

## ***Technical Studies (Associate of Applied Science), Electrical Concentration***

This program is designed to prepare students to work as an Electrician. Electricians install electrical systems in structures; they install wiring and other electrical components, such as circuit breaker panels, switches, and light fixtures, and they follow blueprints, the National Electrical Code® and state and local codes. This program covers four levels of training based on curriculum developed by the National Center for Construction Education and Research (NCCER). To prepare trainees for a career in the electrical field, NCCER offers a comprehensive, 4-level Electrical curriculum that complies with DOL time-based standards for apprenticeship. Students who successfully complete the program will be nationally certified by NCCER.

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Source: <https://www.nccer.org/workforce-development-programs/disciplines/craft-details/electrical>

To receive any of the credentials outlined below (Certificate of Technical Studies, Technical Diploma, or Associate of Applied Science), the student must:

- Complete the program of study outlined below.
- Earn a “C” or better in all courses required for the completion of the program.

### **Program Outcomes. Upon successful completion of the program, the graduate will be able to:**

1. Apply electrical theory and tools in residential and construction environments.
2. Integrate various electrical devices to construct electrical systems.
3. Employ electrical calculations to size and troubleshoot electrical systems.
4. Demonstrate knowledge of the National Electrical Code and its application to various industries.
5. Demonstrate proper safety, use, maintenance, and storage of electrical equipment.

### **PROGRAM OF STUDY**

<b>First Semester</b>		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
ELEC 1116	Electrical Level 1	6
ENGL 1013	English Composition I	3
Gen Ed Math	Any department-approved General Education course in Mathematics	3
<b>Semester Total:</b>		<b>15</b>
<b>Second Semester</b>		<b>Credit Hours</b>
ELEC 1216	Electrical Level 2 Part 1	6
ELEC 1226	Electrical Level 2 Part 2	6
Gen Ed Humanities	Any department-approved, SACS-COC-accepted General Education course in Humanities	3
<b>Semester Total:</b>		<b>15</b>
<b>Third Semester</b>		<b>Credit Hours</b>
ELEC 2316	Electrical Level 3 Part 1	6
ELEC 2326	Electrical Level 3 Part 2	6
Gen Ed Soc Sci	Any department-approved General Education course in the Social Sciences	3

		<b>Semester Total:</b>	<b>15</b>
<b>Fourth Semester</b>			<b>Credit Hours</b>
ELEC 2416	Electrical Level 4 Part 1		6
ELEC 2426	Electrical Level 4 Part 2		6
Gen Ed Phys Sci	Any department-approved General Education course in the Physical Sciences		3
		<b>Semester Total:</b>	<b>15</b>
<b>Technical Studies AAS, Electrical Concentration Total Program Credit Hours:</b>			<b>60</b>

### Electrical Credentials Available

<b>NCCER Electrical Level 1 courses (9 credit hours)</b>		<b>Credit Hours</b>
CORE 1003	Introduction to Craft Skills	3
ELEC 1116	Electrical Level 1	6
<b>NCCER Electrical Level 1:</b>		<b>9</b>
<b>NCCER Electrical Level 2 courses (12 credit hours)</b>		<b>Credit Hours</b>
ELEC 1216	Electrical Level 2 Part 1	6
ELEC 1226	Electrical Level 2 Part 2	6
<b>CTS, NCCER Electrical Level 2 (Level 1 and Level 2 courses):</b>		<b>21</b>
<b>NCCER Electrical Level 3 courses (12 credit hours)</b>		<b>Credit Hours</b>
ELEC 2316	Electrical Level 3 Part 1	6
ELEC 2326	Electrical Level 3 Part 2	6
<b>NCCER Electrical Level 3 (Level 1, Level 2, and Level 3 courses):</b>		<b>33</b>
<b>NCCER Electrical Level 4 courses (12 credit hours)</b>		<b>Credit Hours</b>
ELEC 2416	Electrical Level 4 Part 1	6
ELEC 2426	Electrical Level 4 Part 2	6
<b>TD, NCCER Electrical Level 4 (Level 1, Level 2, Level 3, and Level 4 courses):</b>		<b>45</b>

For more information, contact the Division of Technical Education at 225-216-8367.