

Scope and Sequence Electrical Technology

Academic Subjects – Career success and postsecondary education success require the same level of college prep coursework. The Pennsylvania Department of Education’s (PDE) focus is to ensure that every student is prepared for college and a career. Academic courses such as applied math or general science cannot be listed on the program’s scope and sequence. PDE’s goal is to have all students perform at the competent or advanced level on the PSSA, and earn the Pennsylvania Skills Certificate on the end-of-program assessment.

	SECONDARY				POSTSECONDARY based on PENN COLLEGE OF TECHNOLOGY			
	Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade	Semester One	Semester Two	Semester Three	Semester Four
Technical Units		Blue Print Reading Direct Current-Basic Electrical Theory National & Electrical Code Job Seeking/Keeping Skills Accident Prevention-Safety	Hazardous Locations and Precautions Electrical & Motor Theory Installation of electric Lighting OSHA Job Seeking/Keeping Skills Repair and Installation of Circuit Breakers and Fu Electrical math-Load Calculations Contactors and Relays in an electrical System	Electrical Theory – Level 2 Commercial Electrical Concepts Direct Current Fundamentals Conductor Selections and Calculations Raceway and Box fittings Transformer installation and maintenance Overcurrent Protection	ELT 111: Direct Current Fundamentals ELT 113: Accident Prevention ELT 116: Construction Lab I - Residential	ELT 120: Construction Lab II - Commercial ELT 122: Alternating Current Fundamentals EDT 120: Electrical Drawing and Print Reading	ELT 234: Electrical Motor Control ELT 235: Industrial Electronics	ELT 244: Advanced Electrical Theory ELT 245: Intro to Programming Logic Control ELT 248: Electrical Systems Analysis ELT 249: Programmable Logic Control Input/Output

English	College Prep English I	College Prep English II	College Prep English III	College Prep English IV	ENL 111: English Comp I		ENL 121: English Comp II ENL 201: Technical & Professional Communication	
Math	Algebra I	Algebra II	Geometry	College Prep Math (recommended)	MTH 180: College Algebra and Trig I	MTH 182: College Algebra and Trig II		
Science	Biology	Chemistry	Physics				PHS 114: Physics w/Technological Applications	
Humanities	Civics	American History	World Studies					_SSE: Elective Social Science
Other Required Courses/ Electives	Foreign Language I (recommended)	Foreign Language II (recommended)					FIT: Elective: Fitness	