

Student Outcomes VS ABET Learned Capabilities

ABET Student Outcomes		Electrical Engineering Technology Student Outcomes	
1	an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;	4	Analyze Alternating Current (AC) circuits (including single and three phase) and Direct Current (DC) circuits.
		9	Exhibit fundamental knowledge of electrical power generation, transmission, and distribution systems.
		12	Utilize the fundamentals of networks and digital communications to troubleshoot and maintain distributed plant automation and Supervisory Control and Data Acquisition (SCADA) systems.
2	an ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;	8	Design, troubleshoot, and document circuits for complex motor controls and associated devices.
		11	Design, build, and troubleshoot control systems consisting of Programmable Logic Controllers (PLC) / Programmable Automatic Controllers (PAC) and associated Human Machine Interfaces (HMI).
3	an ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature	1	Demonstrate safe work practices.
		5	Read, interpret, and edit schematics to document electrical, electronic, and process control systems.
4	an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results	3	Utilize test equipment to troubleshoot and analyze electrical, electronic, and instrumentation related circuits.
		6	Apply a fundamental understanding of pressure, temperature, level, and flow to install, calibrate, and troubleshoot process instrumentation.
		7	Apply an in-depth knowledge of Variable Frequency Drives (VFD), motors, and generators to perform installation, troubleshooting, and maintenance related tasks.
		10	Configure, test, and troubleshoot protective relaying and power monitoring systems.
		13	Test, troubleshoot, and repair circuit breakers and switchgear - medium and low voltage.