

**Program Completion Guide**  
**CIP Code - 15.0613**  
**Mechatronics**  
**Associate in Applied Science (AAS Degree)**  
**2023-2024**

**Area I: Written Composition (6 Semester Hours Total)**

Courses	Courses Taken	Hours Earned
ENG101		
ENG102		

**Area II: Humanities and Fine Arts (3 Semester Hours Total)**

Courses	Courses Taken	Hours Earned
ART100, ENG251, ENG252, ENG261, ENG262, ENG271, ENG272, MUS101, PHL206, REL100, REL151, REL152, SPH107		

**Area III: Natural Science and Mathematics (10 Semester Hours Total)**

**Note:** CIS146, MTH100 or higher and a 4 credit hour science course are required.

Courses	Courses Taken	Hours Earned
CIS146		
MTH100 or Higher		
MTH110, MTH112, MTH113, MTH115, MTH120, MTH125, MTH126, MTH227		
BIO103, BIO104, CHM111, CHM112, PHS111, PHS112, PHY201, PHY202		

**Area IV: History, Social, and Behavioral Sciences (3 Semester Hours Total)**

Courses	Courses Taken	Hours Earned
ECO231, ECO232, HIS121, HIS122, HIS201, HIS202, PSY200, PSY210		

**Area V: Pre-Professional, Major, and Elective Courses (47 Semester Hours Total)**

Courses	Credit Hours	Courses Taken	Hours Earned
<b>Major Core Concentration (36 Semester Hours)</b>			
ADM101 - Precision Measurement	3		
ADM106 - Quality Control	3		
ADM111 - Manufacturing Safety Practices	3		
ELT209 Industrial Motor Controls	3		
MTT139 - Basic Computer Numerical Control	3		
MTT147 - Introduction to Machine Shop I	3		
WDT157 - Consumable Welding Processes	3		
INT101/ELT108 -DC Fundamentals	3		

INT103/ELT109 - AC Fundamentals	3		
INT118/ADM105 - Fundamentals of Industrial Hydraulics and Pneumatics	3		
INT158/ELT118 - Industrial Wiring I	3		
INT206/ELT117 - Industrial Motors I	3		
<b>Elective Courses (15 Semester Hours)</b>			
INT284 - Advanced Programmable Logic Controllers	3		
INT288 - Applied Principles Of Programmable Controllers	3		
INT126 - Preventive Maintenance	3		
INT253/ELT253 - Industrial Robotics	3		
INT254/ELT254 – Robot Maintenance and Troubleshooting	3		
ELT230 Programmable Controls	3		
ADM283 Co-Op	3		
WKO110 - NCCER Core	3		
<b>Institutional Requirements (2 Hours)</b>			
ORI101 Take in the first semester unless student has 12 transfer credit hours			
BSS220 Take in last semester of program			

*In Area I through Area IV, transfer credits are accepted in accordance to ACCS policy.*

For additional courses see [http://stars.troy.edu/approved\\_courses.html](http://stars.troy.edu/approved_courses.html)

### Total Semester Hours Required for Degree: 75

<b>Student Name:</b>	<b>Signature of Advisor:</b>
<b>Student Number:</b>	<b>Date of Advising:</b>
<b>Total Credit Hours Earned:</b>	<b>Date Audited by Admissions:</b>

**Certificates and Short Term Certificates are available:**

- Industrial Maintenance – ADM-CER 44 hrs.
- IND Electrical Fundamentals – ADM-STC1 9 hrs.
- Industrial Automation – ADM-STC2 12 hrs.
- Industrial Automation – ADM-STC4 21 hrs.