

ASSOCIATE OF APPLIED SCIENCE PROGRAMS

MECHATRONICS & ELECTRONICS TECHNOLOGY

Mechatronics & Electronics Technology

The Mechatronics and Electronics degree develops knowledge and skills needed for career progression in an automated Advanced Manufacturing environment where the integration of computers and electronic technologies control industrial systems and machines.

Mission

The purpose of the Associate of Applied Science degree in Mechatronics and Electronics 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 Mechatronics and Electronics 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
ELM 110	<i>Basic Electricity</i>	3
ELM 112	<i>Electrical Theory DC</i>	3
ELM 127	<i>Introduction to AC Controls</i>	3
ELM 129	<i>Electric Motors & Drives</i>	3
ELM 134	<i>Programmable Logic Controllers I</i>	3
ELM 140	<i>Industrial Robotics</i>	3
MPT 111	<i>Fundamentals of Manufacturing and Automation I</i>	3
MPT 112	<i>Fundamentals of Manufacturing and Automation II</i>	3
MPT 160	<i>Mechanical Drive Systems I</i>	3
OSH 222	<i>General Industry Safety</i>	1
Choose 8 units from the following program electives:		
Any AIT, CADD, DFT, ELM, ENGR, ENRG, ET, MPT, MT, or MTT course		units vary
GENERAL EDUCATION REQUIREMENTS		24 Units
English/Communications: <i>Must include a writing course</i>		6
Mathematics: <i>Recommend MATH 126</i>		3
Science		3
Human Relations		3
Humanities/Social Science		3
U.S. and Nevada Constitution		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
ELM 110	3	ELM 129	3
ELM 112	3	ELM 134	3
MPT 111	3	Program Electives	4
OSH 222	1	U.S./NV Constitution	3
Math Course	3	English/Communication	3
Second Semester	Units	Fourth Semester	Units
ELM 127	3	MPT 160	3
MPT 112	3	ELM 140	3
Program Elective	4	General Electives	3
English/Communication	3	Science	3
Human Relations	3	Social Science/Humanities	3