

Electromechanical Technology

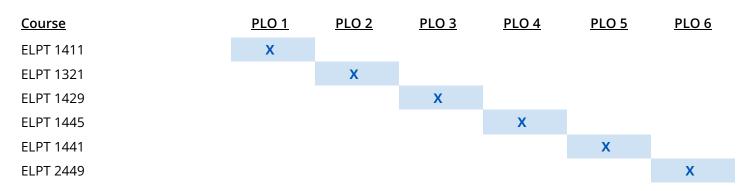
Electromechanical technology is a diverse area of study that combines electrical and mechanical systems used in all areas of industry. Mechanical systems include power transmission, fluid power systems (hydraulics and pneumatics), and material handling. Electrical systems include power generation and distribution, machinery controls, and process industries. Process industries include chemical and petroleum refining and production. Also included in this area of study is the specialty of HVAC. Contractors employ heating, ventilation, and air conditioning technicians to install and maintain essential environmental controls in business and residential settings. Employment opportunities for all graduates are diverse and are available locally and nationwide. Projected growth trends across the State show increasing demand for graduates with these job skills.

Program Learning Outcomes (PLO)

After completing the AAS in Electromechanical Technology-Electrical Technician Specialty degree, students will be able to:

- PLO 1: Apply analytical skills to calculate and measure operating parameters in a given electrical circuit.
- PLO 2: Analyze a workplace setting and develop a job safety analysis.
- PLO 3: Analyze a typical residential setting and install a lighting branch circuit that meets all wiring code requirements.
- PLO 4: Analyze a typical commercial setting and install a commercial branch circuit that meets all wiring code requirements.
- PLO 5: Analyze a control circuit, sketch a circuit diagram, and properly connect the components.
- PLO 6: Utilize common statistical process control techniques to optimize manufacturing processes.

Courses Measuring the Achievement of Program Learning Outcomes



ELECTROMECHANICAL TECHNOLOGY RECOMMENDED ACADEMIC PLAN

1ST YEAR, 1ST SEMESTER			Credit Hours	\checkmark	
Term 1					
ELPT	1321	Introduction to Electrical Safety and Tools		3	
ELPT	1411	Basic Electrical Theory		4	
STSU	0300	Student Success		0	
Term 2					
ELPT	1441	Motor Control		4	
TECM	1301	Industrial Mathematics*		3	
SOCI	1301	Introduction to Sociology		3 17	
1ST YEAR	, 2ND SE	MESTER			
Term 1					
ELPT	1429	Residential Writing		4	
ELPT	1445	Commercial Writing		4	
Term 2					
DFTG	1325	Blueprint Reading and Sketching		3	
ELPT	2319	Programmable Logic Controllers I		3	
* Earned	:	Level 1 Certificate in Electromechanical Technology		14	
2ND YEA	R, 1ST SE	MESTER			
Term 1					
SPCH	1318	Interpersonal Communication		3	
ENGL	1301	Composition		3	
ELPT	2355	Programmable Logic Controllers II		3	
Term 2					
ELPT	2331	AC/DC Drives		3	
PHYS	1305	Elementary Physics		3	
জ্ঞি Apply for Graduation			15		
2ND YEA	R, 2ND S	EMESTER			
Term 1					
HYDR	1409	Basic Fluid Power (Hydraulics)		4	
ELPT	2449	Industrial Automation		4	
Term 2					
ELMT	2381	Cooperative Education		3	
ARTS	1301	Art Appreciation		3	
₩ Earned	:	Associate of Applied Science in Electromechanical Technology	Total Hours	60	