

## Mechatronics AAS (MECA)

Catalog: 2024-2025		Effective Date: 9/01/2024	
CR	COURSE	COURSE TITLE	SUNY GEN ED
1-2	HRD 100, HRD 100A or HRD 110	FRESHMAN EXPERIENCE	
3	ENG 101	<i>Introduction to College Writing</i>	GCWO
3	ENG 102, ENG 103, ENG 104, ENG 105, ENG 106, ENG 107, ENG 108, ENG 109 or ENG 110	<i>Writing II</i>	GCWO
3-4	MAT 108, MAT 121, MAT 125 or MAT 131		GMAT
4	SUNY GEN ED Natural Science lab science (and Scientific Reasoning)		GNSL
3	SUNY GEN ED Diversity: Equity, Inclusion and Social Justice		GDVR
3	SUNY GEN ED Humanities, The Arts, US History and Civic Engagement, World History and Global Awareness, Social Sciences or World Languages		GHUM GART GUSC GGLB GSSC GWRL
3	CIS 131	<i>Introduction to Networking</i>	
3	TEC 101 (Fall only)	<i>Introduction to Technology</i>	
3	TEC 103 (Fall only)	<i>Electrical Systems and Distribution</i>	
3	EGR 109 (Spring only)	<i>Engineering Graphics and CAD</i>	
4	TEC 119 (Fall only –Pre/Coreq Required)	<i>Electricity I</i>	
4	TEC 120 (Spring only - Prereq Required)	<i>Electricity II</i>	GNSC
3	TEC 223 (Fall only – Prereq Required)	<i>Motors Control Systems</i>	
3	TEC 241 (Spring only –Prereq Required)	<i>Electronics I</i>	
3	TEC 250 (Fall only – Prereq Required)	<i>Introduction to PLC's</i>	
3	TEC 251 (Spring only – Prereq Required)	<i>PLC II and Sensors</i>	
3	TEC 264 (Fall only – Prereq Required)	<i>Robotics I</i>	
3	TEC 265 (Spring only- Prereq Required)	<i>Robotics II</i>	
3	TEC 266 (Spring only – Prereq Required)	<i>Hydraulics and Pneumatics</i>	
3	CIS or TEC Elective	TECHNICAL ELECTIVE	
<b>64</b>	<b>Minimum credits required for graduation</b>		

**Note:** Please review the back of this form for additional information.

❖ <b><u>COURSE PREREQUISITES:</u></b>			
<b>PHY 111</b>	MAT 108	<b>TEC 223</b>	TEC 120 and TEC 250 (Co-requisite)
<b>TEC 103</b>	MAT 090	<b>TEC 241</b>	TEC 120 or EGR222
<b>TEC 120</b>	TEC 119 with C or better	<b>TEC 250</b>	TEC 120 and TEC 223 (Co-requisite)
<b>TEC 178</b>	TEC 120 and TEC 264	<b>TEC 251</b>	TEC 250 with C or better and TEC 241 (Co-requisite)
<b>TEC 205</b>	TEC 120	<b>TEC 264</b>	TEC 119
		<b>TEC 265</b>	TEC 264
		<b>TEC 266</b>	2 <sup>nd</sup> year preferred
❖ <b><u>COURSE CO-REREQUISITES:</u></b>			
<b>TEC 119</b>	MAT 097 and TEC 103 (Both Co-requisite)		

❖ <b><u>RECOMMENDED SEQUENCE:</u></b>			
<b><u>FIRST YEAR</u></b>			
<b>First Semester</b>		<b>Second Semester</b>	
1-2	HRD 100, HRD 100A or HRD 110		
3	ENG 101	3	CIS 131
3-4	MAT 108, MAT 121, MAT 125 or MAT 131	3	ENG 102-ENG 110
3	TEC 101	4	TEC 120
3	TEC 103	3	EGR 109 – See Note 1
4	TEC 119	4	SUNY GEN ED Natural Science lab science
<b><u>SECOND YEAR</u></b>			
<b>Third Semester</b>		<b>Fourth Semester</b>	
3	SUNY GEN ED Humanities, The Arts, US History and Civic Engagement, World History and Global Awareness, Social Sciences or World Languages	3	SUNY GEN ED Diversity: Equity Inclusion and Social Justice
3	CIS or TEC Technical Elective	3	TEC 266
3	TEC 223	3	TEC 241
3	TEC 250	3	TEC 251
3	TEC 264	3	TEC 265
<b>NOTES:</b>			
<ol style="list-style-type: none"> <li>Students will be eligible to take the Certified SOLIDWORKS Associate in Mechanical Design examination.</li> <li>Technical Electives are CIS or TEC courses.</li> </ol>			

❖ **DEFINITION OF COURSE REQUIREMENTS:** See <http://catalog.sunyacc.edu/academics/degreerequirements>

❖ **FINANCIAL AID RECIPIENTS:** A student **must** choose courses that are within their degree program. Students are encouraged to meet with their assigned academic advisor for any questions about course selection and degree program requirements. Please visit the Office of Financial Aid for any aid-related questions.

❖ **SUNY GEN ED KNOWLEDGE AREAS:** See <http://catalog.sunyacc.edu/academics/generaleducation>

- |   |   |
|---|---|
| ❖ Mathematics (and Quantitative Reasoning)    | Diversity: Equity, Inclusion and Social Justice |
| ❖ Natural Sciences (and Scientific Reasoning) | Humanities (GHUM)                               |
| ❖ Social Sciences (GSSC)                      | The Arts (GART)                                 |
| ❖ US History and Civic Engagement (GUSC)      | World Languages (GWRL)                          |
| ❖ World History and Global Awareness          | Communication – Written and Oral (GCWO)         |