

Industrial Sciences & Technology (Nondestructive Testing)

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

Nondestructive Testing (NDT) is an emphasis area under the Associate of Applied Science in Industrial Sciences and Technology.

Nondestructive testing is testing that does not destroy the test object. NDT is vital for constructing and maintaining all types of components and structures. NDT students develop the knowledge and skills required to perform sophisticated testing techniques such as eddy current, x-ray, liquid dye penetrant, magnetic particle, and ultrasonic testing that are currently required in many different industry fields.

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
2020-2021

Developmental Coursework

Course Number	Course Title
ENGL0121	Composition I Lab
MATH0131	Mathematical Reasoning Lab

Semester I (16 hours)

Course Number	ACTS#	Course Title
¹ ENGL1113	ENGL1013	Composition I [P1]
¹ MD1073	N/A	NCCER
¹ MD2603	N/A	Industrial Safety
¹ MIS1003	CPSI1003	Introduction to Computers
GSTD1021	N/A	Student Success I
^{1,2} NDT1003	NA	Radiation Safety

Semester II (16 hours)

Course Number	ACTS#	Course Title
CO2213	ENGL2023	Technical Writing [P2]
¹ MATH1063	MATH1113	Mathematical Reasoning [P1]
MD1403	N/A	Basic Blueprint Reading
GSTD1031	N/A	Student Success II
EE1003	NA	Introduction to Basic Electricity
^{1,2} NDT1013	NA	Radiographic Testing Level I [P4]

Semester III (16 hours)

Course Number	ACTS#	Course Title
EM2924	N/A	Programmable Logic Controller 1
EN1003	NA	Introduction Engineering
MD1052	N/A	Introduction to Preventive Maintenance
GSTD1041	N/A	Student Success III
^{1,2} NDT2013	NA	Radiographic Testing Level II [P3]
¹ NDT2033	NA	Ultrasonic Testing I [P4]

Semester IV (12 hours)

Course Number	ACTS#	Course Title
CE2403	N/A	Internship
CJ1003	CRJU1023	Introduction to Criminal Justice or ECON(Economics), GEOG, HIST, PSCI, PSYC, or SOC prefix
EN2043	NA	Robotic Applications
¹ NDT2023	NA	Magnetic Particle/Liquid Penetrant Testing [P4]

Total Credit Hours: 60

¹Indicates Technical Certificate in **Nondestructive Testing (30 hours)**.

²Indicates Certificate of Proficiency in **Nondestructive Testing (9 hours)**.

PREREQUISITES

P1	Refer to the SAU Tech Placement Plan.
P2	ENGL1113-Composition I
P3	NDT1013-Radiographic Testing Level I.
P4	NDT1003-Radiation Safety.

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.

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.