

ELECTRO-MECHANICAL TECHNOLOGY

Is Electro-Mechanical Technology for me?

The field is for you if you ...

- Have an interest in a wide range of technological concepts.
- Have a desire to combine the principles of electricity in a material format.
- Have a scientific and mathematical aptitude.
- Have the ability to work both independently and in a team atmosphere.
- Have above average mathematical ability.
- Have creativity for design work.
- Have a mechanical aptitude.
- Have analytical ability.
- Have the ability to do precision work.

What skills will I need for this field?

- Electro-Mechanical Technicians use principles and theories of science, engineering and mathematics to solve problems.
- They develop, manufacture and service equipment and systems like robots, automated equipment and process controls.
- They use measuring and diagnostic devices to test, adjust and repair equipment.
- They assist engineers and scientists in research and development.
- Those in manufacturing prepare specifications and run tests.
- Those who work with field representatives help customers install, operate and maintain complex technical equipment.

What is the work atmosphere like?

Work in electro-mechanical technology is usually done indoors in laboratories, offices and manufacturing or industrial plants. Electro-mechanical technicians begin routine work under close supervision of an experienced technician, engineer or scientist. As experience is gained they are given assignments with

less supervision, and some may be promoted to supervisory positions. Electro-mechanical technicians are often given situations in which a process must be defined to perform certain tasks. Often, the key to the solution is designing an automated system that will harness electricity in such a way that it can be used to perform repeated actions. Sometimes this is simple, but other times it is more complicated, necessitating the design of a complete and intricate mechanical system.

What are my degree options?

Certificates

Electro-Mechanical Product Research and Developments
Mechanical Maintenance
Programmable Controllers (PLC)
Process Control Instrumentation

Associate's Degree

Associate in Applied Science (AAS)

Bachelor's Degree

Bachelor's degrees are available by transferring to four-year colleges and universities.

What are my career opportunities?

With further education, technicians may become engineers and work as product designers, manufacturing engineers or in technical sales.

What can I do with these degrees?

If you have completed ...

High School Diploma

Electrician Apprentice
Maintenance Apprentice

Certificate

Assembly Technician, Automation Technician,
Manufacturing Technician, Product Technician,
System Tester

Associate in Applied Science Degree

Automated Equipment Technician, Calibration Technician,
Control Technician, Instrumentation Technician, Maintenance
Technician, Manufacturing Engineer or Technician, Quality
Technical Writer

Bachelor's Degree

Engineering Manager, Manufacturing Engineer, Mechanical
Engineer, Product Engineer

How can I prepare now?

Recommended courses ...

Math

Two years of Algebra

Science

Computer Applications and Physics

Communications

Composition

Occupational Electives

Electricity and CAD

Recommended Supporting Electives

Keyboarding

What should I take in my first semester at C.O.D.?

ET 1100: Fundamentals of Electricity and Electronics

Elmec 1100: Survey of Automation

Elmec 1110: Motor Fundamentals

Manuf 1141: Hydraulics

Whom can I talk to for more information?

Natural Sciences Division

(630) 942-2010

For more information on the Associate in Applied Science Degree curriculum, see your program coordinator or go to www.cod.edu.

What about my articulated credit?

Check with your high school coordinator to see if you are eligible for articulated credit at College of DuPage.