

ADVANCED MECHATRONICS, CERTIFICATE

The **Advanced Mechatronics certificate** provides students with multidisciplinary skills in the areas of mechanics, electricity, electronics, instrumentation, robotics, and manufacturing. This certificate prepares students for careers in industrial mechatronics.

For more information about Electro-Mechanical Technology, please visit the program of study page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.ADVMEC

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 1420	Drive Components	2
ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
ELMEC 1106	Power Electricity and Rotating Machines	4
Electives		
Select one of the following:		3
ELMEC 1130	Industrial Electricity	
ELMEC 1150	National Electrical Code	
ELMEC 1171	Introduction to Robotic Technology	
ELMEC 2600	Motion Control: Motor Dr Application?and Control	
Total Credits		27

This page lists programs related to one another.

- Electrician Apprenticeship, A.A.S. (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/electrician-apprenticeship-aas/>)
- Electrician's Preparation, Certificate (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/electricians-preparation-certificate/>)
- Electro-Mechanical Technology, A.A.S. (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/electro-mechanical-technology-aas/>)
- Mechanical Maintenance, Certificate (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/mechanical-maintenance-certificate/>)
- Mechatronics Technology (MET), Certificate (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/mechatronics-technology-met-certificate/>)
- Process Control Instrumentation, Certificate (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/process-control-instrumentation-certificate/>)
- Programmable Logic Controllers in Automation, Certificate (<https://catalog.cod.edu/programs-study/electro-mechanical-technology/programmable-logic-controllers-automation-certificate/>)