

Competency Task List – Secondary Component
Electrical and Power Transmission Installers, Other CIP 46.0399
High School Graduation Years 2025, 2026, 2027

100 Basic Safety

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
101	Inspect and use personal protective equipment.		ELE1
102	Identify causes of job site accidents.		ELE1
	RESERVED (103-104)		
105	Don fall protection harness equipment.		ELE2
106	Identify four classes of fire extinguishers.		ELE1
107	Confirm circuits are de-energized before working on them.		ELE1
108	Perform lockout/tagout.		ELE2
109	Inspect and use ladders.		ELE1
110	Complete jobsite hazard analysis form.		ELE2
111	Identify arc-flash hazards and protection (NFPA70E).		ELE2

200 Hand Tools

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
201	Use screwdrivers.		ELE1
202	Use pliers.		ELE1
203	Use a keyhole/drywall saw.		ELE2
204	Use a hydraulic knockout/punch tool.		ELE2
205	Use a tape measure.		ELE1
206	Use wire strippers.		ELE1
207	Use wire cutters.		ELE1

208	Use a utility knife.		ELE1
209	Use a torpedo level.		ELE1
210	Use a hammer.		ELE1
211	Use a conduit reamer.		ELE2
212	Use a hacksaw.		ELE2
213	Use an MC Cable splitter (roto-split).		ELE1
214	Use an adjustable or non-adjustable wrenches.		ELE2
215	Use a ratchet and sockets.		ELE2
216	Use nut drivers.		ELE1

300 Power Tools

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
	RESERVED (301)		
302	Use a hammer drill.		ELE2
303	Use a reciprocating saw.		ELE2
304	Use a portable hand-held band saw.		ELE2
	RESERVED (305)		
306	Use a drill.		ELE2
	RESERVED (307-309)		
310	Use an oscillating multipurpose tool.		ELE2
311	Use impact driver.		ELE1

400 Blueprint Reading

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
401	Identify types of blueprint plans.		ELE1
402	Identify blueprint symbols.		ELE1
403	Interpret blueprint plans.		ELE2

	RESERVED (404)		
405	Develop electrical details on a blueprint.		ELE2
406	Use a measuring tool to scale.		ELE2

500 Anchors and Supports

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
501	Identify, select, and install various types of anchors and supports.		ELE2

600 Residential Communication Technology

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
	RESERVED (601-604)		
605	Terminate a coaxial cable.		ELE2
	RESERVED (606-608)		
609	Identify telecommunications cable types.		ELE2
610	Terminate a RJ45 connector.		ELE2
	RESERVED (611-612)		

700 Switches and Receptacles Circuits

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
701	Install a duplex receptacle.		ELE1
702	Install a single pole switch.		ELE1
703	Install a 3-way switch.		ELE1
704	Install a 4-way switch.		ELE1
705	Install a split-wired duplex receptacle.		ELE1
706	Install a Ground Fault Circuit Interrupter (GFCI) receptacle.		ELE1

707	Install an Arc-Fault Circuit Interrupter (AFCI).		ELE2
708	Install a time control switch.		ELE1
709	Install a range receptacle.		ELE2
710	Install a dryer receptacle.		ELE2
711	Install various branch circuits with (NM) and (MC) cable.		ELE2
712	Install connected/ smart devices.		ELE2
713	Terminate and splice conductors.		ELE1
714	Install various types new and old work boxes.		ELE2

800 Fixtures

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
801	Install surface-mounted lighting fixture.		ELE1
802	Install recessed lighting fixtures.		ELE2
803	Install a ceiling fan.		ELE1
804	Install special purpose lighting.		ELE2
805	Identify IC and non-IC recessed lighting fixtures.		ELE2

900 Raceways

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
901	Install Electrical Metallic Tubing (EMT).		ELE2
	RESERVED (902)		
903	Design a surface raceways system (wiremold).		ELE2
904	Install flexible raceway.		ELE1
	RESERVED (905-911)		
912	Install conductors in a raceway system.		ELE1
913	Demonstrate knowledge of various raceway systems.		ELE1

914	Identify, bend, and install various bends using types of conduits with the proper tools and techniques.		ELE2
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1000 Wired Devices

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
1001	Install a hard-wired smoke detector.		ELE2
1002	Install door-bell system.		ELE1
1003	Trim out electrical devices.		ELE1
1004	Install an occupancy sensor.		ELE1
1005	Install a photocell.		ELE1

1100 Testing Equipment

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
1101	Use a multimeter to test a circuit.		ELE2
	RESERVED (1102)		
1103	Use a plug-in circuit tester.		ELE1
1104	Use a clamp-on ammeter.		ELE2
	RESERVED (1105)		
1106	Use a circuit tracer.		ELE2
1107	Use a network cable tester.		ELE2
1108	Apply Ohm's/Watt's law calculations to electrical applications in simple/complex circuits.		ELE2

1200 Electrical Service

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
1201	Install an overhead service using SE cable.		

1202	Identify parts of an underground service.		ELE2
	RESERVED (1203-1208)		
1209	Identify types of safety disconnect switches.		ELE1
1210	Terminate a service panel/load center/sub-panel.		ELE2

1300 National Electrical Code (NEC)

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
1301	Identify the purpose of the NEC.		ELE1
1302	Use Chapter 9 Tables.		ELE2
1303	Use the NEC as a reference to questions and competencies that students perform for all electrical installations.		ELE2
1304	Identify the publisher of the NEC.		ELE1
1305	Identify the code cycle of the NEC.		ELE1
	RESERVED (1306)		

1400 Green Technology

Item	Task	(X) Indicates Proficiency ¹	Secondary Course Crosswalk
1401	Identify renewable energy sources.		ELE1
1402	Identify procedures for installing a wind turbine system.		ELE2
	RESERVED (1403)		
1404	Identify procedures for installing a solar energy system.		ELE2
	RESERVED (1405-1407)		

¹ Student Demonstrated Entry-Level Industry Proficiency as Indicated by (X)

Secondary CTE Instructor Signature _____ Date _____

Student Signature _____ Date _____