## 2020-2021 Apprenticeship Program

Electrical Level 4 Course Outline

This is the fourth and final year of the apprenticeship program. This year is based on reviewing the 2020 National Electrical Code (2020 NEC). This year is meant to prep apprentices to the Journeyman Licensure Exam. NEC Articles to be covered this year include the following:

differential Elections Exam. Nee Articles to be covered this year include the following.		
•	Article 100	Definitions
•	Article 110	Requirements for Installations
•	Article 200	Grounded Conductors
•	Article 210	Branch Circuits
•	Article 215	Feeders
•	Article 220	Branch Circuit Calculations
•	Article 220	Commercial, Dwelling, and Multifamily Calculations
•	Article 225	Outside Branch Circuits & Feeders
•	Article 230	Services
•	Article 240	Overcurrent Protection/Taps
•	Article 250	Grounding & Bonding
•	Article 300 / Chapter 9 Tables	Wiring Methods & Materials
•	Article 310	Conductors for General Wiring
•	Article 310 / Chapter 9 Tables	Voltage Drop Review
•	Article 312	Raceway and Box Fill
•	Article 314	Chapter 9 Review
•	Article 320-399	Chapter 3
•	Article 400-427	Equipment for General Use
•	Article 430	Motors & Motor Calculations / Motor Controls
•	Article 440	AC & Refrigeration
•	Article 445	Generators
•	Article 450	Transformers and Calculations
•	Article 455	Phase Converters
•	Article 460	Capacitors
•	Article 470	Resistors and Reactors
•	Article 480	Storage Batteries
•	Article 490	Equipment over 1000 Volts, Nominal
•	Article 500-516	Hazardous Locations
•	Article 517	Health Care
•	Article 518-520	Assembly, Performance Areas
•	Article 522-540	Carnivals, etc.
•	Article 545	Manufactured Buildings
•	Article 547	Agricultural
•	Article 550-555	Mobile Homes & Parks
•	Article 590	Temporary
•	Article 600-695	Special Equipment
•	Article 700-750 & 770	Special Conditions
•	Article 760	Fire Alarm Systems

Communication Systems

• Article 800