THE ASSOCIATE OF APPLIED SCIENCE (A.A.S.)

The Associate of Applied Science Degree is designed for employment purposes, and it should not be assumed that the degree or the courses in the degree can be transferred to another institution. While a few institutions have recently begun to accept some courses in A.A.S. programs, the general rule is that courses in the A.A.S. degree are not accepted in transfer toward bachelor's degrees. Students to whom transfer is important should get assurance in writing in advance from the institution to which they wish to transfer and be aware that they may be required to complete additional lower-division courses to meet specified prerequisite course requirements for their chosen baccalaureate degree program upon Arkansas public university transfer.

ATTENTION STUDENTS: PLEASE SEE CURRENT CATALOG FOR ALL FEES AND CHARGES ASSOCIATED WITH THIS DEGREE.

DEGREE PLAN
ASSOCIATE OF APPLIED SCIENCE IN MECHATRONICS
Degree Code: 3150; CIP Code: 15.0499

Mechatronics integrates electronics, mechanics, pneumatics, hydraulics, and computer control systems to create new and improved automated manufacturing production systems. This program is designed for people who are interested in plant maintenance, set up, installation, and assembly. These jobs are found in the manufacturing, medical, electronics, agriculture, and automotive industries.

Program Learning Outcomes for A.A.S. Mechatronics Program

1. Students will comprehend and communicate using standard technical and engineering terminology.
2. Conduct Standard tests, measurements, and experiments using appropriate instruments, settings, and tools where necessary.
3. Demonstrate basic computer skills, navigation, and software skills related to control systems.
4. Students will demonstrate employability (soft) skills.
5. Interpret schematic symbols, basic schematic diagrams, blueprints and other technical documents to properly assemble, adjust, align and test a power transmission assembly control system.
6. Demonstrate proficiency recognizing potential hazardous situations proper use of personal protective equipment (PPE), and appropriate Lockout/Tag-out/Block-out procedures.
7. Develop and demonstrate a basic level of proficiency using existing knowledge, documentation, observation and measurements aimed at generating an efficient process of troubleshooting and identifying the failure source within a control system.

Students completing the general education core at ASUMH will have demonstrated proficiency in the following skills:

8. Applications of Math and the Natural Sciences appropriate to degree or field of study.
9. Composition and Oral Communication.
10. Evaluation of diverse perspectives and cultures through Arts, Humanities, and Social Sciences.
11. Utilization of technology appropriate to degree or field of study.

Name: _____ Date: _____

Advisor: _____ Student ID# _____

COURSE CODE		COURSE NAME	CREDIT HOURS	HOURS COMPLETED
General Education Requirements (18 credit hours)				
CPSI	10003	Computer Essentials	3	_____
ENGL	10103	Composition I (must earn a "C" or better)	3	_____
ENGL	10203	Composition II (must earn a "C" or better)	3	_____
MATH	10103	Applied Math or higher-level mathematics course	3	_____
SPCH	10003	Oral Communication	3	_____
Social Science Elective (3 credit hours) (Select 1 course)				
(Choose any three-credit hour course from ECON 21003, GEOG, HIST, PLSC, PSYC, **OR** SOCI)				
ECON	21003	Principles of Macroeconomics **OR** GEOG, HIST, PLSC, PSYC, or SOCI course	3	_____
Mechatronics Core (42 credit hours)				
MSTE	10053	Introduction to Machining	4	_____
TECH	10132	Employment Strategies	2	_____
TECH	10044	Computer Aided Design (CAD)	4	_____
TECH	10704	Introduction to Mechatronics	4	_____
TECH	14004	AC/DC Electronics	4	_____
TECH	21034	Industrial Electronic Devices	4	_____
TECH	21054	Industrial Mechanical Systems	4	_____
TECH	23104	Programmable Logic Controllers	4	_____
TECH	23204	Advanced PLC Topics	4	_____
TECH	24004	Robotic Technology	4	_____
TECH	24204	Hydraulic and Pneumatic Systems	4	_____

Program Total 60 Hours