

Mechatronics is an interdisciplinary field that combines elements of engineering, machining, information technology, robotics, and electronics. It synergizes these diverse fields to keep production lines, manufacturing floors, and industry processes working smoothly. Graduates of this program will be prepared to operate and maintain electro-mechanical systems found in automated or robotically controlled environments. Program components include comprehensive analysis, assembly and troubleshooting techniques, which are reinforced through laboratory experiences. **Program completion will require students to attend some classes on the Jamestown Campus.**

		Degree Requirements		
LEVEL I: INQUIRE		5 credit hours		
		JCC	SUNY	LAS
INT 1555: Inquire	2	Critical & Integrative Reasoning		X
ENG 1510: English Composition I	3	College Composition	HUMA	H
LEVEL II: GROW		52 credit hours		
ENG 1530: English Composition II	3	College Comp & Oral CMM	BCOM	H
MAT 1590: College Algebra/Trigonometry	4	Mathematical Reasoning	MATH	N
PHY 1250: Technical Physics I	4	Natural Sciences - SR	SOSC	N
Social Sciences Elective - SUNY Gen Ed	3	Social Sciences - SR		S
Elective choose a Cultural Understanding & Global Perspectives course	3	Cultural Understanding; Global Perspectives	X	X
CSC 1510: Intro to Computer Sciences or CSC 1560: Computer App Software I	3			
CSC 1580: Computer Hardware/Systems Software	3			
ELC 1200: Fundamentals of Electricity	3			
ELC 1220: Industrial Automations Using PLC	3			
ELC 1230: Electric Motors & Control Systems	3			
MCT 1210: Applied Pneumatics & Hydraulics	3			
MCT 1240: Engineering Drawing with AutoCAD	4			
MCT 1270: Machine Theory and Operations	3			
MCT 1280: Computer Numerical Control of Machine Tools	3			
MCT 1310: Industrial Safety & Quality Practices	2			
MCT 1320: Production Processes & Maintenance Awareness	2			
MCT 2210: Mechanical Drives	3			
LEVEL III: CONNECT		6 credit hours		
ELC 2220: Advanced Programmable Logic Controllers	3			
MCT 2220: Automation & Robotics	3	Applied Learning		
Total Credits: 63			not required	22