



Martin Community College



High School-To-College ELECTRICAL/LINE TECH Pathway

The Electrical Systems Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential facilities. Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects as local needs require.

Student Learning Outcomes:

- Use electrical test equipment including volt meters, ohm meters, and amp meters to measure voltage, trouble-shoot, analyze and repair electric apparatus found in residences such as receptacles, light switches, circuit breakers, special purpose outlets.
- Select, install, and maintain equipment found in industrial settings such as motors, motor starters, transformers, and PLCs. Interpret, write, and modify ladder logic diagrams used by control equipment and PLCs in industrial manufacturing processes.

PATHWAY: HS Diploma + Residential Electrical Tech Certificate (C35130P3) (Line Tech Prep)										
	Grade		English/ Lang. Arts	Math	Science	Social Studies	Health & PE	CTE Electives	Career & College Promise College Credit Courses taught by MCC Faculty	
SECONDARY	9	Fall	English I	Fnd. of Math I	Earth Science	-----	Health/PE	-----	-----	
		Spring	-----	Math I	-----	World History	-----	-----	-----	
	10	Fall	English II	-----	Phy. Science	-----	-----	-----	-----	
		Spring	-----	Math II	-----	Civics	-----	-----	ACA 115	
	11	Fall	English III	-----	Found of Bio.	American Hist.	-----	-----	ELC 112, ELC 113	
		Spring	-----	Math III	Biology	-----	-----	-----	ISC 112	
	12	Fall	English IV	-----	-----	Econ. & Personal Finance	-----	-----	ELC 118, ELC 125	
		Spring	-----	Math IV	-----	-----	-----	CTE Internship	-----	
	Congratulations! High School Graduation. Next Step: Submit MCC Admission Application									
	POST	13	Fall	ELC 3014, ELC 3018 This course prepares individuals to work as linemen in the preparation and repair of electrical utility service. Course topics include basic elements of electricity, overhead pole and electrical line construction, safety codes and applications, electric power system, transformer and meter installations, and exploration of underground electrical distribution. Upon completion, individuals will possess the necessary skills for employment in various electrical utility industries. Course content to align with learning outcomes defined by the Carolinas Energy Workforce Consortium. <i>*Upon completion of the CCP Certificate and graduation from high school, the student would then register for the 16-week Electric Lines Technician program offered through Continuing Education. Once the Con Ed program is complete, students will be connected with power company employers for interviews.</i>						
Congratulations! College completion of Apprentice Line Technician Credential										

BDM-8/2/21

Student must be 18 years of age by completion of the Continuing Education course.