

Student Name

PA State ID # (10)

		High School Graduation Years 2019, 2020 and 2021		
Unit/Standard Number	<p>The School District of Philadelphia Office of Career and Technical Education Electrical and Power Transmission Installers, Other Performance Assessment Log (PAL) CIP 46.0399 - Electrical and Power Transmission</p>	<p>Key N = Not Exposed to Task 1 = Knowledge (Exposed to Task) 2 = Guidance (Accomplishes Task w/ Instruct 3 = Mastery (Accomplishes Task w/o Instruct</p>		
		Year 1	Year 2	Year 3
	Secondary Competency Task List			
100	BASIC SAFETY			
101	Inspect and use personal protective equipment			
102	Identify causes of job site accidents.			
103	RESERVED			
104	RESERVED			
105	Properly don fall protection			
106	Identify four classes of fire extinguishers			
107	Confirm circuits are de-energized before working on them.			
108	Perform lockout/tagout.			
109	Inspect and use ladders			
110	Complete jobsite hazard analysis form			
111	Identify Arc-flash hazards and protection			
200	HAND TOOLS			
201	Use screwdrivers.			
202	Use pliers.			
203	Use keyhole/drywall saw.			
204	Use hydraulic knockout/punch tool.			
205	Use a tape measure.			
206	Use wire strippers.			
207	Use wire cutters.			
208	Use utility knife.			
209	Use torpedo level.			
210	Use a hammer.			

211	Use a conduit reamer.			
212	Use a hacksaw.			
213	Use a roto-split.			
214	Use adjustable or non adjustable wrenches.			
215	Use ratchet and sockets.			
216	Use nut drivers.			
300	POWER TOOLS			
301	RESERVED			
302	Use electric hammer drill.			
303	Use reciprocating saw.			
304	Use portable hand-held band saw.			
305	RESERVED			
306	Use a drill.			
307	RESERVED			
308	RESERVED			
309	RESERVED			
310	Use oscillating multi purpose tool.			
311	Use impact driver.			
400	BLUEPRINT READING			
401	Identify types of blueprint plans.			
402	Identify blueprint symbols.			
403	Interpret blueprint plans.			
404	RESERVED			
405	Develop electrical details on a residential blueprint.			
406	Use a measuring tool to scale.			
500	ANCHORS AND SUPPORTS			
501	Identify, select and install various types of anchors and supports.			
600	RESIDENTIAL CABLING TECHNOLOGY			
601	Install non-metallic (NM) Cable for connection to an electrical device.			
602	Install metal-clad cable (MC).			
603	RESERVED			
604	RESERVED			
605	Terminate a coaxial cable.			
606	RESERVED			
607	RESERVED			

608	RESERVED			
609	Identify telecommunications cable types.			
610	Terminate an RJ45 connector.			
611	Install SE cable.			
700	SWITCHES AND RECEPTACLES CIRCUITS			
701	Install a duplex receptacle.			
702	Install a single pole switch.			
703	Install a 3-way switch.			
704	Install a 4-way switch.			
705	Install a split-wired duplex receptacle.			
706	Install a Ground Fault Circuit Interrupter (GFCI) Receptacle.			
707	Install an Arc-Fault Circuit Interrupter (AFCI).			
708	Install a time control switch.			
709	Install a range receptacle.			
710	Install a dryer receptacle.			
800	FIXTURES			
801	Install surface-mounted lighting fixture.			
802	Install recessed lighting fixtures.			
803	Install a ceiling fan.			
804	Install LED lighting.			
805	Identify IC and non-IC recessed lighting fixtures.			
900	RACEWAYS			
901	Install Electrical Metallic Tubing (EMT).			
902	Install Poly-Vinyl Chloride conduit (PVC).			
903	Identify surface metal and non-metal raceways (Wiremold).			
904	Identify flexible raceway.			
905	RESERVED			
906	RESERVED			
907	RESERVED			
908	Bend a stub 90°.			
909	Bend an offset.			
910	Bend a back to back 90°.			
911	Cut, ream and deburr raceway systems.			
912	Install conductors in a raceway system.			
1000	WIRED DEVICES			

1001	Install a hard wired smoke detector.			
1002	Install door-bell system.			
1003	Trim out electrical devices.			
1004	Install an occupancy sensor.			
1005	Install a photocell.			
1100	TESTING EQUIPMENT			
1101	Use a multimeter.			
1102	Use a continuity tester.			
1103	Use a plug-in circuit tester.			
1104	Use a clamp-on ammeter.			
1105	RESERVED			
1106	Use a circuit tracer.			
1107	Use a network cable tester.			
1108	Apply Ohm's/Watt's Law calculations to electrical applications.			
1200	ELECTRICAL SERVICE			
1201	Install an overhead service.			
1202	Identify parts of an underground service.			
1203	RESERVED			
1204	RESERVED			
1205	RESERVED			
1206	RESERVED			
1207	RESERVED			
1208	RESERVED			
1209	Identify types of safety disconnect switches.			
1210	Terminate a service panel/load center.			
1300	NATIONAL ELECTRICAL CODE			
1301	Identify the purpose of the National Electrical Code (NEC).			
1302	Use Chapter 9 Tables.			
1303	Use the NEC as a reference to questions and competencies that students perform for all electrical installations.			
1304	Identify the publisher of the National Electrical Code (NEC).			
1305	Identify the code cycle of the National Electrical Code (NEC).			
1306	Identify NFPA70E (Arc Flash).			
1400	GREEN TECHNOLOGY			
1401	Identify renewable energy sources.			

1402	Identify procedures for installing a wind turbine system.			
1403	RESERVED			
1404	Identify procedures for installing a solar energy source system.			
1405	RESERVED			
1406	RESERVED			
1407	Evaluate the demand and consumption of electrical energy.			

PA Academic Standards for Career Education and Work

<p><i>The Career Education and Work (CEW) Standards were developed by the Pennsylvania Department of Education and complement all disciplines and other academic standards. These skills outline certain skills that students need to obtain prior to high school graduation if they are to succeed in the workplace. Although they are not required under each CIP Code's Program of Study Task List, the School District of Philadelphia requires that all CTE students are taught and master these essential skills.</i></p>				
<p>Click on the following links for more information on the CEW Standards:</p>				
<p>PA Dept. of Education CEW Website</p>				
<p>CEW Standards</p>				
Career Awareness and Preparation				
4000	Relate careers to individual interests, abilities, and aptitudes.			
4001	Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.			
4002	Analyze how the changing roles of individuals in the workplace relate to new opportunities within career choices.			
4003	Evaluate school-based opportunities for career awareness/preparation, such as, but not limited to career days, community service, internships, and job shadowing.			
4004	Justify the selection of a career.			
4005	Analyze the relationship between career choices and career preparation opportunities, such as, but not limited to college degrees, certificates/licensures, entrepreneurship, and industry and military training.			
4006	Assess the implementation of the individualized career plan through the ongoing development of the career portfolio.			
4007	Review personal high school plan against current personal career goals and select postsecondary opportunities based upon personal career interests.			
Career Acquisition (Getting a Job)				
4008	Apply effective speaking and listening skills used in a job interview.			

4009	Apply research skills in searching for a job utilizing various job search resources (e.g. CareerLinks, O-Net, Professional Organizations).			
4010	Develop and assemble, for career portfolio placement, career acquisition documents, such as, but not limited to job application, letter of introduction, postsecondary education/training applications, request for letter of recommendation and resume.			
4011	Analyze, revise, and apply an individualized career portfolio to chosen career path.			
4012	Demonstrate, in the career acquisition process, the application of essential workplace skills/knowledge, such as, but not limited to commitment, communication, dependability, health/safety, and scheduling/time management.			
	Career Retention and Advancement			
4013	Evaluate personal attitudes and work habits that support career retention and advancement.			
4014	Evaluate team member roles to describe and illustrate active listening techniques such as clarifying, encouraging, and summarizing.			
4015	Evaluate conflict resolution skills as they relate to the workplace such as constructive criticism, group dynamics, managing/leadership, negotiation and problem solving.			
4016	Develop a personal budget based on career choice, such as, but not limited to charitable contributions, fixed/variable expenses, gross and net pay, and savings.			
4017	Evaluate time management strategies and their application to both personal and work situations.			
4018	Evaluate strategies for career retention and advancement in response to the changing global workplace.			
4019	Evaluate the impact of lifelong learning on career retention and advancement.			
	Entrepreneurship			
4020	Analyze entrepreneurship as it relates to personal career goals and corporate opportunities.			
4021	Analyze entrepreneurship as it relates to personal character traits.			
4022	Develop a business plan for an entrepreneurial concept of personal interest and identify available resources, such as, but not limited to community-based organizations, financial institutions and venture capital.			

Signed:

CTE Instructor

Date





