

**Jump Start 2.0 Associate of Applied Science: Technical Studies Concentration in Electrician**  
*Postsecondary Partner: Northshore Technical Community College*

**Overview**

The mission of the Electrician Program is to provide a basic core of specialized instruction and practical shop experience, and students will be prepared for employment in electrical trades. Students who successfully complete the Electrician Program will be able to:

1. Wire residential, commercial, and industrial structures utilizing appropriate methods and applications.
2. Produce precise measurements and calculations related to electrical systems.
3. Bend conduit to specification utilizing the appropriate technique.
4. Draw, wire, and connect basic motor controls.
5. Draw, wire, and connect multiple switching locations controlling luminaries.

**Capstone Credentials**

Regional (Emerging)	Basic	Advanced	Fast Forward Advanced Plus
-Carpenter International Training Fund (CITF) Career Connections: Pre-Apprentice Core Skills - NCCER Electrical Helper -OSHA 30	- Career & Technical Certificate: Electrical Fundamentals - Career & Technical Certificate: Electrical Helper -ABC Pelican Level 1 - Carpenter International Training Fund (CITF) Career Connections: Level 1 -NCCER Electrical Level 1	-Technical Diploma: Welding - ABC Pelican Level 2 - Carpenter International Training Fund (CITF) Career Connections: Level 2 -NCCER Electrical Level 2	Associate of Applied Science: Technical Studies Concentration in Electrical

*\*Core Academic Course*  
*\*\*Jump Start CTE Course*

Grade 9	
Semester 1	Semester 2
*English I 120331	*U.S. History 220403
*Algebra I 160321	*Physical Science 150802
*Civics 220501/220504	**Intro to Bus Comp Apps 040401 or Agriscience 1 010301
*Physical Education I 109105	*Foreign Language I

Grade 10	
Semester 1	Semester 2
*English II 121001	*½ Physical Education II 190106 ½ Health

	Education 190500
*Financial Literacy 160345 or Geometry 160323	*Biology 150301
*World Geography 220300	*Foreign Language II
**Agriscience II 010302 or Basic Technical Drafting 110560	**Business Computer Applications 040400

*Additional and/or equivalent TOPS core aligned courses can be found in Bulletin 741.*

Grade 11			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
**Basic Electricity ELEC 1120	**DE Basic Electricity I 310400	**Introduction to Motor Control ELEC 1420	**DE Introduction to Motor Control 890802
**Residential Wiring ELEC 1210	**DE Residential Wiring 890806	**Motor Controls ELEC 1440	**DE Motor Controls 890804
**National Electric Code ELEC 1230	**DE National Electrical Code 890805	**Solid State Theory ELEC 2520	**DE Solid State Theory 890808
*College Algebra Fundamentals MATH 1005	*Algebra III: DE-CMAT 1213 College Algebra 216001	**Logic Functions ELEC 2540	**DE Logic Functions 890803
*English Composition I ENGL 101	*English III: DE-CENL 1013 English Composition I 120601	*Critical Reading and Writing ENGL 102	*English IV: DE – CENL 1023 English Composition II 120607

Grade 12			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
**Intro to Programmable Logic ELEC 2720	**DE Logic Functions 890803	**Blueprint Interpretation ELEC 1430	**DE Design, Blueprint Reading and Codes 310622
**Electrical Raceways ELEC 1220	**DE Electrical Raceways 890800	**Technical Math for Elec ELEC 2460 (4 <sup>th</sup> math)	**TBD
**Generators/Motors & Transformers ELEC 1330	**DE Generators/Motors and Transformer Operation 890801	**Practicum ELEC 2997	**TBD
**Residential Wiring Install ELEC 1311	**DE Residential Wiring Installation 890806	*Intro to American Gov POLI 2010	* Government: DE-CPOL 2013 Introduction to American Govt 220514
*Environmental Biology BIOL 1110	*DE General/Physical Science Elective 150899	*Western Civilization I HIST 1010	*Western Civilization: DE-CHIS 1013 Western Civilization I 220446



*This pathway framework is an outline of how the approved courses can be implemented. Schools may opt to rearrange the order of course sequencing in order to meet local scheduling requirements. Additionally, Fast Forward pathways are dynamic and the Jump Start Review Panel will consider course equivalents on an as needed basis.*