

# Engineering Technology

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
- University of Arkansas-Fort Smith
  - Bachelor of Applied Science

This degree plan is highly applied in nature. Students who complete this degree will have options to transfer to Southern Arkansas University's BS in Engineering Technology and serve as pre-engineering with potential of transferring to engineering programs at four-year colleges. Graduates of this program can also go directly to work for industry as an engineering assistant or in quality control.

## Program Goals

- Apply basic engineering theories and concepts creatively to analyze and solve technical problems.
- Utilize with a high degree of knowledge and skill equipment, instruments, software, and technical reference materials currently used in industry.
- Communicate effectively using developed writing, speaking and graphics skills.
- Assimilate and practice the concepts and principles of working in a team environment.
- Obtain employment within the discipline or matriculate to a four-year program in engineering or industrial technology.

## Program Learning Outcomes (PLOs)

Upon completion of the this program, graduates will be able to:

- PLO 1. Apply the knowledge, techniques, skills and modern tools of the concentration of study to specifically defined engineering technology activities.
- PLO 2. Demonstrate the knowledge of mathematics, science, engineering and technology by applying it to engineering technology problems using developed practical knowledge.
- PLO 3. Conduct and report the results of standard tests and measurements, and conduct, analyze, and interpret experiment or project results.
- PLO 4. Function effectively as a member of a technical team.
- PLO 5. Identify, analyze and solve specifically defined engineering technology-based problems
- PLO 6. Employ written, oral and visual communication in a technical environment.



## 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 (15 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
EN 1003	N/A	Introduction to Engineering	<input type="checkbox"/>	<input type="checkbox"/>
ENGL 1113	ENGL1013	Composition I [P1]	<input type="checkbox"/>	<input type="checkbox"/>
MATH 1045	MATH 1305	Pre-Calculus Math [P1]	<input type="checkbox"/>	<input type="checkbox"/>
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 (17 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
CO 2213	ENGL 2023	Technical Writing [P2]	<input type="checkbox"/>	<input type="checkbox"/>
EN 1023	N/A	Engineering Concepts I	<input type="checkbox"/>	<input type="checkbox"/>
EN 2043	N/A	Robotic Applications	<input type="checkbox"/>	<input type="checkbox"/>
EM 2924	N/A	Programmable Logic Control I	<input type="checkbox"/>	<input type="checkbox"/>
MATH 1033	MATH 1203	Plane Trigonometry [P1]	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1031	N/A	Student Success II	<input type="checkbox"/>	<input type="checkbox"/>

### Semester III (15 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
CPT 2003	N/A	Quality Practices & Measurements	<input type="checkbox"/>	<input type="checkbox"/>
EE 1323	N/A	DC/AC Circuit Analysis for Engineering	<input type="checkbox"/>	<input type="checkbox"/>
MATH1525	MATH 2405	Calculus & Analytic Geometry [P1]	<input type="checkbox"/>	<input type="checkbox"/>
MD 2403	N/A	Hydraulics & Pneumatics (Fluidics)	<input type="checkbox"/>	<input type="checkbox"/>
GSTD 1041	N/A	Student Success III	<input type="checkbox"/>	<input type="checkbox"/>

### Semester IV (15 hours)

Course Number	ACTS#	Course Title	Enrolled	Completed
CPT 1043	N/A	Manufacturing Processes & Production	<input type="checkbox"/>	<input type="checkbox"/>
EN 2063	N/A	Applied Statics [P3]	<input type="checkbox"/>	<input type="checkbox"/>
MD 1403	N/A	Basic Blueprint Reading	<input type="checkbox"/>	<input type="checkbox"/>
SPCH 1113	SPCH 1003	Principles of Speech [C1]	<input type="checkbox"/>	<input type="checkbox"/>
Choose three (3) hours from these courses:				
PSYC 2003	PSYC 1103	<input type="checkbox"/> General Psychology	<input type="checkbox"/>	<input type="checkbox"/>
SOC 2003	SOCI 1013	<input type="checkbox"/> Introduction to Sociology	<input type="checkbox"/>	<input type="checkbox"/>

Total Credit Hours: 62

### PREREQUISITES

P1	Refer to the SAU Tech Placement Chart.
P2	ENGL1113-Composition I.
P3	MATH1033-Plane Trigonometry and MATH1525-Cal & Analytic Geometry I.

### CO-REQUISITES

C1	ENGL 1113 OR ENGL 1113 and ENGL 0121.
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**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 **62** 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.