

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

1. Apply basic engineering theories and concepts creatively to analyze and solve technical problems.
2. Utilize with a high degree of knowledge and skill equipment, instruments, software, and technical reference materials currently used in industry.
3. Communicate effectively using developed writing, speaking and graphics skills.
4. Assimilate and practice the concepts and principles of working in a team environment.
5. 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
2020-2021

Developmental Coursework

Course Number	Course Title
ENGL0121	Composition I Lab
MATH0121	College Algebra Lab

Semester I (16 hours)

Course Number	ACTS#	Course Title
EN1003	N/A	Introduction to Engineering
ENGL1113	ENGL1013	Composition I [P1]
MATH1023	MATH1103	College Algebra [P1]
MD2603	N/A	Industrial Safety
GSTD1021	N/A	Student Success I
<i>Choose three (3) hours from these courses:</i>		
PSYC2003	PSYC1103	General Psychology
SOC2003	SOCI1013	Introduction to Sociology

Semester II (17 hours)

Course Number	ACTS#	Course Title
CO2213	ENGL2023	Technical Writing [P3]
EN1023	N/A	Engineering Concepts I
EN2043	N/A	Robotic Applications
EM2924	N/A	Programmable Logic Control I
MATH1033	MATH1203	Plane Trigonometry [P1]
GSTD1031	N/A	Student Success II

Semester III (15 hours)

Course Number	ACTS#	Course Title
EE1323	N/A	DC/AC Circuit Analysis for Engineering
MATH1525	MATH2405	Calculus & Analytic Geometry [P1]
MD2403	N/A	Hydraulics & Pneumatics (Fluidics)
SPCH1113	SPCH1003	Principles of Speech [P2]
GSTD1041	N/A	Student Success III

Semester IV (15 hours)

Course Number	ACTS#	Course Title
CPT1023	N/A	Manufacturing Processes & Production
CPT1043	N/A	Quality Practices & Measurements
EN2063	N/A	Applied Statics [P4]
MD1403	N/A	Basic Blueprint Reading
EN2033	N/A	Welding Engineering

Total Credit Hours: 63

PREREQUISITES

P1	Refer to the SAU Tech Placement Chart.
P2	Eligible for ENGL1113-Composition I.
P3	ENGL1113-Composition I.
P4	MATH1033-Plane Trigonometry and MATH1525-Cal & Analytic Geometry I

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.