

Duty/Task Crosswalk

This duty/task crosswalk is based on the Oklahoma Duty/Task List for the Electrical Trades, Residential Electrical Assistant, and can be used as a cross-reference in other states.

Abbreviations:

FA—Focus Assignment

AS—Assignment Sheet

JS—Job Sheet

| Skill Code | Skill Description | Unit # | Specific Reference |
|------------|--|----------------------|--|
| E.02 | Inventory equipment and supplies | 2, 5, 6 8-17 | |
| F.01 | Construct/analyze/install series circuits | 10 | Objectives 4-6 |
| F.03 | Draw series circuit and calculate circuit values | 10 | AS 1-9 |
| F.04 | Construct/analyze/install parallel circuits | 10 | Objectives 7&8 |
| F.06 | Draw parallel circuit and calculate circuit values | 10 | AS 10-12 |
| F.07 | Construct/analyze/install series-parallel circuits | 10 | Objective 9 |
| F.09 | Draw series-parallel circuits and calculate circuit values | 10 | AS 13-15 |
| F.10 | Set up and operate for basic circuits: – ohmmeter – voltage tester | 6 6 | JS 5&6 JS 5&6 |
| G.01 | Identify AC sources | 11 | FA |
| G.02 | Analyze and apply principles of transformers to AC circuits | 11 | Objectives 7-10 |
| G.08 | Test capacitors in an AC circuit | 11 | AS 1&2 |
| H.01 | Demonstrate knowledge of Article 90 | 7 | AS 1 |
| H.02 | Demonstrate knowledge of Article 100 | 7 | AS 3 |
| I.01 | Calculate and balance the total load per phase | 11 | Objective 17 |
| I.03 | Calculate individual circuits | 13 | AS 7 |
| I.04 | Calculate the load in volt-amps and load current in amps | 11 | AS 1 |
| I.07 | Perform transformer and motor calculations | 13 | AS 16 |
| I.08 | Calculate voltage drop | 11 | AS 2 |
| I.09 | Calculate conductors – de-rating – correction factors | 13/17 13 13/15 | AS 2/Objectives 7&8 AS 5&6 AS 3&4/AS 1 |
| I.11 | Calculate over-current protection | 15 | AS 1, JS 1 |

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|------------|--|---------|--|
| I.12 | Perform calculations using Ohm's Law | 9 10 | Objectives 9-15, AS 2-5 AS 1, 2, 3, 6, 7, 8, 11, 16 |
| J.02 | Install main service panels | 16 | AS 2 |
| J.04 | Install main service disconnects | 16 | AS 1 |
| J.05 | Install circuit breakers in panels | 16 | AS 2 |
| K.02 | Install recessed fixture housings in ceilings | 17 | JS 7 |
| K.03 | Install bar-hanger mounted box | 11/17 | JS 1-4/JS 7 |
| K.05 | Install flush mount switch and outlet box in – lathe and plaster wall – paneled wall – masonry wall | 17 | JS 1-3 |
| | | 17 | JS 4 |
| | | 17 | JS 5&6 |
| K.07 | Install octagon outlet box | 11/17 | JS 1-4/JS 7 |
| L.03 | Rough-in and properly secure circuits and other raceways in conduits | 17 | AS 1 |
| L.05 | Connect circuits to circuit breaker panels | 16 | JS 1&2 |
| L.06 | Rough-in circuits to outlet boxes | 16 | JS 3 |
| L.07 | Rough-in cables between existing boxes and newly installed boxes | 17 | JS 8-10 |
| L.08 | Rough-in a circuit for an outlet controlled with – three-way switches and four-way switches – feed to the device | 11 | Objective 18 |
| | | 11 | JS 3&4 |
| | | 11 | JS 1&2 |
| L.09 | Rough-in low-voltage circuits – door chime system | 14 | JS 1 |
| L.10 | Rough-in cable for general purpose branch circuits – receptacle outlet | 16 | JS 3 |
| L.11 | Make splices using mechanical-type connectors – wire nuts | 13 | Objective 4 |
| | | 12 | JS 1, 2, 4, 5 |
| | | 13 | JS 4 |
| L.13 | Make terminations | 13 | JS 3 |
| L.15 | Install panels and subpanels | 16 | JS 2 |
| L.20 | Install conduits, cables, raceways, and equipment | 13 | Objective 10 |
| L. 22 | Rough-in thermostat wiring | 13 | Objectives 5-8 |
| N.20 | Install smoke and CO detectors | 14 | JS 2 |
| P.02 | Install wireway – lay-in – underfloor | 17 | Objectives 3-5 |
| | | 17 | JS 8 & 10 |
| | | 17 | JS 9 |
| P.04 | Install circuit breakers, fuses, and disconnecting means | 16 | JS 2 |
| T.02 | Troubleshoot/install/connect/replace door chime systems | 14 | AS 1, JS 1 |

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| Skill Code | Skill Description | Unit # | Specific Reference |
|------------|--|---------|---------------------------------------|
| T.05 | Troubleshoot/install connect/repair/replace emergency warning systems – fire | 14 | AS 2, JS 2 |
| U.02 | Describe the role and discuss the importance of the Occupational Safety and Health Administration (OSHA) | 2 | Objective 5 |
| U.03 | Identify and describe OSHA requirements | 2 | Objective 5 |
| U.04 | Identify and describe first aid and emergency response procedures | 2 | Entire unit |
| U.05 | Identify fire hazards, and describe fire protection and response procedures | 2 | AS 2 |
| U.09 | Identify safety precautions and procedures for working with and around electricity and high voltage transmission equipment | 3 | Entire unit |
| U.10 | Identify precautions for avoiding electrical shock and the procedures to follow when treating victims of electrical shock | 3 | Objective 11 |
| U.11 | Identify safety precautions and procedures for working with "live" circuits | 3 | Objective 5 |
| U.12 | Identify safety precautions and procedures for using test equipment | 6 | Objective 27 |
| U.13 | Identify safety precautions and procedures for installing temporary wiring, power systems, and service installations | 3 | Entire unit |
| U.14 | Identify safety precautions and procedures for installing circuit and feeder disconnects | 3 | Entire unit |
| U.15 | Identify and clearly mark safe working clearances around electrical equipment | 3 | AS 1 |
| U.16 | Describe the safe use of flexible cords and cables | 2 13 | Objective 3 Objectives 10-11, JS 1 |
| U.17 | Demonstrate knowledge of device and conductor polarity identification | 13 | Objective 9 |
| U.18 | Demonstrate knowledge of GFCI applications | 3 15 | Objective 8 Objectives 8-9 |

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| Skill Code | Skill Description | Unit # | Specific Reference |
|------------|--|--|---|
| U.27 | Retrieve, recognize, and calculate common statistical formulas – addition, subtraction, multiplication, and division of – whole numbers – fractions – decimals – percentages – measurements – use of calculator – basic geometry – application of formulas – word problems | 4 8 9 10 11 13 15 17 4 4 7 9 10 11 13 15 17 4 15 5/6 10 6 4 2 4 6 7 9 10 11 15 16 17 | AS 1-4 AS 1 AS 2-5 AS 1-16 AS 1&2 AS 2, 3, 5, 6 AS 1 AS 1 AS 5-9 AS 10-13 AS 6 AS 2, 4, 5 AS 8, 9, 12, 14, 16 AS 1&2 AS 2-6 AS 1 AS 1 AS 14&15 AS 1 AS 1/AS 1 AS 1-15 AS 1 AS 16 AS 1, 4 AS 1-4, 7-13, 15 AS 1 AS 4&5 AS 5 AS 1-3 AS 1&2 AS 1 AS 1 AS 1 |
| U.28 | Demonstrate negotiation skills – solve everyday human relations problems | All | |
| U.29 | Demonstrate leadership skills – employ leadership skills | All | |
| U.30 | Demonstrate career development skills – investigate an occupation – explore career opportunities – compare career options | 1 1 1/14 | FA, AS 1 AS 2 AS 1/FA |