Civilization I	3	
<i>or</i>		
HIST 1163..... World Civilization II	3	
MATH 1113..... College Algebra	3	
PSYC 1403..... Introduction to Psychology.....	3	Total 16

1st Year, 2nd Semester

BIOL 1114..... General Biology & Lab.....	4	
ENGL 1123..... English Composition II.....	3	
Fine Arts elective	3	
HIST 2123..... U.S. History Before 1877	3	
<i>or</i>		
HIST 2133..... U.S. History After 1877	3	
POLS 1143..... American Government.....	3	Total 16

2nd Year, 1st Semester

EDUC 2023..... Introduction to Education.....	3	
EDUC 2213..... Introduction to Educational Technology.....	3	
ENGL 2153..... World Literature I	3	
<i>or</i>		
ENGL 2163..... World Literature II	3	
MATH 2113..... Math for Teachers I.....	3	
PSCI 1214..... Physical Science & Lab	4	Total 16

2nd Year, 2nd Semester

EDUC 2013..... Survey of Early Childhood Education	3	
EDUC 2033..... Child Growth & Development	3	
GEOG 1133..... World Geography.....	3	
HIST 2153..... Arkansas History.....	3	
HPED 1702..... Concepts of Physical Activity.....	1	
MATH 2123..... Math for Teachers II.....	3	Total 17

Technical/Occupational Programs

Mid-South Community College offers technical/occupational programs which lead to associate of applied science (AAS) degrees, as well as technical/occupational certificates or certificates of proficiency which are shorter in length and focused on specific skills sets.

Most programs incorporate career pathways which allow students to begin a program at the certificate level, earn an award which will support employment, and then continue working toward additional awards which will support career advancement. Students can enter and/or stop out at multiple points.

The **certificate of proficiency program** includes 12-18 credit hours of technical/occupational courses that prepare students for a specified level of competency in a particular field. No general education courses are included although general education skills are incorporated into courses within the program. Most certificate of proficiency programs articulate with technical certificates or associate of applied science degrees at MSCC.

A **technical certificate program** is a planned program of classroom and laboratory work at the collegiate level. It includes the completion of core general education skills and enables students to reach a specified level of competency in an occupational field. The program, which contains 24 to 36 credit hours, may also be part of or apply toward an associate degree program.

An **associate of applied science (AAS) degree program** requires 60-67 credit hours for completion. It is intended for students who plan to enter the workforce immediately after program completion. AAS programs at MSCC include capstone or internship courses, which support the integration and synthesis of knowledge and skills acquired in previous coursework, on-the-job training in internship courses, as well as critical thinking and independent learning. These courses are restricted to students' final semester of enrollment.

Bachelor of applied science degrees are available on the MSCC campus through partnerships with Arkansas State University and the University of Arkansas at Fort Smith. These programs support a seamless transfer option for students completing associate of applied science degrees. Additional information about these transfer opportunities may be obtained from university degree center offices in the MSCC University Center or from the MSCC Registrar's Office.

Other four-year colleges and universities may accept some technical/occupational courses in transfer; however, students to whom transfer is important should get assurances of transferability for specific courses in writing, in advance, from the institutions to which they plan to transfer.

Currency of Technical/Occupational Skills: Technical/Occupational programs at MSCC are periodically revised to reflect employment needs and technological advances. Consequently, students who are unable to complete a technical/occupational program within 150 percent of the stated time period (3 years for Associate of Applied Science degrees) may have to fulfill different program requirements than those listed in their catalog of entry

Advanced Manufacturing Technology

Certificate of Proficiency in Advanced Manufacturing Technology

12 Credit Hours

Designed as a short-term introduction to manufacturing careers and fundamental processes, this program provides students with a basic introduction to the manufacturing industry and to the basic processes of design, production, and equipment operation.

Job Opportunities

Maintenance Apprentice (helper) Machine Operator Trainee
Quality Control Technician Trainee Quality Assurance Technician Trainee

Program Goals

Program graduates will be able to

- Apply the skillful use of common tools and technology relevant to manufacturing
- Demonstrate the professional/ethical behaviors of timeliness and of self-directed task-completion

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

MANF 1023.....	Design for Manufacturing.....	3
MANF 1033.....	Manufacturing Production Processes.....	3
MANF 1043.....	Manufacturing Power & Equipment Systems	3
MANF 1053.....	Manufacturing Materials	3

Certificate of Proficiency in Machine Technology (Machine Attendant)

17 Credit Hours

The Certificate of Proficiency in Machine Attendant provides students with the technical skills needed to perform basic machining set-up, programming, and operation. Students will develop the knowledge and skills for job entry into Computer Numerical Control milling and lathe work.

Job Opportunities

Metal Finisher

Program Goals:

- The program trains individuals in the design, application, and operation skills of computer integrated manufacturing which requires experience in computer numerical controlled (CNC) machining, quality control, and computer utilization

- The program provides students with the foundation education, training and direction to work in entry-level positions in the machining field.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

MACH 1003.....	Introduction to Blueprint Reading	3
MACH 1023.....	Introduction to Metallurgy	3
MACH 1063.....	Inspection & Testing	3
MACH 1083.....	Introduction to Manual Machining.....	3
MACH 1103.....	Introduction to CNC Machines	3
MANF 1012.....	Shop Essentials	2

Certificate of Proficiency in Machine Technology (Machinist I)

18 Credit Hours

This program enables students to further develop machining skills first introduced in the Machine Attendant Certificate of Proficiency.

Job Opportunities

Metal Finisher	Machinist Level I
Machine Attendant	Quality Inspector

Program Goals:

- The program provides students with the foundation education, training, and direction to work in entry-level positions in the machining and CNC machining fields.
- The program prepares students to set up and operate CNC lathes and mills from specified setup information, interpret part drawings, and determine the proper tooling to complete a specified project.
- The program provides students the opportunity to become proficient in both manual and CNC operations.
- The program provides students the ability to complete the National Institute of Metalworking Skills (NIMS) certification for level I machining operations.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

MACH 1123	Statistics for Machining I.....	3
MACH 1143	Intermediate Blueprint Reading	3
MACH 1163	CNC Safety and Proper Functions	3
MACH 1183	Metalworking Theory I	3
MACH 1203	Basic Manual Machine Setup & Operation	3
MACH 1223	Basic CNC Machine Setup & Operation	3

Certificate of Proficiency in Machine Technology (Machinist II)

18 Credit Hours

Job Opportunities

Metal Finisher	Machinist Level II
Machine Attendant	Quality Inspector

Program Goals

- The program will help students become proficient in setup, operations, and basic programming of manual and CNC operations.
- The program will provide the student with the ability to determine process methods of machining, communicate process improvements, and identify necessary programming information.
- The program will give students the skills to complete the National Institute of Metalworking Skills (NIMS) certification for level II machining operations.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

MACH 2003	Statistics for Machining II	3
MACH 2023	Engineering Drawing and GD&T	3
MACH 2033	Metalworking Theory II	3
MACH 2043	Computer Aided Manufacturing Basic Programming	3
MACH 2053	Advanced CNC Machine Setup & Operation	3
MACH 2063	Specialty Equipment: EDM and Swiss-Style Setup and Operation	3

Certificate of Proficiency in Welding Technology

18 Credit Hours

The Certificate of Proficiency in Welding Technology provides students with an introduction to welding and cutting processes. Welding processes include shielded metal arc, gas metal arc, gas tungsten, arc, and oxyacetylene welding. Cutting processes include oxyacetylene and plasma cutting. Students will develop welding and cutting skills and knowledge by performing the basic processes on steel and aluminum.

Job Opportunities

Welder	Inspector	Ironworker
Fitting Specialist	Glazier	Boilermaker

Program Goals:

- Develop knowledge in theory, techniques, and welding skills necessary to support maintenance and repair operations in a manufacturing environment
- Provide the foundation education, training and direction to work in entry-level positions in the welding field.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

MANF 1303.....	Industrial Safety	3
WELD 1003.....	Bench Work and Welding Processes	3
WELD 1103.....	Introduction to Welding Processes	3
WELD 1123.....	Shielded Metal Arc Welding: SMAW	3
WELD 1133.....	Gas Metal Arc Welding: GMAW	3
WELD 1143.....	Gas Tungsten Arc Welding I: GTAW	3

Technical Certificate in Advanced Manufacturing Technology

35 Credit Hours

The Technical Certificate in Advanced Manufacturing provides graduates with the basic communication and computational skills, technical training, and work ethics needed for employment in entry-level positions in the advanced manufacturing field.

Job Opportunities

Maintenance Technician Level I	Quality Control Technician Level I
Work Order Clerk	Quality Assurance Technician Level Parts Clerk

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Demonstrate a fundamental knowledge of manufacturing careers, systems, and processes
- Demonstrate basic production skills including the use of hand and power tools
- Follow safety regulations and procedures
- Effectively use computer applications related to manufacturing design, production, and quality control
- Demonstrate the professional/ethical behaviors of timeliness and self-directed task completion

Program Requirements

Successful completion of COMP 1113 Computer Fundamentals or demonstration of equivalent computer skills is a pre-requisite to this program.

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

General Education Core (9 hours)

ENGL 1113.....	English Composition I	3
DMTH 1033.....	Developmental Mathematics III	3
ENGL 2303.....	Oral Communication	3

College Requirement

CSUR 1001.....	College Survival Skills	1
----------------	-------------------------------	---

Technical Core (25 hours)

MANF 1012.....	Shop Essentials	2
MANF 1023.....	Design for Manufacturing	3
MANF 1033.....	Manufacturing Production Processes.....	3
MANF 1043.....	Manufacturing Power & Equipment Systems	3
MANF 1053.....	Manufacturing Materials	3
MANF 1073.....	Manufacturing Equipment Maintenance & Operation	3
MANF 2012.....	Basic Hydraulics and Pneumatics	2
MANF 2023.....	Mechanical Drives and Bearings	3
MANF 2033.....	Applied Electricity and Electronics.....	3

Associate of Applied Science in Advanced Manufacturing Technology

64 Credit Hours

The Associate of Applied Science degree in Advanced Manufacturing provides graduates with the communication and computational skills, technical training, and work ethics needed for employment in entry-level positions in the advanced manufacturing field. Safety procedures and practices are stressed throughout the curriculum, and students are expected to exhibit the fundamental work ethics of regular attendance, adherence to directions, teamwork, and conscientious completion of assigned work.

Job Opportunities

Maintenance Technician Level II	Maintenance Work Order Person
Production Line Team Leader	Quality Control Technician Level II
Quality Assurance Level II	Parts Inventory Control Person
Welder	Planner/Scheduler

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Demonstrate a fundamental knowledge of manufacturing careers, systems, and processes
- Demonstrate basic production skills including the use of hand and power tools
- Follow safety regulations and procedures
- Demonstrate knowledge and skills related to programmable logic controllers (PLCs), electronics, hydraulics and pneumatics, robotics, welding techniques, mechanical systems, plastics engineering, computer numerical controlled (CNC) machining, and quality control
- Effectively use computer applications related to manufacturing design, production, and quality control
- Demonstrate the professional/ethical behaviors of timeliness and self-directed task completion

Program Requirements

The following outline of requirements and electives should be used as a planning worksheet. Students should take care to check course prerequisites. COMP 1113 or demonstration of equivalent computer skills is a pre-requisite to enrollment in this program.

General Education Core (15 hours)

Communication (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
<i>or</i>		
ENGL 1133	Writing for the Workplace	3*
ENGL 2303	Oral Communication	3

*Students planning to transfer may need English Composition II.

Mathematics (3 hours required; select one)

DMTH 1033	Developmental Mathematics III	3
MATH 1113	College Algebra	3

Social Science/History Elective (3 hours required; select one)

HIST 2123	U. S. History Before 1877	3
HIST 2133	U.S. History After 1877	3
POLS 1143	American Government	3

MSCC Requirement (2 hours)

BUSN 1201	Career Preparation	1
CSUR 1101	College Survival Skills	1

Technical Requirement (38 hours)

MANF 1012	Shop Essentials	2
MANF 1023	Design for Manufacturing	3
MANF 1033	Manufacturing Production Processes	3
MANF 1043	Manufacturing Power & Equipment Systems	3
MANF 1053	Manufacturing Materials	3
MANF 1073	Manufacturing Equipment Maintenance & Operation	3
MANF 1083	Manufacturing, Engineering, Design & Problem Solving	3
MANF 1303	Industrial Safety	3
MANF 2012	Basic Hydraulics & Pneumatics	2
MANF 2023	Mechanical Drives & Bearings	3
MANF 2033	Applied Electricity & Electronics	3
MANF 2044	Programmable Logic Controllers	3
MANF 2983	Internship	3
<i>or</i>		
MANF 2993	Capstone Experience	3

Electives (9 hours required; choose 3)

MACH 1083	Introduction to Manual Machining	3
MACH 1103	Intro to CNC Machining	3
MANF 2103	Process Controls for Integrated Systems	3
MANF 2113	Advanced Programmable Logic Controllers	3
MANF 2133	Technical Graphics and CAD Fundamentals	3

MANF 2143	Computer Aided Drafting and Design	3
MANF 2213	Lean Manufacturing	3
WELD 1103	Introduction to Welding Applications.....	3
WELD 1123	Shielded Metal Arc Welding: SMAW	3

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College’s core academic and technical requirements within the specified time frame.

Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, MANF 1023 Design for Manufacturing, and MANF 1033 Manufacturing Production Processes within the first 30 hours of college-level enrollment.

Recommended Course Sequence

1st Year, 1st Semester

CSUR 1101	College Survival Skills	1
ENGL 1113	English Composition I.....	3
DMTH 1033	Developmental Mathematics III	3
<i>or</i>		
MATH 1113	College Algebra	3
MANF 1012	Shop Essentials	2
MANF 1023	Design for Manufacturing.....	3
MANF 1033	Manufacturing Production Processes.....	3
		Total 15

1st Year, 2nd Semester

ENGL 1123	English Composition II.....	3
<i>or</i>		
ENGL 1133	Writing for the Workplace	3
MANF 1043	Manufacturing Power and Equip. Systems.....	3
MANF 1053	Manufacturing Materials	3
MANF 1073	Manufacturing Equipment Maintenance & Operation	3
MANF 1303	Industrial Safety	3
		Total 15

2nd Year, 1st Semester

ENGL 2303	Oral Communication	3
MANF 1083	Manufacturing, Engineering, Design & Problem Solving	3
MANF 2012	Basic Hydraulics & Pneumatics	2
MANF 2033	Applied Electricity and Electronics.....	3
Social Science/History Elective.....		3
Technical Elective		3
		Total 17

2nd Year, 2nd Semester

BUSN 1201	Career Preparation	1
MANF 2023	Mechanical Drives and Bearings	3
MACH 2044	Programmable Logic Controllers	3

MANF 2993	Capstone Learning Experience or Internship	3	
Technical Elective		3	
Technical elective		3	Total 17

Allied Health Sciences

Mid-South Community College offers students several career pathways in the Allied Health Sciences and offers the general education requirements for Arkansas State University's Associate Degree in Nursing, which is offered on the MSCC campus.

Certificate of Proficiency in Nursing Assistant

7/8 Credit Hours

The Certificate of Proficiency in Nursing Assistant provides students with academic and clinical education in nursing related services for long term residents.

Special Admissions/Enrollment Requirements

Students must meet the following criteria:

- Be at least 18 years of age by the end of the CNAS 1014 Nursing Assistant course
- Have a high school diploma, or equivalent, by the end of the course
- Meet required placement test scores or successful completion of DRDG 1023 Developmental Reading II and DENG 1053 Developmental English II
- Submit to a substance abuse screening and criminal background check during the first week of class
- Complete and submit proof of a negative tuberculosis (TB) skin test prior to clinical training

Job Opportunities

Nursing Assistants work in nursing homes, hospitals, hospice programs, rehabilitation centers and home care agencies.

Program Goals

- Provide basic level of both knowledge and demonstrable skills for each individual completing the program
- Create a method of advancement for each individual completing the program
- Prepare students to pass the AR State Certified Nursing Assistant Certification Examination and enter the job market or continue their studies in related Allied Health programs
- Demonstrate the professional/ethical behaviors of timeliness, punctuality, responsibility, confidentiality, and of self-directed task completion

Program Requirements

The following outline of requirements should be used as a planning worksheet.

CNAS 1014	Nursing Assistant.....	4
BIOL 1214	Anatomy and Physiology I	4
<i>or</i>		
MEDP 1043	Anatomy and Physiology	3

Certificate of Proficiency in Emergency Medical Technician

10/11 Credit Hours

The Certificate of Proficiency in Emergency Medical Technician provides students with academic and practical skills using the 1994 Emergency Medical Technician-Basic National Standard Curriculum. The purpose of the Emergency Medical Technician program is to prepare students to provide basic life support to patients in the pre-hospital emergency care setting.

Special Admissions/Enrollment Requirements:

To enroll in EMER 1007 Emergency Medical Technician, students must meet the following criteria:

- Be at least 18 years of age
- Have a high school diploma, or equivalent, at the time of application
- Meet required placement test scores or successful completion of DRDG 1023 Developmental Reading II and DENG 1053 Developmental English II
- Complete a program application, which is available from the Allied Health Sciences Division or email at alliedhealth@midsouthcc.edu
- Interview with course faculty and/or the Program Coordinator for Allied Health Sciences prior to course registration
- Submit to a substance abuse screening and criminal background check during the first week of class
- Submit to additional Arkansas state requirements as described during the course

Job Opportunities

Emergency Medical Technicians are employed by: private ambulance services; fire departments; hospitals; volunteer services and/or ancillary care.

Program Goals

- Provide basic level of both knowledge and demonstrable skills for each individual completing the program
- Prepare students to pass the Arkansas State EMT Certification Examination in accordance with the 1994 Emergency Medical Technician-Basic National Standard Curriculum and enter the job market.
- Demonstrate the professional/ethical behaviors of timeliness, punctuality, responsibility, confidentiality, and of self-directed task completion

Program Requirements

The following outline of requirements should be used as a planning worksheet.

EMER 1007	Emergency Medical Technician.....	7
BIOL 1214	Anatomy and Physiology I	4
<i>or</i>		
MEDP 1043	Anatomy and Physiology	3

Technical Certificate in Pharmacy Technology

42 Credit Hours

The Technical Certificate in Pharmacy Technology, designed in accordance with the standards of the American Society of Health-System Pharmacists, prepares students with the knowledge and practical skills necessary for successful entry into the profession of pharmacy as a pharmacy technician. Topics include origins of pharmacy, law, ethics, mathematics, order interpretation, prescription preparation, pharmacology, extemporaneous compounding, and clinical application of skills. Upon completion of the program, students are eligible to sit for the Pharmacy Technician Certification Exam offered by the Pharmacy Technician Certification Board.

Special Admissions/Enrollment Requirements

Students must meet the following criteria:

- Be at least 18 years of age
- Have a high school diploma, or equivalent, at the time of application
- Meet required placement test scores or successful completion of DRDG 1023 Developmental Reading II and DENG 1053 Developmental English II
- Meet required placement test scores or successful completion of DMTH 1023 Developmental Mathematics II
- Have a minimum overall GPA of 2.0 or greater
- Complete a program application, which is available from the Allied Health Sciences Division or email at alliedhealth@midsouthcc.edu
- Interview with program faculty
- Submit to a substance abuse screening and criminal background check during the first week of class
- Students will be required to complete and submit proof of immunization by the end of the second semester of enrollment for the following: Hepatitis-B, Measles/Mumps/Rubella (MMR), Tetanus/Diphtheria/Pertussis (TDaP), Meningitis, and a negative TB skin test.

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to satisfy the following Technical/Occupational Outcomes:

- Assist the pharmacist in the practice of pharmacy and serving patients;
- Demonstrate skills in the interpretation and preparation of prescription and medication orders pursuant to applicable federal and state laws and standards;
- Apply knowledge of ethics, confidentiality, and professional standards in complex scenarios encountered in pharmacy practice;

- Demonstrate the ability to work as both an independent and collaborative member of the healthcare team;
- Communicate effectively with patients and healthcare team, demonstrating correct terminology and strong customer service skills.

Job Opportunities

Well-trained and educated pharmacy technicians work in professional environments as integral members of the healthcare team. Pharmacy practice settings which currently utilize technicians include community/retail, institutional, home infusion, mail-order, specialty compounding, bio-tech companies, pharmaceutical manufacturers, and regulatory agencies.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their programs of study.

Technical Certificate in Pharmacy Technology

General Education Courses (9 hours)

DMTH 1033.....	Developmental Mathematics III.....	3
ENGL 1113.....	English Composition	3
MEDP 1043.....	Anatomy & Physiology	3

College Requirement (1 hour)

CSUR 1101.....	College Survival Skills.....	1
----------------	------------------------------	---

Technical Courses (32 hours)

MEDP 1033.....	Medical Terminology	3
PHAR 1003.....	Introduction to Pharmacy	3
PHAR 1023.....	Pharmaceutical Mathematics	3
PHAR 1044.....	Community Pharmacy Practice.....	4
PHAR 1054.....	Institutional Pharmacy Practice.....	4
PHAR 2014.....	Pharmacy Drug Therapy and Treatment.....	4
PHAR 2054.....	Sterile Products and Intravenous Admixtures	4
PHAR 2061.....	Pharmacy Technology Professional Seminar	1
PHAR 2996.....	Pharmacy Clinical Externship	6

Recommended Course Sequence for Full-Time Students

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35. Students enter this program in a cohort and must follow the prescribed curriculum sequence.

1st Year, First Semester

CSUR 1101.....	College Survival Skills.....	1		
DMTH 1033.....	Developmental Mathematics III.....	3		
ENGL 1113.....	English Composition I	3		
MEDP 1043.....	Medical Terminology	3		
PHAR 1003.....	Introduction to Pharmacy	3	Total	13

1st Year, Second Semester

MEDP 1043.....	Anatomy & Physiology	3
----------------	----------------------------	---

PHAR 1023	Pharmaceutical Mathematics	3		
PHAR 1044	Community Pharmacy Practice	4		
PHAR 1054	Institutional Pharmacy Practice	4	Total	14

2nd Year, First Semester

PHAR 2014	Pharmacy Drug Therapy and Treatment	4		
PHAR 2054	Sterile Products and Intravenous Admixtures	4		
PHAR 2061	Pharmacy Professional Seminar	1		
PHAR 2996	Pharmacy Clinical Externship	6	Total	15

Associate of Applied Science in Medical Assisting Technology

60 Credit Hours

The Associate of Applied Science in Medical Assisting is designed to prepare students to function in multiple functions in health care settings from routine office procedures to administering medications as directed by the doctor. Completers will be ready for entry level positions in doctor offices and health clinics.

Special Admissions/Enrollment Requirements

Students must meet the following criteria:

- Be at least 18 years of age
- Have a high school diploma, or equivalent, at the time of application
- Meet required placement test scores or successful completion of DRDG 1023 Developmental Reading II and DENG 1053 Developmental English II
- Meet required placement test scores or successful completion of DMTH 1023 Developmental Mathematics II
- Have a minimum overall GPA of 2.0 or greater
- Complete a program application, which is available from the Allied Health Sciences Division or email at alliedhealth@midsouthcc.edu
- Interview with program faculty
- Submit to a substance abuse screening and criminal background check during the first week of class
- Students will be required to complete and submit proof of immunization by the end of the second semester of enrollment for the following: Hepatitis-B, Measles/Mumps/Rubella (MMR), Tetanus/Diphtheria/Pertussis (TDaP), Meningitis, and a negative TB skin test.

Job Opportunities

Well-trained and educated medical assistants work in professional environments as integral members of the healthcare team.

Group Practices	Laboratories	Health Care Facilities
Clinics	Hospitals	Private Offices

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Demonstrate knowledge of administrative duties utilizing basic secretarial skills; scheduling; monitoring appointments; interviewing and taking patient history; preparing

and maintaining medical records; applying computer concepts for office procedures; performing medical transcription; and locating resources and information.

- Demonstrate knowledge of infection control and safety.
- Demonstrate knowledge the technical skills required of entry-level employees in their career areas such as, taking vitals; recognizing medical emergencies; performing basic first aid and CPR; preparing and maintaining the treatment area; preparing patients for procedures; processing specimens; and administering medications as directed by the physician.
- Demonstrate knowledge by taking the National Certification Exam.
- Demonstrate or display professionalism by projecting a positive attitude; working as a team member; showing initiative and responsibility; and promoting the profession.
- Demonstrate competency in the general education outcomes identified for all MSCC graduates.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course descriptions and prerequisites in planning their program of study.

General Education Core (18 hours)

Communication (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
<i>or</i>		
ENGL 1133	Writing for the Workplace	3
ENGL 2303	Oral Communication	3

Mathematics (3 hours required, select one class)

DMTH 1033.....	Developmental Mathematics III	3
<i>or</i>		
MATH 1113.....	College Algebra	3

Computer Skills (3 hours required)

COMP 1113.....	Computer Fundamentals	3
----------------	-----------------------------	---

Social Science (3 hours required)

PSYC 1403.....	Intro to Psychology	3
----------------	---------------------------	---

MSCC Requirement (1 hour)

CSUR 1101.....	College Survival Skills	1
----------------	-------------------------------	---

Technical Requirements (41 hours)

MDAS 1003.....	Medical Assisting Administrative Procedures I	3
MDAS 1033.....	Medical Law & Ethics.....	3
MDAS 1053.....	Medical Assisting Clinical Procedures I	3
MDAS 1073.....	Medical Assisting Clinical Procedures II	3
MDAS 2004.....	Medical Billing and Encoding.....	4
MDAS 2012.....	Medical Assisting Administrative Procedures II	2
MDAS 2043.....	Medical Assisting Laboratory Procedures	3
MDAS 2081.....	Medical Assisting Certification Review	1

MDAS 2981	Medical Assisting Seminar	1
MDAS 2996	Medical Assisting Externship	6
MEDP 1033	Medical Terminology	3
MEDP 1043	Anatomy & Physiology	3
PHLB 1016	Principles & Practices of Phlebotomy	6

Recommended Course Sequence for Full-Time Students

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35. Students enter this program in a cohort and must follow the prescribed curriculum sequence.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, MEDP 1043 Anatomy & Physiology and MDAS 1003 Medical Assisting Administrative Procedures I within the first 30 hours of college-level enrollment.

1st Year, 1st Semester

CSUR 1101	College Survival Skills	1	
COMP 1113	Computer Fundamentals	3	
DMTH 1033	Developmental Mathematics III	3	
MDAS 1003	Medical Assisting Administrative Procedures	3	
MDAS 1033	Medical Law & Ethics	3	
MEDP 1043	Anatomy & Physiology	3	Total 16

1st Year, 2nd Semester

MDAS 1073	Medical Assisting Clinical Procedures	3	
MEDP 1113	Medical Terminology	3	
ENGL 1113	English Composition I	3	
ENGL 2303	Oral Communication	3	
MDAS 2012	Medical Assisting Administrative Procedures II	2	Total 14

2nd Year, 1st Semester

MDAS 2004	Medical Billing & Encoding	4	
MDAS 1073	Medical Assisting Clinical Procedures II	3	
MDAS 2043	Medical Assisting Lab Procedures	3	
PHLB 1016	Principles and Practices of Phlebotomy	6	Total 16

2nd Year, 2nd Semester

ENGL 1123	English Composition II	3	
<i>or</i>			
ENGL 1133	Writing for the Workplace	3	
MDAS 2081	Medical Assisting Certification Review	1	
MDAS 2981	Medical Assisting Seminar	1	
MDAS 2996	Medical Assisting Externship	6	
PSYC 1403	Intro to Psychology	3	Total 14

Aviation Maintenance Technology

Mid-South Community College offers a career pathway in Aviation Maintenance Technology which prepares students for three Federal Aviation Administration certifications as well as completion of an associate's degree in the field.

Certificate of Proficiency in General Aviation Maintenance Technology

18 hours

The General Aviation Maintenance certificate addresses the general knowledge area required for FAA (Federal Aviation Administration) certification as an airframe and powerplant maintenance technician.

Job Opportunities

Mechanics Helper

Aircraft Parts Department

Aircraft Line Service

Program Goals

Program completers will

- Develop the technical skills necessary for entry-level employment in the aviation maintenance industry including a basic understanding of math, physics, and electricity as they apply to aviation maintenance, as well as an introduction to associated tools, drawings and regulations.
- Meet the technical knowledge requirement for General Aviation Maintenance mechanic certification, required by Federal Aviation Regulation, Part 65.
- Strengthen core skills in reading, writing, mathematics, and science reasoning common to the aviation maintenance industry

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students enroll in this program on a cohort basis and must follow the required course sequence.

AMTG 1003.....	Aviation Math and Basic Physics.....	3
AMTG 1024.....	Basic Aviation Electricity.....	4
AMTG 1033.....	Aviation Tools, Materials, and Processes.....	3
AMTG 1054.....	Aircraft Familiarization	4
AMTG 1074.....	Aviation Regulations, Documentation, and Drawing.....	4.

Technical Certificate in Aviation Airframe Maintenance Technology

32 Credit Hours

The Powerplant Aviation Maintenance certificate provides students with the knowledge and hours required for the FAA (Federal Aviation Administration) Airframe certificate. The subjects covered include reciprocating and turbine engine operation theory, lubrication, powerplant electricity, ignition, starting, fire protection, auxiliary power units, engine instruments,

induction, exhaust, cooling, fuel systems and fuel metering, propeller operation and overhaul, and powerplant inspection.

Students who successfully complete the Certificate of Proficiency in General Aviation Maintenance Technology and the Technical Certificate in Aviation Powerplant Maintenance Technology classes will be eligible for the FAA “Mechanics Certificate” (Airframe Specialization) testing process.

Job Opportunities

Avionics Technician	Composite Technician	Aircraft Painter
Sheet Metal Technician	Electrician	

Program Goals

- Develop the technical skills expected of a beginning licensed mechanic for the repair, maintenance, inspection and overhaul of airframe, including electrical systems, sheet metal, welding, hydraulic systems, rigging and assembly, wood, fabric, and doping, and general overhaul procedures.
- Meet the technical knowledge requirement for Airframe Maintenance certification, required by Federal Aviation Regulation, Part 65.
- Develop core skills in reading, writing, mathematics, and science reasoning necessary for employment in the aviation maintenance industry

Program Requirements

The prerequisite requirement for this course of study is successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology. Students enroll in this program on a cohort basis and must follow the required course sequence:

AMTA 1076..... Aircraft Metallic Structures.....	6
AMTA 1094..... Aircraft Composite Structures.....	4
AMTA 1104..... Aircraft Systems I.....	4
AMTA 2006..... Aircraft Electricity.....	6
AMTA 2024..... Aircraft Inspection and Rigging.....	4
AMTA 2044..... Aircraft Systems II.....	4
AMTA 2064..... Aircraft Instruments and Avionics.....	4

Required Course Sequence: Students enroll in this program on a cohort basis and must follow the required course sequence.

Summer Semester

AMTA 1076..... Aircraft Metallic Structures.....	6
--------------------------------------------------	---

Fall Semester

AMTA 1094..... Aircraft Composite Structures.....	4
AMTA 1104..... Aircraft Systems I.....	4
AMTA 2006..... Aircraft Electricity.....	6
AMTA 2064..... Aircraft Instruments and Avionics.....	4

Spring Semester

AMTA 2024..... Aircraft Inspection and Rigging.....	4
AMTA 2044..... Aircraft Systems II.....	4

Technical Certificate in Aviation Powerplant Maintenance Technology

31 Hours

The Powerplant Aviation Maintenance certificate provides students with the knowledge and hours required for the FAA (Federal Aviation Administration) Powerplant certificate. The subjects covered include reciprocating and turbine engine operation theory, lubrication, powerplant electricity, ignition, starting, fire protection, auxiliary power units, engine instruments, induction, exhaust, cooling, fuel systems and fuel metering, propeller operation and overhaul, and powerplant inspection.

Students who successfully complete the Certificate of Proficiency in General Aviation Maintenance Technology and the Technical Certificate in Aviation Powerplant Maintenance Technology classes will be eligible for the FAA “Mechanics Certificate” (Powerplant specialization) testing process.

Job Opportunities

Powerplant Technician Engine Manager Jet Engine Mechanic

Program Goals

- Develop the technical skills expected of a beginning licensed mechanic for the repair, inspection and overhaul of aircraft powerplants, including their electrical components, propellers, ignition systems, lubrication systems, fuel systems, and exhaust systems
- Meet the technical knowledge requirement for Powerplant Maintenance certification, required by Federal Aviation Regulation, Part 65.
- Develop core skills in general education in reading, writing, mathematics, and science reasoning necessary for employment in the aviation maintenance industry.

Program Requirements

The prerequisite requirement for this course of study is successful completion of the Certificate of Proficiency in General Aviation Maintenance Technology. Students enroll in this program on a cohort basis and must follow the required course sequence.

AMTP 1006.....	Reciprocating Engines I.....	6
AMTP 1036.....	Reciprocating Engines II.....	6
AMTP 1054.....	Powerplant Electrical Systems	4
AMTP 2016.....	Turbine Engines I.....	6
AMTP 2036.....	Turbine Engines II.....	6
AMTP 2053.....	Propeller Systems.....	3

Required Course Sequence: Students enroll in this program on a cohort basis and must follow the required course sequence

Spring Semester

AMTP 1006.....	Reciprocating Engines I.....	6
AMTP 2053.....	Propeller Systems.....	3

Summer Semester

AMTP 1036.....	Reciprocating Engines II.....	6
----------------	-------------------------------	---

Fall Semester

AMTP 1054.....	Powerplant Electrical Systems	4
----------------	-------------------------------------	---

AMTP 2016.....	Turbine Engines I.....	6
AMTP 2036.....	Turbine Engines II.....	6

Associate of Applied Science in Aviation Maintenance Technology

98 Credit Hours

The Aviation Maintenance Technology program provides an up-to-date, intensive training for this occupational field. Students who successfully complete the program, which is certified by the Federal Aviation Administration (FAA) under Title 14 CFR Part 147, meet the training and experience requirements of the FAA for Airframe and/or Powerplant certificate ratings. The number of credit hours is determined by the FAA required hours.

The Aviation Maintenance Technology curriculum is divided into three (3) parts: General, Airframe, and Powerplant. A student enrolling in this course of study must first enroll for the general curriculum. Upon completion of the general section, the student may elect to pursue the Airframe and/or Powerplant section.

Completion of the general curriculum qualifies the student for an Aviation General Certificate of Proficiency. Further successful completion of the Airframe and/or Powerplant courses satisfies FAA requirements of training and experience prior to testing for one or both of these ratings. Students will be awarded technical certificates upon reaching the Airframe and/or Powerplant training milestones. Though not required for FAA certification, Mid-South Community College offers an AAS degree in this field. In order to qualify for the A.A.S. degree the student must complete the prescribed program of General, Airframe, and Powerplant sections, plus the additional General Education requirements.

Job Opportunities

Aviation maintenance technicians may expect to gain employment in a wide variety of fields and locations. Various fields include but are not limited to airline, manufacturing, repair station, charter operation, corporate, general aviation, and airport operation. Very lucrative aviation maintenance positions are available in state as well as across the nation and worldwide. Skills sets acquired through the program also directly fit many job requirements for the missiles/defense industry and other technical fields.

Maintenance Manager	Production Manager
Service Manager	Engine Manager

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Develop the technical skills necessary for entry-level employment in the aviation maintenance industry including
- Gain a basic understanding of math, physics, and electricity as they apply to aviation maintenance, as well as an introduction to associated tools, drawings and regulations.
- Learn technical skills for the repair, inspection and overhaul of aircraft powerplants, including their electrical components, propellers, ignition systems, lubrication systems, fuel systems, and exhaust systems

- Acquire skills for the repair, maintenance, inspection and overhaul of airframe, including electrical systems, sheet metal, welding, hydraulic systems, rigging and assembly, wood, fabric, and doping, and general overhaul procedures.
- Meet the technical knowledge requirement for mechanic certification, require by Federal Aviation Regulation, Part 65.
- Develop general education in reading, writing, mathematics, and science reasoning applicable to the aviation industry.

Program Requirements

General Education Core (15 hours)

ENGL 1113.....	English Composition I.....	3
ENGL 1123.....	English Composition II.....	3
ENGL 2303.....	Oral Communications.....	3
MATH 1023.....	College Algebra.....	3
Social Science Elective.....		3

MSCC Requirement (2 hours)

CSUR 1101.....	College Survival Skills.....	1
BUSN 1201.....	Career Prep.....	1

Technical Requirements (81 hours)

General Aviation Maintenance Requirements (18 hours)

AMTG 1003.....	Aviation of Math & Physics.....	3
AMTG 1024.....	Basic Aviation Electricity.....	4
AMTG 1033.....	Aviation Tools, Materials, and Processes.....	3
AMTG 1054.....	Aircraft Familiarization.....	4
AMTG 1074.....	Aviation Regulations, Documentation, and Drawing.....	4

Airframe Maintenance Requirements (32 hours)

AMTA 1076.....	Aircraft Metallic Structures.....	6
AMTA 1094.....	Aircraft Composite Structures.....	4
AMTA 1104.....	Aircraft Systems I.....	4
AMTA 2006.....	Aircraft Electricity.....	6
AMTA 2024.....	Aircraft Inspection and Rigging.....	4
AMTA 2044.....	Aircraft Systems II.....	4
AMTA 2064.....	Aircraft Instruments and Avionics.....	4

Powerplant Maintenance Requirements (31 hours)

AMTP 1006.....	Reciprocating Engines I.....	6
AMTP 1036.....	Reciprocating Engines II.....	6
AMTP 1054.....	Powerplant Electrical Systems.....	4
AMTP 2016.....	Turbine Engines I.....	6
AMTP 2036.....	Turbine Engines II.....	6
AMTP 2053.....	Propeller Systems.....	3

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35. Students enroll in this program on a cohort basis and must follow the required course sequence

First Semester (Spring) - General (AMT)		
AMTG 1003.....	Aviation Math and Basic Physics.....	3
AMTG 1024.....	Basic Aviation Electricity.....	4
AMTG 1033.....	Aviation Tools, Materials, and Processes.....	3
AMTG 1054.....	Aircraft Familiarization.....	4
AMTG 1074.....	Aviation Regulations, Documentation, and Drawing.....	4
CSUR 1011.....	College Survival Skills.....	1
	Total	19
Second Semester (Summer) – Airframe (AMT)		
AMTA 1076.....	Aircraft Metallic Structures.....	6
MATH 1113.....	College Algebra.....	3
	Total	9
Third Semester (Fall) – Airframe (AMT)		
AMTA 1094.....	Aircraft Composite Structures.....	4
AMTA 1104.....	Aircraft Systems I.....	4
AMTA 2006.....	Aircraft Electricity.....	6
AMTA 2064.....	Aircraft Instruments and Avionics.....	4
ENGL 1113.....	English Composition I.....	3
	Total	21
Fourth Semester (Spring) – Airframe/Powerplant (AMT)		
AMTA 2024.....	Aircraft Inspection and Rigging.....	4
AMTA 2044.....	Aircraft Systems II.....	4
AMTP 1006.....	Reciprocating Engines I.....	6
AMTP 2053.....	Propeller Systems.....	3
ENGL 1123.....	English Composition II.....	3
	Total	20
Fifth Semester (Summer) – Powerplant (AMT)		
AMTP 1036.....	Reciprocating Engines II.....	6
ENGL 2303.....	Oral Communication.....	3
	Total	9
Sixth Semester (Fall) – Powerplant (AMT)		
AMTP 1054.....	Powerplant Electrical Systems.....	4
AMTP 2016.....	Turbine Engines I.....	6
AMTP 2036.....	Turbine Engines II.....	6
BUSN 1201.....	Career Prep.....	1
Social Science Elective.....		3
	Total	20

Business Technology

Certificate of Proficiency in Administrative Office Procedures

15 Credit Hours

The goal of this program is to meet the needs of students seeking short-term occupational training that will prepare them to work in an administrative/office environment in various entry-level positions. The program will also provide certification opportunities for individuals who are currently employed and seeking to further their formal education and training.

Job Opportunities

Various entry-level administrative office positions.

Program Prerequisite

Successful completion of DKEY 1101 Computer Keyboarding or approved proficiency test.

Program Goals

Program completers will

- Demonstrate office administration skills including organization, communication, and storage and retrieval of information
- Apply fundamental knowledge of computers and applications software including Microsoft Word and Excel
- Demonstrate speed and accuracy in computer applications and proofreading skills
- Demonstrate the professional/ethical behaviors of timeliness and self-directed task completion

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should check course prerequisites carefully while planning their program of study.

Technical Courses

COMP 1113	..... Computer Fundamentals	3
COMP 2003	..... Keyboarding for Professionals.....	3
COMP 1413	..... Document Processing.....	3
COMP 1313	..... Spreadsheet Applications*	3
BUSN 1223	..... Administrative Office Procedures	3

*Microsoft Certification Application Specialist (MCAS) examination required. Purchase voucher in bookstore beginning of semester.

Associate of Applied Science in Business Technology

62 Credit Hours

Students choosing this major will obtain a core of general education and fundamental business skills and knowledge. Two concentrations of study are provided: Business Administration, which provides a basic understanding of business, economics and accounting issues, and Applications Specialist, which provides a basic understanding of business issues and prepares students for certification in the Microsoft Office® applications software.

Students planning to transfer to a four-year institution should note two possible options. First those planning to transfer to bachelor of science degrees in business should complete the Associate of Arts, using business courses as electives. Students should verify, in advance, which electives their transfer institution of choice will accept. Students planning to transfer to the University of Arkansas – Fort Smith's Bachelor of Applied Science degree may prefer to complete an Associate of Applied Science in Business Technology.

Job Opportunities

Office Manager	Applications Management Specialist
Office Support Technician	Small Business Manager

The following outline of requirements should be used as a planning worksheet. Students should take care to check course descriptions and prerequisites in planning their program of study.

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Apply the skillful use of common tools and technology relevant to their field of study
- Demonstrate the professional/ethical behaviors of punctuality, of regular attendance, of respect for supervisors and co-workers, and of self-directed task completion
- Plan and document, using grammar and language appropriate to the workplace, a business project that is comprehensive, logical, and attainable

**AAS in Business Technology,
Business Administration Option**

The following outline of requirements should be used as a planning worksheet. Students should take care to check course descriptions and prerequisites in planning their program of study.

General Education Core (15 hours)

Communication (9 hours required)

ENGL 113.....	English Composition I	3
ENGL 1123.....	English Composition II	3
<i>or</i>		
ENGL 1133.....	Writing for the Workplace	3
ENGL 2303.....	Oral Communication	3

Mathematics (3 hours required, select one class)

DMTH 1033.....	Developmental Mathematics III	3
<i>or</i>		
MATH 1113.....	College Algebra	3

Social Science (3 hours required, select one)

HIST 2123.....	U.S. History Before 1877	3
HIST 2133.....	U.S. History After 1877	3
POLS 1143.....	American Government.....	3
SOCI 1303.....	Intro to Sociology	3
PSYC 1403.....	Intro to Psychology	3

MSCC Requirements (4 hours)

CSUR 1101.....	College Survival Skills	1
COMP 1113.....	Computer Fundamentals	3

Technical Core (22 hours)

BUSN 1103.....	Introduction to Business	3
BUSN 1143.....	Business Communication	3
BUSN 1201.....	Career Preparation	1

BUSN 1303	Business Mathematics	3
BUSN 1453	Human Resource Management	3
BUSN 2033	Legal Environment of Business	3
BUSN 2993	Capstone Learning Experience	3
<i>or</i>		
BUSN 2133	Introduction to Project Management	3
COMP 1413	Document Processing	3

General Electives (3 hours)

Any course not taken to satisfy another state program requirement

Recommended General Electives

BUSN 2143	Business Logistics	3
BUSN 2043	Supervisor Safety Management	3

Students should choose additional courses from the following:

Business Administration (BA) Concentration (18 hours)

BUSN 1203	Basic Marketing	3
BUSN 1423	Principles of Accounting I	3
BUSN 1433	Principles of Accounting II	3
BUSN 2113	Principles of Management	3
ECON 2213	Macroeconomics	3
ECON 2223	Microeconomics	3
<i>or</i>		
BUSN 1273	Intro to Operations Management	3

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College’s core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, BUSN 1103 Introduction to Business and COMP 1113 Computer Fundamentals within the first 30 hours of college-level enrollment.

Business Administration

1st Year, 1st Semester

BUSN 1103	Intro to Business	3
BUSN 2113	Principles of Management	3
CSUR 1101	College Survival Skills	1
ENGL 1113	English Composition I	3
DMTH 1033	Developmental Mathematics III	3
<i>or</i>		
MATH 1113	College Algebra	3
COMP 1113	Computer Fundamentals	3

Total 16

1st Year, 2nd Semester

BUSN 1143	Business Communication	3
BUSN 2033	Legal Environment of Business	3

ENGL 1123	English Composition II	3	
<i>or</i>			
ENGL 1133	Writing for the Workplace	3	
COMP 1413	Document Processing	3	
Social Science Elective		3	Total 15

2nd Year, 1st Semester

BUSN 1303	Business Mathematics	3	
BUSN 1423	Principles of Accounting I	3	
BUSN 1453	Human Resource Management	3	
ECON 2213	Macroeconomics	3	
ENGL 2303	Oral Communication	3	Total 15

2nd Year, 2nd Semester

BUSN 1201	Career Preparation	1	
BUSN 1203	Basic Marketing	3	
BUSN 1433	Principles of Accounting II	3	
BUSN 2223	Microeconomics	3	
<i>or</i>			
BUSN 1273	Intro to Operations Management	3	
BUSN 2993	Capstone Learning Experience	3	
<i>or</i>			
BUSN 2133	Introduction to Project Management	3	
General Elective		3	Total 16

AAS in Business Technology, Applications Specialist Option

The following outline of requirements should be used as a planning worksheet. Students should take care to check course descriptions and prerequisites in planning their program of study.

General Education Core (15 hours)

Communication (9 hours required)

ENGL 113	English Composition I	3
ENGL 1123	English Composition II	3
<i>or</i>		
ENGL 1133	Writing for the Workplace	3
ENGL 2303	Oral Communication	3

Mathematics (3 hours required, select one class)

DMTH 1033	Developmental Mathematics III	3
<i>or</i>		
MATH 1113	College Algebra	3

Social Science (3 hours required, select one)

HIST 2123	U.S. History Before 1877	3
HIST 2133	U.S. History After 1877	3
POLS 1143	American Government	3
SOCI 1303	Intro to Sociology	3
PSYC 1403	Intro to Psychology	3

MSCC Requirements (4 hours)

CSUR 1101..... College Survival Skills 1
COMP 1113..... Computer Fundamentals 3

Technical Core (22 hours)

BUSN 1103..... Introduction to Business 3
BUSN 1143..... Business Communication 3
BUSN 1201..... Career Preparation 1
BUSN 1303..... Business Mathematics 3
BUSN 1453..... Human Resource Management..... 3
BUSN 2033..... Legal Environment of Business 3
BUSN 2993..... Capstone Learning Experience 3

or

BUSN 2133..... Introduction to Project Management..... 3
COMP 1413..... Document Processing..... 3

General Electives (3 hours)

Any course not taken to satisfy another state program requirement

Recommended General Electives

BUSN 2143..... Business Logistics 3
BUSN 2043..... Supervisor Safety Management 3

Students should choose additional courses from the following:

Applications Specialist (AS) Concentration (18 hours)

COMP 1213..... Database Applications*..... 3
COMP 1313..... Spreadsheet Applications*..... 3
COMP 2003..... Keyboarding for Professionals..... 3
COMP 2013..... Presentation Applications* 3
BUSN 1223..... Administrative Office Procedures 3
COMP 2503..... Advanced Document Processing* 3

*Microsoft Certification Application Specialist (MCAS) examination required. Purchase voucher in bookstore beginning of semester.

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College’s core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, BUSN 1103 Introduction to Business and COMP 1113 Computer Fundamentals within the first 30 hours of college-level enrollment.

1st Year, 1st Semester

BUSN 1103 Intro to Business 3
BUSN 1453..... Human Resource Management..... 3
CSUR 1101 College Survival Skills 1
DMTH 1033 Developmental Mathematics III 3
or
MATH 1113..... College Algebra 3

ENGL 1113.....	English Composition I.....	3	
COMP 1113.....	Computer Fundamentals.....	3	Total 16

1st Year, 2nd Semester

BUSN 2033.....	Legal Environment of Business.....	3	
COMP 1413.....	Document Processing.....	3	
COMP 2003.....	Keyboarding for Professionals.....	3	
ENGL 1123.....	English Composition II.....	3	
<i>or</i>			
ENGL 1133.....	Writing for the Workplace.....	3	
Social Science Elective.....		3	Total 15

2nd Year, 1st Semester

BUSN 1143.....	Business Communication.....	3	
BUSN 1303.....	Business Mathematics.....	3	
ENGL 2303.....	Oral Communication.....	3	
COMP 2013.....	Presentation Applications.....	3	
COMP 2503.....	Advanced Document Processing.....	3	Total 15

2nd Year, 2nd Semester

BUSN 1201.....	Career Preparation.....	1	
BUSN 1223.....	Administrative Office Procedures.....	3	
COMP 1213.....	Database Applications.....	3	
COMP 1313.....	Spreadsheet Applications.....	3	
BUSN 2993.....	Capstone Learning Experience.....	3	
<i>or</i>			
BUSN 2133.....	Introduction to Project Management.....	3	
General Elective.....		3	Total 16

General Technology

Associate of Applied Science in General Technology

61-62 Credit Hours

The Associate of Applied Science in General Technology provides students with the opportunity to complete an individualized program of study to fulfill a unique career goal by combining general education with specific technical knowledge and skills in preparation for employment or career advancement in industrial settings. A core of general education courses is required with at least 24 technical credit hours must be from one technical area. Remaining hours may be drawn from one or two related areas. Students may apply hours earned in approved technical certificate programs or receive portfolio credit for professional certifications or training toward the degree requirements. No more than nine (9) credits in the major technical area, however, may be earned through portfolio credit or credit by examination. Guidelines for developing credit portfolios are available from the Vice President for Workforce Technology or the Academic Affairs Office, and validation of portfolio experience is dependent upon the approval of the Vice President for Workforce Technology with input from the appropriate program advisory committee members.

Students choosing the AAS in General Technology must have their programs of study approved **in advance** by the Registrar. Guidelines for developing credit portfolios are available from the Registrar's Office or the Academic Affairs Office, and validation of portfolio experience is dependent upon the approval of the Vice President for Workforce Technology with input from the appropriate program advisory committee members.

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Know and be able to apply the terminology and conceptual frameworks related to common organizational structures and basic operations in the workplace
- Have the technical skills expected of entry-level employees in their field of study
- Demonstrate the professional/ethical behaviors of punctuality, of regular attendance, of respect for supervisors and co-workers, and of self-directed task completion

Other specific technical goals may apply depending upon the student's choice of major technical area.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, and two technical courses to be approved by the Registrar within the first 30 hours of college-level enrollment

Students choosing the AAS in General Technology must meet with the Registrar to obtain an approved degree plan which includes a minimum of 15 approved general education core credits and 43-45 approved technical credits.

Information Systems Technology

Certificate of Proficiency in Micro-Computer Upgrade and Repair

15 Credit Hours

Upon completing this program, students will have gained the knowledge to obtain an entry-level position as a computer technician in micro-computer repair and be prepared for the A+ Certification examination. Courses in this program will also apply toward completion of the AAS in Information Systems Technology at Mid-South Community College and are ideally suited for students who want to prepare for Cisco Networking certifications.

Job Opportunities

Computer Repair Technician

A+ Technician

Program Goals

Program graduates will be able to

- Utilize diagnostic techniques to identify and correct hardware and configuration problems

- Recognize, understand, and utilize the relationships of various hardware and software components designed for the construction of computer systems
- Demonstrate the professional/ethical behaviors of timeliness and of self-directed task completion

In addition, graduates will be prepared to take the CompTIA A+ Certification exam.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

Technical Courses

ISTC 1013	..... IT Principles and Practices	3
ISTC 1023	..... IT Essentials I	3
ISTC 1033	..... IT Essentials II	3
ISTC 1043	..... A+ Certification Prep Course	3
ISTC 1513	..... Cisco Network Fundamentals.....	3

Certificate of Proficiency in Networking (Associate Certification)

15 Credit hours

MSCC is a Cisco Systems Networking Academy®. This Network Associate Certificate of Proficiency trains students in the installation and configuration of Cisco's latest routers and switches and introduces them to the Sun Solaris and UNIX operating systems. ISTC 1013 IT Principles and Practices must be taken as a prerequisite to the program or as a corequisite with ISTC 1513 Cisco Network Fundamentals.

Program Goals

Program graduates will be able to

- Apply the skillful use of common tools and technology relevant to their field of study
- Demonstrate the professional/ethical behaviors of timeliness and of self-directed task-completion

Students who successfully complete all required courses will be eligible to take the Cisco Certified Network Associate (CCNA) examination, the capstone assessment tool used to validate student-learning outcomes.

A CCNA certified individual should be able to

- Troubleshoot an environment that uses Cisco routers and switches for multi-protocol client hosts and services
- Perform entry-level tasks in the planning, design, installation, operation, and troubleshooting of Ethernet and TCP/IP networks

Job Opportunities

Network Engineer

Network Administrator

Other computer networking positions in companies using Ethernet-compliant hardware in their LAN/WANs.

Program Goals

Program graduates will be able to

- Apply the skillful use of common tools and technology relevant to their field of study
- Demonstrate the professional/ethical behaviors of timeliness and of self-directed task-completion

Students who successfully complete all required courses will be eligible to take the Cisco Certified Network Associate (CCNA) examination. The certification exam is the capstone assessment tool used to validate student-learning outcomes.

Program Requirements

The following outline of requirements should be used as a planning worksheet. □ Students should take care to check course prerequisites in planning their program of study.

Technical Courses

ISTC 1513	..... Cisco Network Fundamentals.....	3
ISTC 1523	..... Routing Protocols and Concepts	3
ISTC 2563	..... LAN Switching and Wireless.....	3
ISTC 2573	..... Accessing the WAN	3
ISTC 2613	..... Fundamentals of UNIX	3

Certificate of Proficiency in Internet Web Professional

15 Credit Hours

Upon completing this program, students will have the knowledge and skills to successfully complete certifications in Internet Webmaster technology. The program prerequisite is COMP 1113 Computer Fundamentals or successful completion of an approved proficiency test.

Job Opportunities

Web-Page Designer

Web Developer

Software Engineer

Webmaster

Program Goals

Program graduates will be able to

- Utilize current web technologies and application software to design and development functional websites for e-commerce and other business applications
- Demonstrate the professional/ethical behaviors of timeliness and of self-directed task completion

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

Technical Courses

ISTC 1053.....	Introduction to Web Page Design.....	3
ISTC 1313.....	Internet Business Fundamentals.....	3
ISTC 1323.....	CIW Networking Fundamentals.....	3
ISTC 2266.....	CIW Site Design and Methodology.....	6

Successful completion of these courses qualifies students to take examinations as follows:

ISTC 1053, ISTC 1313 and ISTC 1323	CIW Foundations Exam
ISTC 2266.....	CIW Design Exam
ISTC 2323.....	CIW E-Commerce Certification Exam

Students who pass the Foundations and Design Exams earn a CIW Associate and Associate Design Specialist Certification. Students who also pass the E-Commerce Certification Exam earn certification as a Master Certified Internet Webmaster Designer. Addition information about these examinations may be obtained via www.ciwcertified.com.

Associate of Applied Science in Information Systems Technology

62 Credit Hours

The AAS in Information Systems Technology provides students with a core of general education courses, as well as courses which prepare them for professional certifications in Cisco Networking or Certified Internet Web Professional (CIW) technology. MSCC is a Certified Partners training institution and a Regional Cisco Networking Academy where students can prepare for certification in Cisco Networking. MSCC is also a Certified Internet Web Professional (CIW) testing center where students can both prepare and test for CIW certification.

Students enrolling in either the Cisco or CIW option areas must document or demonstrate, through credit by examination, a fundamental understanding of computers and common applications software. Otherwise, they must successfully complete COMP 1113 Computer Fundamentals before or concurrently with any of the ISTC courses.

Students who already hold professional certifications in one or both of these areas may satisfy some degree requirements by presenting those certifications to the Registrar's Office.

Networking Design and Administration Option

The AAS in Information Systems Technology: Networking Design and Administration Option provides students with the networking skills and knowledge needed for today's multi-platform networking environment. Areas of emphasis in the Networking option include network analysis and design, configuration and implementation, testing, monitoring and management, and system administration and maintenance.

Job Opportunities

Network Administration
PC Support Technician
Network Support IT Management

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Plan a technical project in a way that is comprehensive, logical and reachable
- Apply the skillful use of common tools and technology relevant to their field of study
- Install, configure, and operate LAN and WAN-access services for small networks, including but not limited to use of these protocols: IP, RIP, OSPF, EIGRP, Frame Relay, VLANs, Fast Ethernet, Ethernet, and Access Lists, and network security
- Demonstrate the professional/ethical behaviors of punctuality, regular attendance, respect for supervisors and co-workers, and self-directed task-completion

Program Requirements

Program Pre- or Corequisite (3 hours)

COMP 1113.....Computer Fundamentals3

or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills should take COMP 1113 as a general elective, during the first semester of enrollment.

General Education Courses (15 hours)

Communication (9 hours required)

ENGL 1113..... English Composition I3

ENGL 1133..... Writing for the Workplace

or

ENGL 1123..... English Composition II3

ENGL 2303..... Oral Communication3

Mathematics (3 hours required)

DMTH 1033..... Developmental Mathematics III3

or

MATH 1113..... College Algebra3

Social Science Electives (3 hours required)

HIST 2123..... U.S. History Before 18773

HIST 2133..... U.S. History After 18773

POLS 1143..... American Government.....3

PSYC 1403..... Introduction to Psychology.....3

SOCI 1303..... Introduction to Sociology3

General Elective (3/4 hours)

Any 3- or 4-hour credit course not taken to satisfy a stated program requirement

Recommended General Electives

BUSN 1103..... Introduction to Business3

BUSN 2113..... Principles of Management3

COMP 1113..... Computer Fundamentals3

MSCC Requirement (1 hour)

CSUR 1101 College Survival Skills 1

Technical Core (16 hours)

BUSN 1201..... Career Preparation1

COMP 1213..... Database Applications3

ISTC 1013..... IT Principles and Practices3

ISTC 1053..... Introduction to Web Page Design.....3

ISTC 2613..... Fundamentals of UNIX3

ISTC 2993..... Capstone Learning Experience 3

Cisco Concentration (27 hours)*

ISTC 1023	IT Essentials I	3
ISTC 1033	IT Essentials II	3
ISTC 1043	A+ Certification Prep	3
ISTC 1513	Cisco Network Fundamentals	3
ISTC 1523	Routing Protocols and Concepts	3
ISTC 2563	LAN Switching and Wireless	3
ISTC 2573	Accessing the WAN	3
ISTC 2623	UNIX System Administration I	3
ISTC 2633	UNIX System Administration II	3

*Successful completion of these courses qualifies students to take examinations as follows:

ISTC 1513, ISTC 1523, ISTC 2563, and ISTC 2573	CCNA exam.
ISTC 1023 and ISTC 1043	CompTIA A+ certification exam.

Recommended Course Sequence for Full-Time Students

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Mathematics III or MATH 1113 College Algebra, ISTC 1013 IT Principles and Practices, and ISTC 1053 Introduction to Web Page Design within the first 30 hours of college-level enrollment.

Cisco Networking

1st Year, 1st Semester

CSUR 1101	College Survival Skills	1
DMTH 1033	Developmental Mathematics III	3
or		
MATH 1113	College Algebra	3
ENGL 1113	English Composition I	3
ISTC 1013	IT Principles and Practices	3
ISTC 1513	Cisco Network Fundamentals	3
General Elective		3
Total 16		

1st Year, 2nd Semester

ENGL 1133	Writing for the Workplace	3
or		
ENGL 1123	English Composition II	3
ISTC 1023	IT Essentials I	3
ISTC 1053	Introduction to Website Design	3
ISTC 1523	Routing Protocols and Concepts	3
ISTC 2613	Fundamentals of UNIX	3
Total 15		

2nd Year, 1st Semester

BUSN 1201	Career Preparation	1
ENGL 2303	Oral Communication	3
ISTC 1033	IT Essentials II	3
ISTC 1043	A+ Certification Prep	3
ISTC 2563	LAN Switching and Wireless	3
ISTC 2623	UNIX System Administration I	3
Total 16		

2nd Year, 2nd Semester

COMP 1213.....Database Applications	3	
ISTC 2573..... Accessing the WAN	3	
ISTC 2633..... UNIX System Administration II.....	3	
ISTC 2993..... Capstone Learning Experience	3	
Social Science Elective.....	3	Total 15

Certified Internet Web Professional Option

Areas of emphasis in the AAS in Information Systems Technology: Certified Internet Web Professional Option include website analysis and design, e-learning tutorial design, principles of ecommerce, and website design including graphics and multimedia creation and enhancement. Students enrolled in the Certified Internet Web Professional option will take several certification examinations as course finals.

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will

- Plan a technical project in a way that is comprehensive, logical and reachable
- Apply the skillful use of common tools and technology relevant to their field of study
- Possess the ability to utilize current web technologies and application software to design and develop functional websites for e-commerce
- Demonstrate the professional/ethical behaviors of punctuality, of regular attendance, of respect for supervisors and co-workers, and of self-directed task-completion

Job Opportunities

E-commerce designer Multimedia Design Specialist
E-Learning Design Specialist Website Designer
IT Marketing/Sales

Program Requirements for Certified Internet Web Professional Option

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals3

or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills may take COMP 1113 as a general elective, during the first semester of enrollment.

General Education Courses (16 hours)

Communication (9 hours required)

ENGL 1113 English Composition I3

ENGL 1133..... Writing for the Workplace

or

ENGL 1123..... English Composition II3

ENGL 2303..... Oral Communication3

Mathematics (3 hours required)

DMTH 1083 Intermediate Algebra3
or
MATH 1113 College Algebra3

Social Science Electives (3 hours required)

SOCI 1303 Introduction to Sociology3
POLS 1143 American Government.....3
PSYC 1403 Introduction to Psychology.....3
HIST 2123 U.S. History Before 18773
HIST 2133 U.S. History After 18773

General Elective (3/4 hours)

Any 3- or 4-hour credit course not taken to satisfy a stated program requirement

BUSN 1103 Introduction to Business3
BUSN 2113 Principles of Management3
COMP 1113 Computer Fundamentals3

MSCC Requirement

CSUR 1101 College Survival Skills 1

Technical Core (16 hours)

COMP 1213 Database Applications3
BUSN1201..... Career Preparation1
ISTC 1013..... IT Principles and Practices3
ISTC 1053..... Introduction to Web Page Design3
ISTC 2173..... Flash for the Web
ISTC 2993..... Capstone Learning Experience3

CIW Concentration (27 hours)**

ISTC 1313..... Internet Business Fundamentals 3
ISTC 1323..... CIW Networking Foundations 3
ISTC 2123..... Digital Graphics for the Web..... 3
ISTC 2143 Javascript..... 3
ISTC 2183 Adv. Website Design 3
ISTC 2266 CIW Site Design and Methodology..... 6
ISTC 2323 CIW E-Commerce..... 3
ISTC 2333..... Introduction to E-Learning Design 3

****Successful completion of these courses qualifies students to take examinations as follows:**

ISTC 1053, ISTC 1313 and ISTC 1323CIW Foundations Exam
ISTC 2266CIW Design Exam
ISTC 2323CIW E-Commerce Certification Exam

Students who pass the Foundations and Design Exams earn a CIW Associate and Associate Design Specialist Certification. Students who also pass the E-Commerce Certification Exam earn certification as a Master Certified Internet Webmaster Designer. Additional information about these examinations may be obtained via www.ciwcertified.com

Recommended Course Sequence for Full-Time Students

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Note: All students must complete ENGL 1113 English Composition I, either DMTH 1033 Developmental Math III or MATH 1113 College Algebra, ISTC 1013 IT Principles and Practices, and ISTC 1053 Introduction to Web Page Design within the first 30 hours of college-level enrollment.

Certified Internet Web Professional (CIW)

1st Year, 1st Semester

CSUR 1101	College Survival Skills	1	
DMTH 1033	Developmental Math III	3	
<i>or</i>			
MATH 1113	College Algebra	3	
ENGL 1113	English Composition I	3	
ISTC 1013	IT Principles and Practices	3	
	Recommended General Elective	3	
	Social Science Elective	3	Total 16

1st Year, 2nd Semester

ENGL 1133	Writing for the Workplace		
<i>or</i>			
ENGL 1123	English Composition II	3	
COMP 1213	Database Applications	3	
ISTC 1053	Introduction to Web Page Design	3	
ISTC 1323	CIW Networking Foundations	3	
ISTC 1313	Internet Business Fundamentals	3	Total 15

2nd Year, 1st Semester

ENGL 2303	Oral Communication	3	
ISTC 2123	Digital Graphics for the Web	3	
ISTC 2143	Javascript	3	
ISTC 2266	CIW Site Design	6	Total 15

2nd Year, 2nd Semester

BUSN 1201	Career Preparation	1	
ISTC 2173	Flash for the Web	3	
ISTC 2183	Advanced Website Design	3	
ISTC 2323	E-Commerce	3	
ISTC 2333	Introduction to E-Learning Design	3	
ISTC 2993	Capstone Learning Experience	3	Total 16

Bachelor of Science in Information Technology

The Bachelor of Science in Information Technology is available on the MSCC campus through a partnership agreement with the University of Arkansas – Fort Smith. Additional

storage and location processes, inventory control and related skills sets needed for entry-level employment in warehouses and distribution centers.

Job Opportunities

Cargo and Freight Agents	Shipping, Receiving, & Traffic Clerks
Stock Clerk and Order Fillers	Transportation, Storage & Distribution Managers

Program Goals

- Interpret business practices as they apply to transportation, distribution, & logistics
- Utilize storage, inventory management, shipping & receiving, order fulfillment, commercial transportation, and customer service functions
- Operate storage and location processes and stock movement and placement systems

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

TRAN 1003	..... Introduction to Transportation, Distribution and Logistics	3
TRAN 1013	..... Fundamentals of Transportation Operations.....	3
TRAN 1043	..... Warehouse and Distribution Center Operations	3
TRAN 1063	..... Introduction to Logistics Operations.....	3
TRAN 1083	..... Inventory and Asset Control.....	3
TRAN 1093	..... Current Technology in Transportation, Distribution, & Logistics	3

Technical Certificate in Diesel Maintenance Technology

41 Hours

The Technical Certificate in Diesel Maintenance provides students with the technical skills expected in an entry-level position as a truck technician. Hours earned in this program will also apply toward completion of an Associate of Applied Science in General Technology.

Job Opportunities

Heavy Truck/Diesel	Service Technician	Service Manager
Mechanic	Service Writer	Specialty Technician
Parts Manager	Shop Supervisor	

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Know and apply the terminology common to heavy truck/diesel mechanics
- Apply the skillful use of common tools, test equipment, and technology for preventive maintenance
- Troubleshoot and repair fundamental heavy truck systems
- Demonstrate the professional/ethical behaviors of timeliness and self-directed task completion

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills may take COMP 1113 as a general elective during the first semester of enrollment.

General Education Core (6 hours)

ENGL 1113	English Composition I	3
DMTH 1033	Developmental Math III	3

College Requirement (1 hour)

CSUR 1101	College Survival Skills	1
-----------	-------------------------	---

Technical Requirements (34 Hours)

HTDM 1014	Preventive Maintenance	4
HTDM 1024	Electrical Systems	4
HTDM 1034	Brake Systems	4
HTDM 1044	Electrical Systems II	4
HTDM 1054	Diesel Engines I	4
HTDM 1063	HVAC Systems	3
HTDM 1073	Steering and Suspension	3
HTDM 1084	Powertrain	4
HTDM 1094	Diesel Engines II	4

Technical Certificate in Logistics and Supply Chain Technology

38 Hours

The Technical Certificate in Logistics and Supply Chain Technology provides students with the technical skills expected in an entry-level position in warehousing and distribution. Hours earned in this program will also apply toward completion of an Associate of Applied Science in Transportation and Logistics Technology or an Associate of Applied Science in General Technology

Job Opportunities

Cargo and Freight Agents	Shipping, Receiving, & Traffic Clerks
Stock Clerk and Order Fillers	Transportation, Storage & Distribution Managers

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Understand the practices, knowledge sets and skills necessary in the transportation, distribution, and logistics (TDL) industries
- Utilize technology to enhance decision-making skills and improve productivity

- Demonstrate the ability to think critically, identify problems, and propose solutions to TDL problems
- Acquire knowledge in the major functional areas of TDL and understand the interrelationships among them
- Apply the functions of transportation, distribution, & logistics on the free enterprise system

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills may take COMP 1113 as a general elective during the first semester of enrollment.

General Education Core (10 hours)

ENGL 1113	English Composition I	3
MATH 1113	College Algebra	3
PSCI	Physical Science Elective	4

College Requirement (1 hour)

CSUR 1101	College Survival Skills	1
-----------	-------------------------	---

Technical Requirements (27 hours)

TRAN 1003	Introduction to Transportation, Distribution & Logistics	3
TRAN 1013	Fundamentals of Transportation Operations	3
TRAN 1043	Warehousing and Distribution Center Operations	3
TRAN 1063	Introduction to Logistics Operations	3
TRAN 1083	Inventory and Asset Control	3
TRAN 1093	Current Technology in Transportation, Distribution and Logistics	3
TRAN 2093	Customer Service Excellence in Transportation, Distribution, and Logistics	3
TRAN 2003	Automated ID Technology Applications in TDL	3
TRAN 2053	Warehouse Automation Systems	3

Associate of Applied Science in Logistics and Supply Chain Technology

63 credit hours

The Associate of Applied Science Degree in Logistics and Supply Chain Technology provides graduates a practical curriculum that focuses on common practices, skills and knowledge necessary for employment in the TDL industries. Students will interact with professionals in the industry within a regionally prominent and recognized program that emphasizes distribution, logistics, and supply chain management. Students are expected to

exhibit the fundamental work ethics of regular attendance, adherence to directions, teamwork, and conscientious completion of assigned work.

Job Opportunities

Cargo and Freight Agents	Shipping, Receiving, & Traffic Clerks
Stock Clerk and Order Fillers	Transportation, Storage & Distribution Managers

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Understand the practices, knowledge sets and skills necessary in the transportation, distribution, and logistics industries
- Utilize technology to enhance decision-making skills and improve productivity
- Demonstrate the ability to think critically, identify problems, and propose solutions to TDL problems
- Acquire knowledge in the major functional areas of TDL and understand the interrelationships among them
- Apply the functions of transportation, distribution, & logistics on the free enterprise system

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills may take COMP 1113 as a general elective during the first semester of enrollment.

General Education Core (19 hours)

Communication (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
<i>or</i>		
ENGL 1133	Writing for the Workplace	3*
ENGL 2303	Oral Communication	3

*Students planning to transfer may need English Composition II.

Mathematics (3 hours required)

MATH 1113	College Algebra	3
-----------	-----------------	---

Science (4 hours required)

PSCI 1214	Physical Science	4
-----------	------------------	---

History Elective (3 hours; choose one of the following)

HIST 2123	U. S. History Before 1877	3
HIST 2133	U.S. History After 1877	3
POLS 1143	American Government	3

MSCC Requirement (2 hours)

BUSN 1201	Career Prep	1
CSUR 1101	College Survival Skills	1

Logistics and Supply Chain Requirements (36 hours)

BUSN 1103	..... Introduction to Business.....	3
BUSN 1423	..... Principles of Accounting I.....	3
BUSN 2033	..... Legal Environment of Business	3
ECON 2213	..... Macroeconomics	3
TRAN 1003	..... Introduction to Transportation, Distribution & Logistics.....	3
TRAN 1013	..... Fundamentals of Transportation Operations.....	3
TRAN 1043	..... Warehousing and Distribution Center Operations.....	3
TRAN 1063	..... Introduction to Logistics Operations.....	3
TRAN 1083	..... Inventory and Asset Control.....	3
TRAN 1093	..... Current Technology in Transportation, Distribution and Logistics	3
TRAN 2093	..... Customer Service Excellence in Transportation, Distribution, and Logistics	3
TRAN 2983	..... Internship	3
<i>or</i>		
TRAN 2993	..... Capstone.....	3

Logistics and Supply Chain Electives (6 hours)

Choose 2 of the following

BUSN 1433	..... Principles of Accounting II.....	3
ECON 2223	..... Microeconomics	3
TRAN 2003	..... Automated ID Technology Applications in TDLE.....	3
TRAN 2023	..... GPS and GIS Technology Applications in TDLE.....	3
TRAN 2043	..... International Operations.....	3
TRAN 2053	..... Warehouse Automation Systems.....	3
TRAN 2073	..... Risk Prevention and Safety Management.....	3

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College’s core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

1st Year, 1st Semester

CSUR 1101	..... College Survival Skills	1
ENGL 1113	..... English Composition I.....	3
MATH 1113	..... College Algebra	3
TRAN 1003	..... Introduction to Transportation, Distribution, & Logistics	3
TRAN 1013	..... Fundamentals of Transportation Operations	3
TRAN 1043	..... Warehouse & Distribution Center Operations	3
		Total 16

1st Year, 2nd Semester

ENGL 1123	..... English Composition II.....	3
<i>or</i>		
ENGL 1133	..... Writing for the Workplace	3
TRAN 1063	..... Introduction to Logistics Operations	3
TRAN 1083	..... Inventory and Asset Control	3

TRAN 1093	Current Technology in Transportation, Distribution, and Logistics Operations	3	
ECON 2213	Macroeconomics	3	Total 15

2nd Year, 1st Semester

BUSN 1423	Principles of Accounting I.....	3	
BUSN 2033	Legal Environment of Business	3	
ENGL 2303	Oral Communication	3	
	History Elective	3	
TRAN 2093	Customer Service Excellence in TDL	3	
	Logistics & Supply Chain Elective.....	3	Total 18

2nd Year, 2nd Semester

BUSN 1103	Introduction to Business.....	3	
BUSN 1201	Career Preparation	1	
PSCI 1214	Physical Science	4	
TRAN 2983	Internship	3	
or			
TRAN 2993	Capstone.....	3	Total 14

Renewable Energy

Certificate of Proficiency in Renewable Energy Technology

12 Credit Hours

The Certificate of Proficiency in RET introduces students to the concepts, methodologies, and sources of renewable energy needed to perform basic operations in the production of alternative forms of energy.

Job Opportunities

Energy Management Technician Renewable Energy Technician
Renewable Energy Maintenance Technician

Program Goals

- Demonstrate the ability to work in teams, think critically, identify problems, and propose solutions to RET problems
- Acquire knowledge in the primary disciplines of RET and understand the interrelationships among them
- Understand the practices, knowledge sets, and skills necessary in the various renewable energy technology industries
- Apply the principles of energy production and distribution in the classroom, simulations, and workplace situations.

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

ENER 1013	Introduction to Renewable Energy.....	3
ENER 1033	Biofuels	3
MANF 1033	Manufacturing Production Processes.....	3
MANF 1303	Industrial Safety	3

Technical Certificate in Renewable Energy Technology

27 Hours

The Technical Certificate in Renewable Energy Technology (RET) provides students with the technical skills expected in an entry-level position as an RET technician. Hours earned in this program will also apply toward completion of an Associate of Applied Science in Renewable Energy Technology.

Job Opportunities

Energy Management Technician	Renewable Energy Technician
Renewable Energy Maintenance Technician	Biofuel Process Technician

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will be able to

- Demonstrate the ability to work in teams, think critically, identify problems, and propose solutions to RET problems
- Acquire knowledge in the primary disciplines of RET and understand the interrelationships among them
- Understand the practices, knowledge sets, and skills necessary in the various renewable energy technology industries
- Apply the principles of energy production and distribution in the classroom, simulations, and workplace situations

Program Requirements

The following outline of requirements should be used as a planning worksheet. Students should take care to check course prerequisites in planning their program of study.

Program Prerequisite (3 hours)

COMP 1113 Computer Fundamentals or documented evidence of requisite computer knowledge and skills. Students without the required computer knowledge and skills may take COMP 1113 as a general elective during the first semester of enrollment.

General Education Core (6 hours)

ENGL 1113	English Composition I	3
DMTH 1033	Developmental Mathematics III	3

College Requirement (1 hour)

CSUR 1101	College Survival Skills	1
-----------------	-------------------------------	---

Technical Requirements (20 Hours)

ENER 1013	Introduction to Renewable Energy Technology	3
-----------------	---------------------------------------------------	---

ENER 1033	Biofuels	3
MANF 1303	Industrial Safety	3
MANF 1033	Manufacturing Production Processes	3
MANF 2012	Hydraulics & Pneumatics.....	2
MANF 2033	Applied Electricity & Electronics	3
MANF 2103	Process Controls for Integrated Systems	3

Associate of Applied Science in Renewable Energy Technology

64 Credit Hours

The Associate of Applied Science degree in Renewable Energy Technology provides graduates with the communication and computational skills, technical training, and work ethics needed for employment in entry-level positions in the Renewable Energy—Biofuel field. Safety procedures and practices are stressed throughout the curriculum, and students are expected to exhibit the fundamental work ethics of regular attendance, adherence to directions, teamwork, and conscientious completion of assigned work.

Job Opportunities

Energy Management Technician	Renewable Energy Technician
Renewable Energy Maintenance Technician	Biofuel Process Technician

Program Goals

In addition to satisfying the General Education Learning Outcomes listed on pages 89-90, program graduates will:

- Demonstrate the ability to work in teams, think critically, identify problems, and propose solutions to RET problems
- Acquire knowledge in the primary disciplines of RET and understand the interrelationships among them
- Understand the practices, knowledge sets, and skills necessary in the various renewable energy technology industries
- Apply the principles of energy production and distribution in the classroom, simulations, and workplace situations
- Identify questions that can be addressed and answered through scientific inquiry and technological design
- Write descriptions, explanations, predictions, and make models that are based on inquiry and evidence

Program Requirements

The following outline of requirements and electives should be used as a planning worksheet. Students should take care to check course prerequisites. COMP 1113 or demonstration of equivalent computer skills is a pre-requisite to enrollment in this program.

General Education Core (23 hours)

Communication (9 hours required)

ENGL 1113	English Composition I	3
ENGL 1123	English Composition II	3
or		
ENGL 1133	Writing for the Workplace	3*
ENGL 2303	Oral Communication	3

*Students planning to transfer may need English Composition II.

History Elective (3 hours; choose one of the following)

HIST 2123	U. S. History Before 1877	3
HIST 2133	U.S. History After 1877	3
POLS 1143	American Government	3

Mathematics (3 hours required; select one)

DMTH 1033	Developmental Mathematics III	3
MATH 1113	College Algebra	3

Science (8 hours required)

BIOL 1124	Plant Biology	4
CHEM 1314	Chemistry I	4

MSCC Requirement (2 hours)

CSUR 1101	College Survival Skills	1
BUSN 1201	Career Prep	1

Technical Requirements (39 hours)

BUSN 2113	Principles of Management	3
MANF 1033	Manufacturing Production Processes	3
MANF 1073	Manufacturing Equipment Maint. & Operation	3
MANF 1303	Industrial Safety	3
MANF 2012	Basic Hydraulics & Pneumatics	2
MANF 2033	Applied Electricity & Electronics	3
MANF 2044	Programmable Logic Controllers	4
MANF 2103	Process Controls for Integrated Systems	3
ENER 1013	Introduction to Renewable Energy Tech	3
ENER 1033	Biofuels	3
ENER 2003	Biomass and Feedstocks	3
ENER 2043	Bioprocess Practices	3
ENER 2983	Internship	3
or		
ENER 2993	Capstone	3

Recommended Course Sequence

The following course sequence assumes that students are unconditionally enrolled at the time of entry and ensures that students will satisfy the College's core academic and technical requirements within the specified time frame. Students needing developmental course work should refer to the guidelines for Conditional Enrollment on page 35.

Recommended Course Sequence

1st Year, 1st Semester

CSUR 1101	College Survival Skills	1
ENER 1033	Biofuels	3
ENGL 1113	English Composition I	3
DMTH 1033	Developmental Mathematics III	3
<i>or</i>		
MATH 1113	College Algebra	3
MANF 1033	Manufacturing Production Processes	3
MANF 2033	Applied Electricity & Electronics	3

1st Year, 2nd Semester

BIOL 1124	Plant Biology	4	
ENER 1013	Introduction to Renewable Energy Technology	3	Total 16
ENGL 1123	English Composition II	3	
<i>or</i>			
ENGL 1133	Writing for the Workplace	3	
MANF 1073	Manufacturing Equipment Maint. & Operation	3	
MANF 1303	Industrial Safety	3	Total 16

2nd Year, 1st Semester

CHEM 1314	Chemistry I	4	
ENER 2003	Biomass & Feedstocks	3	
ENGL 2303	Oral Communication	3	
MANF 2012	Basic Hydraulics & Pneumatics	2	
MANF 2044	Programmable Logic Controllers	4	Total 15

2nd Year, 2nd Semester

BUSN 1201	Career Prep	1	
BUSN 2113	Principles of Management	3	
ENER 2043	Bioprocess Practices	3	
ENER 2983	Internship	3	
<i>or</i>			
ENER 2993	Capstone	3	
History Elective		3	
MANF 2103	Process Controls for Integrated Systems	4	Total 16

Licensures

Mid-South Community College offers courses leading toward the following licensures:

Certified Nursing Assistant (CNA). Students who successfully complete CNAS 1014 Certified Nursing Assistant are eligible to take the State of Arkansas examination to become Long Term Care Certified Nursing Assistants.

Cisco Certified Network Associate (CCNA). Students who successfully complete the Certificate of Proficiency in Network Associate are eligible to take the CCNA examination.

CompTia A+. Students who complete ISTC 1033 IT Essentials II: Network Operating Systems Software and ISTC 1043 A+ Certification Prep are eligible to take the CompTia A+ examination.

Emergency Medical Technician (EMT). Students who successfully complete EMER 1007 Emergency Medical Technician-Basic (EMT-B) are eligible to take the National Registry examination for EMT-B certification.

Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT). Students who successfully complete the Certificate of Proficiency in Advanced Manufacturing are eligible to test for Certified Production Technician status by successfully meeting the four MSSC critical work functions modules for production: Safety, Quality Practices & Measurement, Manufacturing Processes and Production, and Maintenance.

Master Certified Internet Webmaster. Students who successfully complete the Certificate of Proficiency in Website Design are eligible to take the Certified Internet Professional Foundations examination and the Certified Internet Professional Design examination.

Occupational Safety and Health Administration (OSHA) Thirty Hour General Industry Safety Certification. Students will receive an overview of OSHA; how to conduct OSHA inspections, and tips on how to locate specific OSHA regulations. Each subpart of the OSHA General Industry Standards, including sections on basic electrical safety, fall protection, stairways & ladders, machine guarding, confined space entry, overhead & mobile cranes, PPE, and tools & equipment are covered in this certification course.

Truck Driving-Commercial Driver License (CDL). Students who successfully complete this training are eligible to take the Arkansas Commercial Vehicle Driving examination.

College Preparatory Programs

Adult Education

The Adult Education program of Mid-South Community College is committed to providing educational opportunities to all the citizens of Crittenden County and, in particular, to those who lack basic skills, do not have a high school diploma, or speak English as a second language. The College offers free testing, counseling, and classes for adults from the literacy level to basic skills to the Official GED® Test. The three main programs providing Adult Education services at MSCC include GED classes, testing, and Literacy tutoring.

GED Instruction

GED classes are held on campus Monday-Thursday from 8 a.m. to noon and 5-8 p.m. Day classes also are offered at the Crittenden County Detention Center, the Parole and Probation Office, and East Arkansas Youth Services (EAYS) in Marion (for students 16-17 only). Evening

Adult Education classes are offered at Gilmore City Hall, Whole Truth Church in Earle, and EAYS (students 16-17 only). Class times at the different sites vary, so students should call the College for current locations and times.

MSCC is a free Official GED® Testing Center for Arkansas residents. Students who pass the Official GED® Test will be recognized at the graduation ceremonies held in December. Additional information about the Adult Education program can be obtained by calling the Adult Education department number at (870) 733-6763.

Literacy Council

The Literacy Council of Crittenden County, administered by MSCC, is a non-profit educational program designed to help fight illiteracy in Crittenden County to break the cycle of non-readers' underachievement associated with poor reading skills. Its purpose is to enable non-reading adults to acquire reading and writing skills through free, student-centered instruction in basic literacy or English as a second language. Students are taught by trained volunteer tutors in one-on-one or small-group settings. Classes are held on the MSCC campus as well as in various off-campus locations, including community centers and businesses. Additional information about adult literacy services may be obtained by visiting the Literacy Council office on the MSCC campus or by calling (870) 733-6763.

Job-Related Skill Development

The Arkansas Career Readiness Certificate (CRC) Program allows citizens to measure their skills against those skills required for a particular job. Anyone who has taken the KeyTrain® assessment and would like to increase their score can come to Adult Education to use the KeyTrain® software to improve their basic skills before retaking the test. Computers and staff are available to assist in this process during daytime and evening hours. For more information please call the Adult Education department at (870) 733-6871.

Developmental Education

The College offers students who are under-prepared for college-level work the opportunity to develop basic knowledge and skills in English, reading, and mathematics by taking developmental education courses. Concurrently enrolled high school students may not enroll in developmental education courses except on an audit basis.

Students whose placement scores fall below 19 on the American College Testing (ACT) assessment or equivalent scores on the COMPASS or ASSET tests (listed on page 30) will benefit from review and other preparatory work before enrolling in college courses. Developmental Education courses include the following:

College Preparation

DSTU 1102 College Study Skills (Students placing in one or more developmental course must enroll in this course.)

Computer Skills

DKEY 1101 Computer Keyboarding DKEY 1201 Intro to Computers

Reading and English

DRDG 1003 Developmental Reading I
DENG 1033 Developmental English I
DRDG 1023 Developmental Reading II
DENG 1053 Developmental English II

Mathematics

DMTH 1013 Developmental Math I
DMTH 1023 Developmental Math I
DMTH 1033 Developmental Math I

Students enrolled in DENG 1033 who believe their writing skills are sufficiently strengthened to succeed in degree credit courses may seek the instructor's permission to test out of DENG 1053. To test out of DENG 1053, students must score a 75 or higher on the COMPASS English test and score a 4 or higher on an essay in relation to criteria established for entry into English Composition I.

Students enrolled in DRDG 1003 who believe their reading skills are sufficiently strengthened to succeed in degree credit courses may seek the instructor's permission to test out of DRDG 1023. To test out of DRDG 1023, students must score an 82 or higher on the COMPASS test. Note: Required placement scores or successful completion of both DRDG 1053 and DRDG 1023 are pre-requisites for most degree credit courses

All developmental math students begin in Developmental Mathematics I; however, they have the option with the option of pre-testing out of some modules and immediately moving to the next course in the sequence.

Students must earn grades of "C" or better to successfully complete Developmental Education courses. Academic advisors and Learning Success Center staff will work with students to develop appropriate class schedules and to identify resources to support their academic success.

Developmental course grades do not affect student's grade point averages for their award programs, but do affect their financial aid eligibility and academic standing.

Mid-South Community College Technical Center

The Mid-South Community College Technical Center (MSCCTC) is a workforce education center that offers college credit in technical programs to juniors and seniors in the Crittenden County area. The Center's curriculum serves as an extension of high school curricular offerings by providing students with hands-on training in technical fields. Services are offered at no cost to the students. Books, tuition, and fees are provided through the Center and are funded by local school districts and the Arkansas Department of Workforce Education.

Purposes

- To provide quality technical education programs to area high school juniors and seniors
- To help students make informed career choices and to provide relevant and supportive learning experiences
- To prepare students to enter the workforce upon high school graduation
- To encourage students to continue their education after high school

Admission Policy

Prospective students apply for admission to MSCCTC programs through their local high school counselor. Admission is based on grade point average, college entrance exam scores, school attendance, citizenship, motivation, ability, and aptitude.

All students are required to submit the following:

- Written recommendation from the high school principal, counselor, and classroom teacher
- Completed application for admission form
- Current high school transcript for each semester of enrollment
- ACT, PLAN, COMPASS, or ASSET exam scores
- Signed student/parent agreement
- Proof of immunization against mumps, measles, and rubella if born on or after January 1, 1957

Additional information about the Technical Center may be obtained by calling the Academic Office at (870) 733-6728.

Courses of Study

Advanced Manufacturing

First Year	
Fall Semester	MANF 1023 Design for Manufacturing
Spring Semester	MANF 1033 Manufacturing Production Processes
Second Year	
Fall Semester	MANF 1043 Manufacturing Power and Equipment Systems
Spring Semester	MANF 1053 Manufacturing Materials

Certified Internet Web Professional

First Year	
Fall Semester	ISTC 1313 Internet Business Fundamentals
	ISTC 1053 Introduction to Web Page Design
Spring Semester	ISTC 2266 CIW Site Design and Methodology
Second Year	
Fall Semester	ISTC 1323 CIW Networking Fundamentals
	ISTC 2123 Digital Graphics for the Web
Spring Semester	ISTC 1013 IT Principals and Practices
	ISTC 2173 Flash for the Web

Computer Engineering

First Year	
Fall Semester	ISTC 1013 IT Principals and Practices
	ISTC 1023 IT Essentials I: PC Hardware/Software
Spring Semester	ISTC 1033 IT Essentials II: Network Operating Systems Software
	ISTC 1043 A+ Certification Prep Course

Computer Engineering Second Year	
Fall Semester	ISTC 1513 Cisco Network Fundamentals
	ISTC 2613 Fundamentals of Unix
Spring Semester	ISTC 1523 Routing Protocols and Concepts
	ISTC 2623 Unix System Administrator I

Diesel Technology

First Year	
Fall Semester	HTDM 1014 Preventive Maintenance
Spring Semester	HTDM 1034 Brake Systems
Second Year	
Fall Semester	HTDM 1054 Diesel Engines I
Spring Semester	HTDM 1094 Diesel Engines II

Health Science Technology

First Year	
Fall Semester	MEDP 1013 Introduction to Medical Professions I
	MEDP 1033 Medical Terminology
Spring Semester	MEDP 1083 Medical Procedures
	MEDP 1113 Introduction to Medical Professions II
Second Year	
Fall Semester	MEDP 1044 Anatomy and Physiology
Spring Semester	CNAS 1014 Certified Nursing Assistant

Machining Technology

First Year	
Fall Semester	MACH 1003 Introduction to Blueprint Reading
	MANF 1012 Shop Essentials
Spring Semester	MACH 1023 Introduction to Metallurgy
	MACH 1063 Inspection and Testing
Second Year	
Fall Semester	MACH 1083 Introduction to Manual Machining
Spring Semester	MACH 1103 Introduction to CNC Machining

Renewable Energy Technology

First Year	
Fall Semester	ENER 1013 Introduction to Renewable Energy
Spring Semester	MANF 1303 Industrial Safety
Second Year	
Fall Semester	ENER 1033 Biofuels
Spring Semester	MANF 1033 Manufacturing Production Processes

Welding Technology

First Year	
Fall Semester	WELD 1002 Bench Work
	WELD 1103 Introduction to Welding Applications
Spring Semester	MANF 1303 Industrial Safety
	WELD 1123 Shielded Metal Arc Welding: SMAW

Welding Technology Second Year	
Fall Semester	WELD 1133 Gas Metal Arc Welding II: GMAW
Spring Semester	WELD 1143 Gas Tungsten Arc Welding I:GTAW Specialty Welding

Transfer Options

Mid-South Community College currently offers a complete college-transfer curriculum through its Associate of Arts (AA) degree program and through the Associate of Arts in Teaching degree program. Classes are scheduled both days and evenings to accommodate work and family schedules. Students can complete the first two years of basic college courses in English, mathematics, social science, fine arts, and humanities (while continuing to live and work at home).

Associate of Applied Science students now have a transfer option through the Bachelor of Applied Science (BAS) degree. Individual technical/occupational courses may transfer to four-year college and universities; however, the acceptance of transfer credit is the prerogative of the receiving institution. Students should obtain assurances in advance from the institution to which they wish to transfer.

MSCC University Center

The MSCC University Center is a partner in the Arkansas Delta Education and Training Consortium (ADTEC) University Center (<http://adtec-uc.org>). Through this partnership and partnerships with other four-year universities, students have access to a variety of baccalaureate and advanced degrees on the MSCC campus. Programs currently available include the following:

Arkansas State University

- Associate in Applied Science degree in Nursing
- Bachelor's degree in Applied Science
- Bachelor's degree in Middle Level Education
- Bachelor's degree in P-4 Education
- Bachelor's degree in Business Administration
- Bachelor's degree in Nursing
- Bachelor's degree in Radiologic Technology
- Master's degree in Business Administration
- Master's degree in K-12 Curriculum and Instruction
- Master's degree in Public School Administration
- Master's degree in Nursing

Arkansas Tech University

- Bachelor's degree in Emergency Management

Bethel University

- Online Bachelor's degree in Organizational Management

Franklin University

- Online Bachelor's degree in Accounting

Online Bachelor's degree in Applied Management
Online Bachelor's degree in Business Forensics
Online Bachelor's degree in Computer Science
Online Bachelor's degree in eMarketing
Online Bachelor's degree in Financial Management
Online Bachelor's degree in Forensic Accounting
Online Bachelor's degree in Healthcare Management
Online Bachelor's degree in Human Resources Management
Online Bachelor's degree in Information Technology
Online Bachelor's degree in Management
Online Bachelor's degree in Management Information Sciences
Online Bachelor's degree in Marketing
Online Bachelor's degree in Public Safety Management
Online Bachelor's degree in Web Development

Montana State University-Northern

Bachelor's degree in Diesel Technology

University of Central Arkansas

Bachelor's degree in Addiction Studies

University of Arkansas at Fort Smith

Bachelor's of Applied Science

Bachelor's of Science in Information Technology

University of Arkansas at Fayetteville

Bachelor's degree in Human Resource Development

Other Transfer Opportunities

Most colleges and universities will accept transfer credits from MSCC, which is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 N. LaSalle St., Suite 2400, Chicago, IL 60602-2504, (800) 621-7440.

However, the acceptance of transfer credit is the prerogative of the receiving institution. Students should obtain assurances in advance from the institution to which they wish to transfer.

Students can obtain current information about the transferability of MSCC courses to Arkansas public colleges and universities by accessing the Arkansas Course Transfer System (ACTS). Students are guaranteed the transfer of courses listed in ACTS and assured equitable treatment in the application of those credits for the admissions and degree requirements. This listing represents the minimum number of transfer courses that may be accepted by a particular Arkansas institution. Students wishing to transfer a course not listed in ACTS should contact the receiving institution to determine transferability.

Course transferability is not guaranteed for courses listed in ACTS as "No Comparable Course." Additionally, courses with a "D" frequently do not transfer, and institutional policies may

vary. ACTS may be accessed on the Internet by going to the Arkansas Department of Higher Education website (<http://adhe.edu>) and selecting Course Transfer.

The MSCC Registrar's Office serves as a resource for students who are planning to transfer and provides information and a current list of colleges and universities accepting MSCC credits in transfer.

Workforce and Economic Development

ADTEC Solutions Group

Mid-South Community College and Arkansas Northeastern College, members of the Arkansas Delta Training and Educational Consortium (ADTEC), have combined their resources to expand and enhance the customized workforce training services for the colleges' combined service regions. Both Mid-South and Arkansas Northeastern will operate their services under the name of ADTEC Solutions Group.

The ADTEC Solutions Group supports a variety of continuing education opportunities for personal, professional, and workforce development through open-enrollment credit courses, specialized programs, non-credit online courses, and contract offerings customized to meet specific business or industry needs. Many courses carry Continuing Education Units (CEU's); some carry college credits or enable students to challenge college courses through credit by examination.

Dynamic technological advances, increased competition for better paying jobs, and a global marketplace are but a few of the challenges facing today's workforce and workplace. As the intensity of these challenges increases, employers and workers will need to update existing skills and acquire new ones. The ADTEC Solutions Group provides training programs to meet those needs.

Seminars, workshops, customized training, short-term credit and non-credit training, and workforce readiness programs are part of the options available. Customized training for employers can be developed to meet an endless variety of training needs and can be offered during regular class hours or through creative scheduling arrangements. Programs can be conducted on the MSCC campus or at an employer's worksite. Several options may be available to assist employers in meeting the costs associated with training.

The ADTEC Solutions Group supports business and industry by providing a variety of services, including the following:

AchieveGlobal Customer Service Supervisory and Workforce Development Training—leadership, workskills and customer service training courses.

Conference Center Services—Satellite, video and conference capabilities for business training and special events.

Customized Business and Industry Training—Training developed directly in response to employers' needs.

Development Dimensions International (DDI) Supervisory and Workforce Development Training DDI leadership, work skills and customer-service training courses.

Employment Skills Training—Short-term, credit and non-credit vocational training for individuals seeking entry-level employment in specific fields.

Existing Workforce Training Program (EWTP) Grants—Financial assistance in the form of grants or income tax credits to assist Arkansas industries upgrade the skills of their existing workforce through customized training.

Mid-South Business and Industry Council, Inc. -- The Mid-South Business and Industry Council, Inc. is a business and industry training consortium created in 2002 to address the training needs of incumbent workers and to improve the overall quality of the workforce in Crittenden County. This consortium is a 501(c) 3 entity run by local business and industry which uses The ADTEC Solutions Group as its primary educational provider. Additionally, the consortium serves as an advisory group to Mid-South Community College by providing input regarding the business and technical educational needs in Crittenden County.

On-line courses -- The ADTEC Solutions Group offers more than 300 online courses on a variety of subjects ranging from the Internet, grant writing, web page design, healthcare professional development, K-12 faculty professional development, and law and legal careers.

Pre and Post Employment Skills Assessments and Training— Using KeyTrain and WorkKeys, as well as a variety of dexterity assessments, trainers can help businesses screen potential employees for applicable skills and provide training and education to address identified skills deficits through short-term, credit and non-credit courses.

Additional information about courses and services may be obtained by contacting The ADTEC Solutions Group office at (870) 733-6583.

Regional Partnerships

MSCC is committed to the economic development of the Arkansas Delta Region by helping ensure a world-class workforce and by helping attract new industry to the region. In support of those goals, the college participates in a number of regional partnerships which support economic growth and provides comprehensive array of training services for business and industry.

Arkansas Delta Training & Education Consortium—ADTEC

The Arkansas Delta Training & Education Consortium (ADTEC), established in late 2005, provides for a coordinated, regional response to workforce development in the Arkansas Delta. ADTEC is a partnership of five community colleges (Mid-South Community College, Arkansas Northeastern College, East Arkansas Community College, Arkansas State University-Newport, and Phillips Community College of the University of Arkansas System) that are committed to raising the skill level of the workforce and transforming the economy of the Arkansas Delta. In 2006, ADTEC was incorporated into the Arkansas Delta Workforce Innovations in Economic Development (ADWIRED) initiative as the primary workforce training and education provider in the ADWIRED region. In 2007, ADTEC was awarded the prestigious Southern Growth Policy Board Innovator of the Year Award; in 2008, it received the Department of Labor's Recognition of Excellence Award for Developing a Regionally Focused Workforce Strategy, and in 2010, the Institute of Higher Education at the University of Florida Community College Bellwether Award

for Workforce Development. ADTEC is a workforce development consortium that uses proven, successful strategies to implement training and education projects.

ADTEC is a unique partnership in that all participating community colleges collaborate to share curriculum, support strategies, and a wide range of industry input regarding training needs while pursuing the ultimate goal of growing jobs and economic opportunity in the region. ADTEC is able to provide a broad range of training services at a lower overall cost. Continuous industry feedback is an essential element of this workforce development strategy. This strategy is used to develop career pathways which have employable exit-points at 1) high school graduation and award of a certificate of proficiency; 2) award of a technical certificate; 3) award of an Associate of Applied Science Degree; and 4) award of a Bachelor of Applied Science Degree. Students may stop out at any exit point with a college credential in hand, go to work in the selected field of study, and return at any time (whether employed or not) to re-enter the pathway and achieve the next educational level.