# **Appendix A**

# **ON THE JOB LEARNING**

# AND

# **RELATED INSTRUCTION OUTLINE**

# **DEVELOPED FOR**

# **AUBURN UNIVERSITY FACILITIES MANAGEMENT**

# 2023-AL-117052

Sponsor: Hayley White	
	0

Date: 2/17/2025

 Registration Agency:
 \_\_\_\_\_

Date:

 $\boxtimes$  Revised Appendix A, Occupation Registration Date: <u>1/9/2023</u>

# **Appendix A**

#### WORK PROCESS SCHEDULE ELECTRICIAN

# **O\*NET-SOC CODE:** <u>47-2111.00</u> RAPIDS CODE: <u>0159</u>

oxtimes National Occupation oxtimes State Occupation

This schedule is attached to and a part of these Standards for the above identified occupation.

#### 1. APPRENTICESHIP APPROACH - V.8 29 CFR § 29.5(b)(2)

 $\boxtimes$  Time-based

Competency-based

□ Hybrid

#### 2. TERM OF APPRENTICESHIP – 29 CFR § 29.5(b)(2)

The term of the apprenticeship is 6000 hours, supplemented by 680 total hours of related instruction.

#### 3. RATIO OF APPRENTICES TO JOURNEYWORKERS – 29 CFR § 29.5(b)(7)

Every apprenticeship program is required to provide a numeric ratio of apprentices to journeyworkers consistent with proper supervision, training, safety, and continuity of employment.

The apprentice to journeyworker ratio is: 1 apprentice(s) to 1 journeyworker(s). Total number of journeyworkers employed: 18

#### 4. APPRENTICE WAGE SCHEDULE – 29 CFR § 29.5(b)(5)

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the journeyworker wage rate. The entry wage must not be less than the minimum wage prescribed by the Fair Labor Standards Act, where applicable, unless a higher wage is required by other applicable Federal law, State law, or respective regulations.

The journeyworker wage for this occupation is \$18.00.

PERIOD	HOURS	WAGE RATE
1 <sup>st</sup>	Starting wage – complete 2000 hours to move to period 2 wage	\$15.00
2 <sup>nd</sup>	Complete 4000 total hours to move to period 3 wage	\$16.00
3 <sup>rd</sup>	Complete 6000 total hours and all related instruction to move to end wage	\$17.00
4 <sup>th</sup>	End wage	\$18.00

### 5. **PROBATIONARY PERIOD – 29 CFR § 29.5(b)(8) and (20)**

The probationary period may not exceed 25 percent of the length of the program or 1 year whichever is shorter. Full credit will be given for the probationary period toward the completion of the apprenticeship.

Every applicant selected for apprenticeship will serve a probationary period of 1500 hours.

# 6. SELECTION PROCEDURES – 29 CFR § 29.5(b)(10), (21) and 29 CFR § 30.10

### **SECTION I – MINIMUM QUALIFICATIONS**

Applicants will meet the following minimum qualifications to be eligible for the pool of applicants:

A. <u>Age</u>

Applicants must not be less than 16 years of age and provide appropriate verification of age respecting Alabama state laws.

B. <u>Education</u>

Applicants must have a high school diploma, General Educational Development (GED) equivalency, or other high school equivalency credential. Applicant must provide an official transcript(s) for high school and any post-high school education.

C. <u>Physical</u>

Applicants will be physically capable of performing the essential functions of the apprenticeship program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.

D. <u>Other</u>

Valid driver's license

### **SECTION II – SELECTION PROCEDURES**

The sponsor has adopted the following selection procedures, consistent with the requirements set forth in forth in 29 CFR § 30.10(b):

- A. Applications will be accepted as specified by the sponsor.
- B. Every applicant will be required to complete an application that will be made available by the sponsor.
- C. Completed applications will be checked for minimum qualifications. Applicants deficient in one or more qualifications or requirements or making false statements on their applications will be disqualified and no further processing of such application will be taken.
- D. Applicants who meet the minimum qualifications will be entered into the pool of eligible applicants.
- E. Applicants will have the opportunity to review the standards, the sponsor's written rules and policies, and the apprenticeship agreement during the application process and prior to joining the program.
- F. Sponsor will conduct interviews and internal human resources procedures prior to an offer of employment.

# **SECTION III – DIRECT ENTRY**

The sponsor who invokes a direct entry provision may do so without regard to the existing selection procedure or minimum qualifications used for entry into the apprenticeship program. Direct entry shall be done without regard to race, color, religion, national origin, sex (including pregnancy and gender identity), sexual orientation, genetic information, or an individual with a disability or a person 40 years old or older. The methods for direct entry are as follows:

- A. A military veteran who has completed military technical training school and/or participated in a registered apprenticeship program or related occupation while in the military in the occupation registered. Applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience. The sponsor will evaluate the training received to grant appropriate credit.
- B. An individual who has completed an AOA certified pre-apprenticeship training program and meets the minimum qualifications of the apprenticeship program. may be admitted directly into the program. The applicant shall provide official

documentation confirming that they fulfilled the specific requirements of the pre-apprenticeship program, such as skills assessments, completion/graduation certificates, and transcripts. The sponsor will evaluate the pre-apprenticeship training received to grant appropriate credit.

C. Individual who is a current employee. The sponsor will evaluate the current employee's skills to grant appropriate credit.

#### ON-THE-JOB LEARNING OUTLINE ELECTRICIAN

# **O\*NET-SOC CODE:** <u>47-2111.00</u> RAPIDS CODE: <u>0159</u>

#### **On-the-Job Learning Guidelines:**

- During the apprenticeship, the apprentice shall receive work experience and jobrelated education in all phases of the occupation, including safe work practices, necessary to develop the skill and proficiency of a skilled professional.
- The program sponsor must ensure apprentices are rotated throughout the various job functions to ensure a well-rounded professional upon completion of the apprenticeship and identify what methodology will be used to track progression of experience on-the-job.
- The on-the-job learning outline does not need to be followed in any particular sequence. In all cases, the apprentice is to receive sufficient experience to make them fully competent in all job functions.
- Such on-the-job learning shall be carried on under the direction and guidance of a qualified professional.

JOB FUNCTION	HOURS
JOB FUNCTION 1: Wiring	800
1. Signal wiring	
2. Power wiring	
3. Wire splicing	
4. Equipment wiring	
5. Installation of conductors	
6. Wire sizing	
JOB FUNCTION 2: Control Equipment	400
1. Install sensors and controls	
2. Repair control wiring	
3. Adjust	
JOB FUNCTION 3: Lighting	500

1. Layout	
2. Install	
3. Repair	
JOB FUNCTION 4: Installation	900
1. Lighting equipment	1
2. Ballast	
3. Power equipment	
4. Fuses	
5. Signal equipment	
6. Fluorescent /LED fixtures	
7. Conduit	
8. Panels and switch gears	
9. Receptacles	
10. Switches	
11. Race ways, wire ways, and support	
JOB FUNCTION 5: Electric Motors	500
1. Install	
2. Repair	
3. Detection of faults	
4. AC variable speed drives	
5. Magnetic starters	
JOB FUNCTION 6: General Maintenance	1000
1. Appliance repairs, tools etc.	
2. Electrical circuits	
3. Replace fuses, lamps, etc.	
4. Grounding	
5. Troubleshooting	

JOB FUNCTION 7: Electronic Controls and Equipment	900
1. Install	
2. Repair	
3. PC controllers	
4. Emergency lighting	
5. Emergency power	
<ul> <li>6. Low voltage</li> <li>a. Fire alarms</li> <li>b. Lighting controls</li> <li>c. Access control</li> </ul>	
JOB FUNCTION 8: Instrument	700
1. Electrical	
2. Pneumatic	
3. Digital	
4. Environmental control loops	
5. Test equipment training	
JOB FUNCTION 9: Safety - Electrical	300
1. Methods and procedures	
2. Respiratory and personal protective equipment	
3. Vessel entry	
4. Hazardous material handling	
5. Lift operation	
6. Lockout tagout	
7. Proper starter procedures	
8. Arc Flash	
Total	6000

#### RELATED INSTRUCTION OUTLINE ELECTRICIAN

### **O\*NET-SOC CODE:** <u>47-2111.00</u> RAPIDS CODE: <u>0159</u>

#### **Related Instruction Guidelines:**

- The course listings outline the related instruction that supplements the on-the-job learning. It is through the combination of both the on-the-job learning and the related instruction that the apprentice can reach the skilled level of the occupation.
- Each apprentice's attendance and progress in related education must be tracked and appropriate records maintained.
- Time devoted to the job-related education shall not be considered as part of the onthe-job learning.
- Failure on the part of the apprentice to fulfill their obligation as to the related education and/or attendance, or their failure to maintain passing grades therein, shall constitute adequate cause for cancellation of their Apprenticeship Agreement.

Hours Instruction Provided: ⊠During Work Hours □During Non-Work Hours □Both Instruction Method: ⊠Classroom □Correspondence/Shop □Web-Based Learning Apprentices will be paid for hours spent attending related instruction classes.

RTI Provider Name: <u>Auburn University Facilities Management</u> Contact Name: <u>Dan Whatley</u> Contact Phone: <u>334-844-7411</u> Contact Email: <u>wdw0013@auburn.edu</u> Contact Address: <u>1161 W Samford Avenue, Auburn, AL 36849</u>

#### National Center for Construction Education and Research (NCCER) Credentials

#### NCCER CORE

NCCER ELECTRICAL LEVEL 1

NCCER ELECTRICAL LEVEL 2

NCCER ELECTRICAL LEVEL 3

NCCER ELECTRICAL LEVEL 4

NCCER COURSE	TITLE	HOURS	
Core: Introduction to	Core: Introduction to Basic Construction		
Module ID 00100	Build Your Future in Construction	2.5	
Module ID 00101	Basic Safety (Construction Site Safety Orientation)	12.5	
Module ID 00102	Introduction to Construction Math	10	
Module ID 00103	Introduction to Hand Tools	12.5	
Module ID 00104	Introduction to Power Tools	10	
Module ID 00105	Introduction to Construction Drawings	10	
Module ID 00106	Introduction to Basic Rigging	7.5	
Module ID 00107	Basic Communication Skills	7.5	
Module ID 00108	Basic Employability Skills	7.5	
Module ID 00109	Introduction to Materials Handling	5	
Electrical Level I			
Module ID 26101-20	Occupational Overview: The Electrical Industry	2.5	
Module ID 26102-20	Safety For Electricians	10	
Module ID 26103-20	Introduction to Electrical Circuits	7.5	
Module ID 26104-20	Electrical Theory	7.5	
Module ID 26105-20	Introduction to the National Electrical Code	7.5	
Module ID 26106-20	Device Boxes	10	
Module ID 26107-20	Hand Bending	10	
Module ID 26108-20	Wireways, Raceways, and Fittings	20	
Module ID 26109-20	Conductors and Cables	10	
Module ID 261010-20	Basic Electrical Construction Documents	7.5	
Module ID 26111-20	Residential Wiring	15	
Module ID 26112-20	Electrical Test Equipment	5	
Electrical Level 2			
Module ID 26201-20	Alternating Current	17.5	
Module ID 26202-20	Motors: Theory and Application	20	
Module ID 26203-20	Electric Lighting	15	
Module ID 26204-20	Conduit Bending	15	

Module ID 26205-20	Pull and Junction Boxes	12.5
Module ID 26206-20	Conductor Installations (	10
Module ID 26207-20	Cable Tray	7.5
Module ID 26208-20	Conductor Terminations and Splices	7.5
Module ID 26209-20	Grounding and Bonding	15
Module ID 26210-20	Circuit Breakers and Fuses	12.5
Module ID 26211-20	Control Systems and Fundamental Concepts	12.5
Electrical Level 3		
Module ID 26301-20	Load Calculations — Branch and Feeder Circuits	17.5
Module ID 26302-20	Conductor Selection and Calculations	15
Module ID 26303-20	Practical Applications of Lighting	12.5
Module ID 26304-20	Hazardous Locations	15
Module ID 26305-20	Overcurrent Protection	25
Module ID 26306-20	Distribution Equipment	12.5
Module ID 26307-20	Transformers	12.5
Module ID 26308-20	Commercial Electrical Services	10
Module ID 26309-20	Motor Calculations	12.5
Module ID 26310-20	Voice, Data, & Video	10
Module ID 26311-20	Motor Controls	12.5
Electrical Level 4		
Module ID 26401-20	Load Calculations — Feeders & Services	20
Module ID 26402-20	Health Care Facilities	10
Module ID 26403-20	Standby and Emergency Systems	10
Module ID 26404-20	Basic Electronic Theory	10
Module ID 26405-20	Fire Alarm Systems	15
Module ID 26406-20	Specialty Transformers	10
Module ID 26407-20	Advanced Controls	20
Module ID 26408-20	HVAC Controls	15
Module ID 26409-20	Heat Tracing and Freeze Protection	10
Module ID 26410-20	Motor Operation and Maintenance	10

Module ID 26411-20	Medium-Voltage Terminations/Splices	10
Module ID 26412-20	Special Locations	20
Module ID 46101	Fundamentals of Crew Leadership	22.5
	TOTAL	680