

# Industrial Sciences & Technology

Associate of Applied Science (A.A.S.)  
(Emphasis: Production Technician)



**DEGREE PLAN**  
**2021-2022**

## Transfer Options

- Arkansas State University-Jonesboro
  - BAS Organizational Supervision
- University of Arkansas Fort Smith
  - Bachelor of Applied Science

Southern Arkansas University Tech's Production Technician program provides skills-based training that leads to demonstrative mastery of the core competencies of manufacturing production at the front-line (entry-level through front-line supervisor) through successful completion of the certification assessments. The goal of the certification program is to raise the level of performance of production workers both to assist the individual in finding higher-wage jobs and to help employers ensure their workforce increases the company's productivity and competitiveness.

The program consists of four individual courses and certificate modules: Safety; Quality Practices & Measurement; Manufacturing Processes & Production; and Maintenance Awareness. Candidates must earn the four individual certificates to receive the full Manufacturing Skills Standards Council (MSSC) CPT certification.

The four certification classes are available through SAU Tech's Workforce Training Department. Successful passing of each certification exam can be used to receive college credit for the four classes mentioned above resulting in completion of the Certification of Proficiency in Production Technician. Students wishing to receive the Technical Certificate in Production Technician will be required to complete Composition I, College Math and six additional hours of technical coursework. Completion of the remaining required coursework results in completion of the Associate of Applied Science degree in Industrial Sciences and Technology with an emphasis in Production Technician.

## 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 Learning Outcomes (PLOs)

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

## 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
<sup>1,2</sup> CPT 1003	N/A	Production Safety	<input type="checkbox"/>	<input type="checkbox"/>
<sup>1</sup> MD 1073	N/A	NCCER	<input type="checkbox"/>	<input type="checkbox"/>
MD 1303	N/A	Basic Welding	<input type="checkbox"/>	<input type="checkbox"/>
<sup>1</sup> MD 2603	N/A	Industrial Safety	<input type="checkbox"/>	<input type="checkbox"/>
MIS 1003	CPSI 1003	Introduction to Computers	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1021	N/A	Student Success I	<input type="checkbox"/>	<input type="checkbox"/>

## Semester II (15 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
<sup>1,2</sup> CPT 1043	NA	Manufacturing Processes and Production	<input type="checkbox"/>	<input type="checkbox"/>
MD 1052	N/A	Intro to Preventive Maintenance	<input type="checkbox"/>	<input type="checkbox"/>
MD 1323	N/A	Intermediate Welding	<input type="checkbox"/>	<input type="checkbox"/>
MD 1403	N/A	Basic Blueprint Reading	<input type="checkbox"/>	<input type="checkbox"/>
<sup>1</sup> ENGL 1113	ENGL 1013	Composition I [P1]	<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
<sup>1,2</sup> CPT 2003	N/A	Quality Practices and Measurements	<input type="checkbox"/>	<input type="checkbox"/>
CO 2213	ENGL 2023	Technical Writing [P2]	<input type="checkbox"/>	<input type="checkbox"/>
<sup>1</sup> MATH 1063	MATH 1103	Math Reasoning	<input type="checkbox"/>	<input type="checkbox"/>
MD 1343	NA	Advanced Welding	<input type="checkbox"/>	<input type="checkbox"/>
MD 2403	N/A	Fluidics	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1041	N/A	Student Success III	<input type="checkbox"/>	<input type="checkbox"/>

## Semester IV (13 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
<sup>1,2</sup> CPT 2013	NA	Maintenance Awareness	<input type="checkbox"/>	<input type="checkbox"/>
EM 2924	N/A	Programmable Logic Controller 1	<input type="checkbox"/>	<input type="checkbox"/>
CE 2403	N/A	Internship	<input type="checkbox"/>	<input type="checkbox"/>
<i>Choose three (3) hours from these courses:</i>				
CJ 1003	CRJU 1023	<input type="checkbox"/> Introduction to Criminal Justice <input type="checkbox"/> ECON [P3], GEOG, HIST, PSCI, PSYC, or SOC prefix	<input type="checkbox"/>	<input type="checkbox"/>

**Total Credit Hours: 60**

<sup>1</sup> Indicates Technical Certificate in **Production Technician (24 hours)**.

<sup>2</sup> Indicates Certificate of Proficiency in **Production Technician (12 hours)**.

## PREREQUISITES

P1	Refer to the SAU Tech Placement Plan.
P2	ENGL1113-Composition I
P3	MATH 1023 or MATH 1063.

### **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 **60** 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.

### **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.