

Students who are progressing in the Mechatronics Engineering Technology program must follow the semester-by-semester curriculum plan.

Mechatronics Engineering Technology A.A.S. Degree (A40350) General Track

The general track is recommended for those seeking an A.A.S. Degree in Mechatronics with no plans of continuing on to a bachelor's degree. This track is the common choice for most degree-seeking students that plan to work as an automation technician.

First Year

Fall 1st Semester

Course	Title	Contact Hours	Credit Hours	Offered	Pre/Co-Requisites
PTE 111	Pathway to Employment - Manufacture	5	3	F, S, SS	None
ELC 112	DC/AC Electricity	9	5	F	None
ELC 128	Introduction to PLC	5	3	F	None
ENG 110	Freshman Composition	3	3	F, S, SS	Developmental courses may be required (ENG 002)
MAT 121	Algebra/Trigonometry I	3	3	F, S, SS	Developmental courses may be required (MAT 003, MAT 021)
Semester Total		22	15		

Spring 2nd Semester

Course	Title	Contact Hours	Credit Hours	Offered	Pre/Co-Requisites
ELC 228	PLC Applications	8	4	S	None
ELN 229	Industrial Electronics	6	4	S	None
HYD 110	Hydraulics/Pneumatics I	5	3	S	None
MEC 130	Mechanisms	4	3	S	None
*see table below	Humanities/Fine Arts Elective	3	3	F, S, SS	Requisites may be required
Semester Total		26	17		

Summer 3rd Semester

Course	Title	Contact Hours	Credit Hours	Offered	Pre/Co-Requisites
ELC 117	Motors and Controls	8	4	S	None
PHY 131	Physics-Mechanics	5	4	SS	State Pre-req: MAT 121 or MAT 171
Semester Total		13	8		

Second Year

Fall 4th Semester

Course	Title	Contact Hours	Credit Hours	Offered	Pre/Co-Requisites
ATR 112	Introduction to Automation	5	3	F	None
DFT 170	Engineering Graphics	4	3	F	None
ELC 115	Industrial Wiring	8	4	F, S	None
ENG 115 OR COM 231	Oral Communication Public Speaking	3 3	3 3	F, S, SS	None
*see table below	Social/Behavioral Science Elective	3	3	F, S, SS	Requisites may be required
Semester Total		23-24	16		

Spring 5th Semester

Course	Title	Contact Hours	Credit Hours	Offered	Pre/Co-Requisites
ATR 212	Industrial Robots	5	3	S	Pre: ELC 228
DFT 154	Intro to Solid Modeling	5	3		None
EGR 285 OR WBL XXX and WBL 115	Design Project Work Based Learning Work Based Learning Seminar I	4 30 1	2 2 1	S F, S, SS	Instructor permission required None State Co-req: WBL XXX
ELC 213	Instrumentation	5	4	S	None
ELN 275	Troubleshooting	3	2	S	None
Semester Total		23-29	14-15		

Total Hours

110-127 72-73

**Recommended Humanities/Fine Arts Elective*

HUM 115 Critical Thinking

Other Humanities/Fine Arts Elective Options

ART 111	Art Appreciation	MUS 112	Introduction to Jazz
ART 114	Art History I	PHI 215	Philosophical Issues
ART 115	Art History II	PHI 240	Introduction to Ethics
MUS 110	Music Appreciation		

***Recommended Social/Behavioral Sciences Elective*

ECO 251 Principles of Microeconomics

Other Social/Behavioral Sciences Elective Options

ECO 252	Principles of Macroeconomics	HIS 132	American History II
HIS 111	World Civilizations I	POL 120	American Government
HIS 112	World Civilizations II	PSY 150	General Psychology
HIS 131	American History I	SOC 210	Introduction to Sociology