

# Industrial Sciences & Technology

Associate of Applied Science (A.A.S.)  
(Emphasis: Mechanical Maintenance)

## Transfer Options

- Arkansas State University-Jonesboro
  - BAS Organizational Supervision
- Southern Arkansas University
  - BS Engineering Physics-Industrial 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 Goal

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 Outcomes

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

## 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.



**DEGREE PLAN**  
**2019-2020**

## Developmental Coursework

Course Number	Course Title
CO0143	Introduction to Language Arts
CO0243	Writing Workshop
MATH0133	Transitional Math I
MATH0233	Transitional Math II

## Semester I (16 hours)

Course Number	ACTS#	Course Title
<sup>1</sup> EE1003	N/A	Introduction to Basic Electricity
<sup>1</sup> MD1033	N/A	Machine Tools
<sup>1</sup> MD1073	N/A	NCCER
<sup>1,2</sup> MD1303	N/A	Basic Welding
<sup>1</sup> MD2603	N/A	Industrial Safety
GSTD1021	N/A	Student Success I

## Semester II (16 hours)

Course Number	ACTS#	Course Title
<sup>1</sup> ENGL1113	ENGL1013	Composition I [P1]
<sup>1,2</sup> MD1323	N/A	Intermediate Welding
<sup>1</sup> MD1403	N/A	Basic Blueprint Reading
<sup>1</sup> MD2003	N/A	Millwright Level I
<sup>1</sup> MIS1003	CPSI1003	Introduction to Computers
GSTD1031	N/A	Student Success II

## Semester III (16 hours)

Course Number	ACTS#	Course Title
EM2924	N/A	Programmable Logic Controller 1
MD1052	N/A	Preventive Maintenance
MD2013	N/A	Millwright Level II [P3]
GSTD1041	N/A	Student Success III
<i>Choose three (3) hours from these courses:</i>		
CO2213	ENGL2023	Technical Writing [P3]
ENGL1123*	ENGL1023	Composition II [P3]
<i>Choose three (3) hours from these courses:</i>		
MATH1023*	MATH1003	College Algebra [P1]
MATH1063	MATH1103	College Math [P1]

## Semester IV (15 hours)

Course Number	ACTS#	Course Title
CE2403	N/A	Internship
<sup>2</sup> MD1343	N/A	Advanced Welding
MD2023	N/A	Millwright Level III [P4]
MD2403	N/A	Fluidics
CJ1003	CRJU1023	Introduction to Criminal Justice <b>or</b> ECON(Economics), GEOG, HIST, PSCI, PSYC, or SOC prefix

\*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.

<sup>1</sup>Indicates Technical Certificate in **Mechanical Maintenance (30 hours)**.

<sup>2</sup>Indicates Certificate of Proficiency in **Welding Technology (9 hours)**.

## PREREQUISITES

P1	Refer to the SAU Tech Placement Plan.
P2	ENGL1113-Composition I
P3	MD2003-Millwright Level I
P4	MD2013-Millwright Level II

**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.
- Satisfaction of all financial obligations due to the college is required for graduation.

**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.