

## Electrician – Associate in Applied Science (ELEC.AAS)

Electricians install and maintain electrical systems in residential construction and commercial buildings. They also work in manufacturing settings, often servicing highly automated industrial processes. Increasingly electricians will be required to wire computer networks and telecommunications. This program will prepare students to work on each of these applications of electricity.

Minimum credits: 60

*Minimum cumulative GPA: 2.0*

*Minimum grade in all courses: 2.0*

*Minimum Jackson College credits: 15*

### GENERAL EDUCATION REQUIREMENTS (20-23 CREDITS)

#### **GEO 1: Write clearly, concisely and intelligibly (3 credits)**

**Take the following:**

ENG 131 Writing Experience I

#### **GEO 2: Recognize the importance of effective communication in a dynamic and changing society (3 credits)**

**Choose one of the following:**

|     |     |  |
|-----|-----|--|
| COM | 231 | Communication Fundamentals                       |
| COM | 240 | Interpersonal Communication                      |
| COM | 250 | Intercultural Communication                      |
| HIS | 211 | Minority Groups in America                       |
| HUM | 131 | Cultural Connections                             |
| PHL | 243 | Great World Religions                            |
| PLS | 262 | International Relations                          |
| PSY | 152 | Social Psychology (OR SOC 152 Social Psychology) |
| SOC | 246 | Marriage & Family                                |

#### **GEO 3: Demonstrate computational skills and mathematical reasoning (4 credits)**

**Take the following:**

MAT 130 Quantitative Reasoning (or higher)

#### **GEO 4: Demonstrate scientific reasoning (4-5 credits)**

**Choose one of the following:**

|     |     |                           |
|-----|-----|---------------------------|
| BIO | 110 | Introductory Biology      |
| CEM | 131 | Fundamentals of Chemistry |
| GEL | 109 | Earth Science             |
| NSC | 131 | Contemporary Science      |
| PHY | 131 | Conceptual Physics        |

**GEO 5: Understand human behavior and social systems, and the principles which govern them  
(3-4 credits)\*\***

***Choose one of the following:***

|     |     |                              |
|-----|-----|------------------------------|
| ECN | 231 | Macroeconomics               |
| ECN | 232 | Microeconomics               |
| PLS | 141 | American National Government |
| PSY | 130 | General Psychology           |
| SOC | 231 | Principles of Sociology      |

**GEO 6: Identify artistic, linguistic, and theoretical perspectives across the human experience  
(3 credits)\*\***

***Choose one of the following:***

|     |     |                                     |
|-----|-----|-------------------------------------|
| ART | 111 | Art History: Prehistoric to 1400    |
| ART | 112 | Art History: Renaissance to Present |
| HUM | 131 | Cultural Connections                |
| MUS | 131 | Understanding Music                 |
| THR | 116 | Introduction to Theatre             |

**ELECTRICIAN CORE REQUIREMENTS (40 CREDITS)**

***Take the following:***

|     |     |                                     |
|-----|-----|-------------------------------------|
| ELT | 120 | Circuit Analysis I                  |
| ELT | 126 | Circuit Analysis II                 |
| ELT | 130 | Electronics I                       |
| ELT | 140 | Introduction to Digital Electronics |
| ELT | 150 | Residential Wiring                  |
| ELT | 151 | Commercial Wiring                   |
| ELT | 152 | Industrial Wiring                   |
| ELT | 215 | Electrical Troubleshooting          |
| ELT | 220 | Industrial Motion Control           |
| ELT | 250 | Electrical Motors & Controls        |
| ELT | 260 | Basic Programmable Controllers      |
| ELT | 261 | Advanced PLC Programming            |
| ELT | 274 | Electrician's National Code         |

**ELECTRICIAN ADDITIONAL REQUIREMENTS**

|     |     |  |
|-----|-----|--|
| HOC | 110 | Advanced First Aid & American Heart CPR OR Current Adult CPR and First Aid Certification |
|-----|-----|--|