

# Mountain Empire Community College Publication Change Form

Please fill in and print this page to request change MECC's publications on the college's web site to the printed copies that are updated once a year.	es to MECC's publications. This process provides for oe maintained with up-to-date information, unlike		
Change Applies to: Catalog Student Ha	andbook Other		
Type of Change: Update Deletion	te Deletion 🗸 Addendum		
Does the change need to be applied to the websit			
If yes, which web page(s) requires the change?	CMT Electromechanical Specialization (726-01)		
Current Page Number: 211 -or- Pr Effective Date: Fall 2019	oposed Page Number:		
Brief Description of Change:			
Remove MEC 120 Principals of Machining Technology Add MEC 154 Mechanical Maintenance I Remove Roger Greene from Contact add Eric McI			
Person Submitting Change:	Vice President of Academic Affairs and Workforce Solutions:		
Tommy Clements	Maken		
Name (print)	Signature		
Jamy Clenen &	3-22-19		
Signature	Date		

Send this form and attachments to the office of the Vice President of Academic Affairs and Workforce Solutions.

## **CMT - ELECTROMECHANICAL TECHNOLOGY SPECIALIZATION (726-01)**

#### **Purpose**

The Electromechanical Technology Specialization of the Computerized Manufacturing Technology program trains students in various electrical, electronic, and mechanical components of systems and upon successful completion, awards the Associate of Applied Science Degree. Emphasis is on programmable logic controllers, motor controls, piping systems, valves, and related components, and process controllers. Computer skills and teamwork are also emphasized.

The electromechanical program will provide students with the knowledge and skills necessary to assume employment as competent electromechanical technicians. The program was developed in cooperation with Eastman Chemical Company. After the first year of the program, students have the opportunity for a one-year internship with Eastman after which they will return to MECC to finish the AAS degree.

#### Program Learning Outcomes (PLO): Upon successful completion, students will be able to:

- 1. Practice industry recognized safety practices and guidelines, including the use of personal protective equipment in an industrial operating environment.
- 2. Interpret drawings, schematics, and specifications for industrial equipment.
- 3. Use precision measuring equipment.
- 4. Troubleshoot and repair electromechanical and electronic equipment and systems.
- 5. Modify, install, maintain, and program electronic and electromechanical systems.
- 6. Modify, install, and maintain hydraulic and pneumatic systems.
- 7. Work as an effective member of a workgroup.

#### **Employment Opportunities**

Companies need competent electromechanical technicians. The electromechanical program was designed to meet this increasing need. The skills developed in this program will prepare students for jobs in chemical processing, coal mining, power plants and manufacturing. Jobs are available as electromechanical technicians, quality assurance technicians, and maintenance technicians.

#### **Program Requirements**

Students should have English and Mathematics skills assessed. Deficiencies in these areas may be corrected by completing the appropriate developmental studies courses.

## COMPUTERIZED MANUFACTURING TECHNOLOGY -ELECTROMECHANICAL TECHNOLOGY SPECIALIZATION PROGRAM OF STUDY

Course #	Course Title	Credit	Pre-Requisite Courses (if applicable)
FIRST YEAR FALL			
DRF 160	Machine Blueprint Reading	3	
ELE 140	Basic Electricity & Machinery	4	
SAF 126	Industrial Safety	3	
ELIGIBLE FOR NCCER CONSTRUCTION CORE & LEVEL 1 ELECTRICAL CERTIFICATION			
MEC 154	Mechanical Maintenance I	3	ě.
MTH 111	Basic Technical Math	3	
SDV 100	College Success Skills	1	
FIRST YEAR SE			
ENG 111	College Composition I	3	
ELE 156	Electrical Control Systems	3	ELE 140
ITE 119	Information Literacy	3	
MEC 113	Materials and Processes of Industry I	4	
	Humanities Elective	3	
SECOND YEAR		4	ELE 440 B' 4
ETR 218	Ind. Electronics Circuits	4	ELE 140 or Div. Approval
HLT 105	CPR	1	
PHY 131	Applied Physics	3	MTH 106 or MTH 103
IND 101	Quality Assurance Tech	3	
IND 125	Installation and Preventive Maintenance	3	
MEC 205	Piping & Auxiliary Systems	3	
SECOND YEAR SPRING			
ELE 239	Programmable Controllers	3	ELE 140, ELE 156
MEC 266	Fluid Mechanics	3	LLL 140, LLL 100
IND 137	Team Concepts & Problem Solving	3	
and the second s	Welding Elective	3	
	Social Science Elective	3	
		-	
TOTAL PROGRA	AM CREDITS	65	

### **Notes and Additional Curriculum Options**

Course substitutions may be available. Please see your advisor.