

## **PROGRAM REQUIREMENTS**

www.cvtc.edu - 1-800-547-2882

START DATE(S): June, August, October, January, and March EFFECTIVE: June 2023

## **MECHATRONICS SPECIALIST – FULL-TIME**

Associate Degree

Course			
Number	Course Title	Credits	Prerequisite(s)/Comments
	First Semester		
419-116	Basic Hydraulics	2	Program student or instructor approval
419-117	Basic Pneumatics	2	Program student or instructor approval
442-120	Related Welding- Industrial Mechanic <b>OR</b>	2	Program student or instructor approval
106-114	Customer Communication Techniques AND	1	
106-115	Customer Care Strategies	1	
462-111	Mechanical Concepts	2	Program student or instructor approval
462-115	Industrial PC Network Concepts	2	Program student or instructor approval
462-119	Industrial Mechanical Skills	2	Program student or instructor approval
462-130	Manufacturing Prints & Networks	1	Program student or instructor approval
625-180	Manufacturing Skills Standards	2	
	Total Credits	15 cr.	
	Second Semester		
462-118	Industrial Electricity Principles	3	Program student or instructor approval
462-120	Centrifugal Pumps & Alignment	3	Program student, 462-126 or concurrent, or instructor approval
462-121	IOT Automated Manufacturing	4	Program student, 462-118 or concurrent, or instructor approval
462-123	PLC Manufacturing Applications	3	Program student, 462-121 or concurrent, or instructor approval
462-126	Mechanical Alignment & Bearings	2	Program student, 462-111, 462-119 or concurrent, or instructor approval
	Total Credits	15 cr.	
	Third Semester (8 weeks)		
419-102	Hydraulic System Operations	2	Program student, 419-116, or instructor approval
419-118	Pneumatic System Operations	2	Program student, 419-117, or instructor approval
462-122	Preventative and Periodic Maintenance	1	Program student, 462-111, or instructor approval
462-132	Machine Troubleshooting & Repair, Advanced	2	Program student, 462-120, (462-123, 419-102, 419-118 or concurrent) or
			instructor approval
	Total Credits	7 cr.	
	Fourth Semester		
462-140	Piping Systems	2	Program student, 462-120, or instructor approval
462-150	Building System Maintenance	2	Program student, 462-123, or instructor approval
801-136	English Composition 1	3	
804-134	Mathematical Reasoning	3	
	Total Credits	10 cr.	
	Fifth Semester		
462-141	Process Control & Water Treatment Systems	2	Program student, 462-120, 462-123, 462-140, or instructor approval
462-151	New Technologies in Industrial Maintenance	2	Program student, 462-120, 462-123, 462-150, or instructor approval
801-197	Technical Reporting	3	801-136
809-195	Economics	3	
809-199	Psychology of Human Relations	3	
	Total Credits	13 cr.	

MINIMUM PROGRAM CREDITS REQUIRED = 60

2.0 MINIMUM PROGRAM CUMULATIVE GPA REQUIRED FOR GRADUATION

If a student does not enroll in any courses at CVTC for two or more consecutive semesters, the student will be required to reapply with Admissions. Students must abide by any changes in admission requirements and degree requirements.



## **PROGRAM REQUIREMENTS**

www.cvtc.edu - 1-800-547-2882

START DATE(S): June, August, October, January, and March EFFECTIVE: June 2023

## **MECHATRONICS SPECIALIST – PART-TIME**

Associate Degree

Course			
Number	Course Title	Credits	Prerequisite(s)/Comments
	<u>First Semester</u>		
419-116	Basic Hydraulics	2	Program student or instructor approval
419-117	Basic Pneumatics	2	Program student or instructor approval
462-111	Mechanical Concepts	2	Program student or instructor approval
462-115	Industrial PC Network Concepts	2	Program student or instructor approval
462-119	Industrial Mechanical Skills	2	Program student or instructor approval
	Total Credits	10 cr.	
	Second Semester		
442-120	Related Welding- Industrial Mechanic OR	2	Program student or instructor approval
106-114	Customer Communication Techniques AND	1	
106-115	Customer Care Strategies	1	
462-130	Manufacturing Prints & Networks	1	Program student or instructor approval
625-180	Manufacturing Skills Standards	2	
462-120	Centrifugal Pumps & Alignment	3	Program student, 462-126 or concurrent, or instructor approval
462-126	Mechanical Alignment & Bearings	2	Program student, 462-111, 462-119 or concurrent, or instructor
			approval
	Total Credits	10 cr.	
	Third Semester		
462-118	Industrial Electricity Principles	3	Program student or instructor approval
462-121	IOT Automated Manufacturing	4	Program student, 462-118 or concurrent, or instructor approval
462-123	PLC Manufacturing Applications	3	Program student, 462-121 or concurrent, or instructor approval
	Total Credits	10 cr.	
	Fourth Semester		
419-102	Hydraulic System Operations	2	Program student, 419-116, or instructor approval
419-118	Pneumatic System Operations	2	Program student, 419-117, or instructor approval
462-122	Preventative and Periodic Maintenance	1	Program student, 462-111, or instructor approval
462-132	Machine Troubleshooting & Repair, Advanced	2	Program student, 462-120, (462-123, 419-102, 419-118 or concurrent)
	- '		or instructor approval
	Total Credits	7 cr.	
	Fifth Semester		
462-140	Piping Systems	2	Program student, 462-120, or instructor approval
462-150	Building System Maintenance	2	Program student, 462-123, or instructor approval
804-134	Mathematical Reasoning	3	
801-136	English Composition 1	3	
	Total Credits	10 cr.	
	Sixth Semester		
462-141	Process Control & Water Treatment Systems	2	Program student, 462-120, 462-123, 462-140, or instructor approval
	·		
462-151	New Technologies in Industrial Maintenance	2	Program student, 462-120, 462-123, 462-150, or instructor approval
801-197	Technical Reporting	3	801-136
809-195	Economics	3	
809-199	Psychology of Human Relations	3	
	Total Credits	13 cr.	

MINIMUM PROGRAM CREDITS REQUIRED = 60

2.0 MINIMUM PROGRAM CUMULATIVE GPA REQUIRED FOR GRADUATION

If a student does not enroll in any courses at CVTC for two or more consecutive semesters, the student will be required to reapply with Admissions. Students must abide by any changes in admission requirements and degree requirements.