

# ELECTRO-MECHANICAL TECHNOLOGIES, CERTIFICATE OF COMPETENCY (ELTC)

Effective: Fall 2016

Electro-Mechanical Technologies program is designed to prepare students for employment as electro-mechanical technicians who assemble, install, troubleshoot and/or repair mechanical, electrical and fluid power systems. The program includes instruction in electrical controls and programmable controllers, manufacturing and operational testing, as well as system analysis and maintenance procedures.

## Program Outcomes

- Demonstrate understanding and applications of AC/DC Electrical Theories.
- Demonstrate an understanding of electrical controls and programmable controllers.
- Demonstrate a working knowledge of the functions of components and devices used in mechanical, electrical and fluid power systems.
- Apply principles, knowledge and analysis skills in troubleshooting, repairing and maintaining mechanical, electrical and fluid power systems.
- Demonstrate computational skills to solve problems related to mechanical, electrical, electronic and fluid power systems.

## Curriculum

The College will award a certificate of competency to students who complete an approved credit-bearing career program that requires less than 30 credits. General education courses may not be required for programs that have less than 30 credits. The student must have a cumulative GPA of 2.0 or higher. At least six credit hours must be in courses that are awarded grade points.

First Semester		Hours
TEL 101	D C Analysis	4
TEL 110	Electronics I	4
IST 105	Industrial Systems Interpretations	3
MTT 108 or MAT 128	Mathematics for Occupational Technologies or Algebra	3-4
<b>Hours</b>		<b>14-15</b>
Second Semester		Hours
TEL 102	A C Analysis	4
TEL 200	Electro and Mechanical Systems	3
ELT 204	Introduction to Programmable Logic Controllers	3
TME 115 or MAT 128	Basic Technical Skills or Algebra	3
<b>Hours</b>		<b>13</b>
<b>Total Hours</b>		<b>27-28</b>

## Notes

This program is offered in two schedules: Early College Enrollment and regular College Open Enrollment.

- In the Open Enrollment Schedule, TEL 101 D C Analysis and TEL 110 Electronics I are offered in sequence in accelerated format.

- In the Early College Enrollment Schedule, students take MTT 108 Mathematics for Occupational Technologies in 11th Grade and MAT 128 Algebra in 12th Grade.
- In the Open Enrollment Schedule, TEL 102 A C Analysis and TEL 200 Electro and Mechanical Systems are offered in sequence in accelerated format.
- Students in the Open Enrollment Schedule, take TME 115 Basic Technical Skills and those in Early College Enrollment Schedule take MAT 128 Algebra.

## Campus Locations

### DELAWARE COUNTY

Marple Campus

### CHESTER COUNTY

Exton Center

### Catalog Addendum - Spring 2023

#### IMPORTANT NOTICE

More recently, the College reassessed our how we can best serve the Chester County community and elected to consolidate the staff and resources of both the Exton and Downingtown locations into the Downingtown Center effective June 30, 2023. The last classes at Exton will be held in the Summer I session: May 22 – June 28, 2023. The Exton Center will permanently close on June 30, 2023. The Summer II session, starting July 6, 2023, will be held at the Downingtown Center only.

The educational programs currently offered at the Exton Center will be relocated to the nearby Downingtown Center. These programs are also available at the Marple Campus.

## Fall 2023 Changes

### Catalog Addendum Effective Fall 2023:

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