

Industrial Sciences & Technology (Mechanical Maintenance)

Associate of Applied Science (A.A.S.)

Transfer Options

- Arkansas State University-Jonesboro
 - BAS Organizational Supervision
- Oklahoma State University Institute of Technology
 - Bachelor of Technology Applied Technical Leadership
- Southern Arkansas University
 - BS Engineering Physics-Engineering Technology Option
- University of Arkansas-Fort Smith
 - Bachelor of Applied Science

Graduates from this program are prepared for employment in general maintenance in a plant or industrial facility. The Industrial Technologies program is a known leader in training students to meet industry needs. The program is strongly supported by the companies in the Highland Industrial Park. Located inside the Park, SAU Tech has the ability to work directly with plant managers providing employee training and identifying employment needs. In doing this, SAU Tech has been strongly encouraged by Lockheed Martin Missiles & Fire Control Corporation, General Dynamics Corporation, Aerojet Rocketdyne and others to provide quality mechanical maintenance training to current employees and to seek out students for employment in the manufacturing industry.

Mission

The mission of the Industrial Sciences & Technology program is to provide quality education and training that enhance employment opportunities and increase the personal development of students including opportunity to complete a four-year degree.

Program Goals

The Associate of Applied Science in Industrial Sciences & Technology will provide students the knowledge and skills necessary to obtain entry level employment in the applicable field of study and the first two years of a university program.

Program Learning Outcomes (PLOs)

- PLO 1. An ability to use the techniques, skills, and modern tools necessary for the appropriate field of study.
- PLO 2. An ability to apply knowledge of mathematics, science, and engineering.
- PLO 3. An ability to identify, formulate, and solve problems.
- PLO 4. An understanding of professional and ethical responsibility.
- PLO 5. An ability to communicate effectively.



**DEGREE PLAN
2021-2022**

Developmental Coursework

Course Number	Course Title	Required	Enrolled	Completed
ENGL 0121	Composition I Lab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MATH 0121	College Algebra Lab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Semester I (16 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
¹ EE1 003	N/A	Introduction to Basic Electricity	<input type="checkbox"/>	<input type="checkbox"/>
¹ MD 1033	N/A	Machine Tools	<input type="checkbox"/>	<input type="checkbox"/>
^{1,3} MD 1073	N/A	NCCER	<input type="checkbox"/>	<input type="checkbox"/>
^{1,2} MD 1303	N/A	Basic Welding	<input type="checkbox"/>	<input type="checkbox"/>
¹ MD 2603	N/A	Industrial Safety	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1021	N/A	Student Success I	<input type="checkbox"/>	<input type="checkbox"/>

Semester II (16 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
¹ ENGL 1113	ENGL 1013	Composition I [P1]	<input type="checkbox"/>	<input type="checkbox"/>
^{1,2} MD 1323	N/A	Intermediate Welding	<input type="checkbox"/>	<input type="checkbox"/>
¹ MD 1403	N/A	Basic Blueprint Reading	<input type="checkbox"/>	<input type="checkbox"/>
¹ MD 2003	N/A	Millwright Level I	<input type="checkbox"/>	<input type="checkbox"/>
¹ MIS 1003	CPSI1003	Introduction to Computers	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1031	N/A	Student Success II	<input type="checkbox"/>	<input type="checkbox"/>

Semester III (16 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
EM 2924	N/A	Programmable Logic Controller 1	<input type="checkbox"/>	<input type="checkbox"/>
³ MD 1052	N/A	Intro to Preventive Maintenance	<input type="checkbox"/>	<input type="checkbox"/>
MD 2013	N/A	Millwright Level II [P3]	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1041	N/A	Student Success III	<input type="checkbox"/>	<input type="checkbox"/>

Choose three (3) hours from these courses:

CO 2213	ENGL 2023	<input type="checkbox"/> Technical Writing [P2]	<input type="checkbox"/>	<input type="checkbox"/>
ENGL 1123*	ENGL 1023	<input type="checkbox"/> Composition II [P2]		

Choose three (3) hours from these courses:

MATH 1023*	MATH 1103	<input type="checkbox"/> College Algebra [P1]	<input type="checkbox"/>	<input type="checkbox"/>
MATH 1063	MATH 1113	<input type="checkbox"/> Math Reasoning		

*Students wishing to transfer course work in this degree to Southern Arkansas University for the BS in Engineering Physics-Industrial Technology Option must take Composition II and College Algebra.

Semester IV (15 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
CE 2403	N/A	Internship	<input type="checkbox"/>	<input type="checkbox"/>
² MD 1343	N/A	Advanced Welding	<input type="checkbox"/>	<input type="checkbox"/>
MD 2023	N/A	Millwright Level III [P4]	<input type="checkbox"/>	<input type="checkbox"/>
³ MD 2403	N/A	Fluidics	<input type="checkbox"/>	<input type="checkbox"/>

Choose three (3) hours from these courses:

CJ1 003	CRJU 1023	<input type="checkbox"/> Introduction to Criminal Justice	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/> ECON [P5], GEOG, HIST, PSCI, PSYC, or SOC prefix		

Total Credit Hours: 63

¹Indicates Technical Certificate in **Mechanical Maintenance (30 hours)**.

²Indicates Certificate of Proficiency in **Welding Technology (9 hours)**.

³Indicates Certificate of Proficiency in **Mechanical Maintenance (8 hours)**.

General Information

- Developmental coursework may be required in addition to the courses required for this degree and/or certificate(s).
- A [P] indicates that a prerequisite is required before the course can be taken. Refer to the prerequisites table listed below the degree plan or the course description in the College Catalog to determine the prerequisite.

General Requirements

- This degree requires successful completion of **63** credit hours.
- All degree-seeking students are required to take Student Success.
- A minimum 2.00 cumulative grade point average is required for graduation.

Residency Requirement

The student is required to complete a minimum of 15 semester hours in residence at SAU Tech for associate degrees and technical certificates and half of the credit hours required for certificates of proficiency as well as complete all other graduation requirements. Students who wish to pursue additional degrees must complete a minimum of 15 credit hours of difference between the degrees.

ACTS Course Numbers

The Arkansas Course Transfer System (ACTS) contains information about the transferability of courses within Arkansas public colleges and universities. Students are guaranteed the transfer of applicable credits and equitable treatment in the application of credits for admissions and degree requirements. Go to <http://acts.adhe.edu> for more information.

PREREQUISITES

P1	Refer to the SAU Tech Placement Plan.
P2	ENGL 1113-Composition I
P3	MD 2003-Millwright Level I
P4	MD 2013-Millwright Level II
P5	MATH 1023-College Algebra or MATH 1063-Math Reasoning.