

ASSOCIATE OF APPLIED SCIENCE PROGRAMS

TECHNOLOGY - MECHATRONICS TECHNOLOGY

The Mechatronics degree specialization develops knowledge and skills needed for career progression in Advanced Manufacturing fields utilizing Industry 4.0 processes and technologies.

Mission

The purpose of the Associate of Applied Science degree in Technology is to provide employment-related knowledge and skills necessary to succeed as a professional in a chosen field of study.

Student Learning Outcomes

Students who complete an Associate of Applied Science Automation and Industrial Applied Technology are expected to:

- Know the subject matter appropriate to the emphasis of the degree. (WNC SLO 1,3,6,7)
- Communicate effectively and appropriately, in oral and written form. (WNC SLO 2)
- Locate, evaluate and properly utilize the tools and resources appropriate to a technology degree professional. (WNC SLO 1,6,7)
- Acquire skills and perform tasks necessary for employment or career enhancement. (WNC SLO 1,7)
- Develop an appreciation of the importance of social, ethical, legal and diversity issues. (WNC SLO 5,7)
- Develop an appreciation of the need and importance of lifelong learning. (WNC SLO 1)

Required Courses

Total Requirements		60 Units
Program Requirements		36 Units
AIT 101	Fundamentals Of Applied Industrial Technology	4
or MPT 111 & OSH 222	<i>Fundamentals of Manufacturing and Automation I (3) & General Industry Safety (1)</i>	
AIT 250	Mechatronics: Electrical Components	3
or ELM 127	<i>Introduction to AC Controls</i>	
AIT 251	Mechatronics: Mechanical Components	3
or MPT 160	<i>Mechanical Drive Systems I</i>	
AIT 252	Mechatronics: Pneumatic & Hydraulic	3
or ELM 134	<i>Programmable Logic Controllers</i>	
AIT 253	Mechatronics: Programmable Logic Controllers	3
or ELM 136	<i>Programmable Logic Controllers II</i>	
Choose 20 units from the following program electives:		
Any AIT, CADD, DFT, ELM, ENGR, ENRG, ET, MPT, MT, or MTT course		units vary
General Education Requirements		
General Education Requirements		24 Units
English/Communications Requirement <i>Must include a writing course</i>		6
Human Relations Requirement		3
Humanities/Social Science Requirements		3
Science Requirement		3
Mathematics Requirement: Recommend MATH 110		3
U.S. and Nevada Constitution Requirement		3
General Elective		3

Please see the [Associate of Applied Science](#) page for a list of all courses filling general education requirements.

Suggested Course Sequence

First Semester	Units	Third Semester	Units
MPT 111	3	ELM 134	3
OSH 222	1	ELM 136	3
ELM 127	3	Program Elective	3
MPT 160	3	English/Communication	3
Program Elective	3	Humanities/Social Science	3
Human Relations	3		
Second Semester	Units	Fourth Semester	Units
English/Communication	3	Program Electives	8
Mathematics	3	General Elective	3
Program Elective	6	U.S./NV Constitution	3
Science	3		