



DABNEY S. LANCASTER
COMMUNITY COLLEGE

Electrical Wiring Fundamentals

Career Studies Certificate

Program Code: 221-706-01

2020-2021 Catalog

Jay Hooper

jhooper@dslcc.edu

(540) 863-2892

www.dslcc.edu

Purpose

The Electrical Wiring Fundamentals program is designed to prepare individuals for entry level positions or advancement opportunities in the electrical wiring field. Electricians are skilled workers who are responsible for the construction, repair, maintenance, alteration or removal of electrical systems in accordance with the National Electrical Code (and other state and local codes). This program is designed to prepare individuals for a broad range of employment opportunities in the field of electrical construction and industrial maintenance. The curriculum provides preparation for the journeyman electrical exam. For those interested, credits earned in this program may also be applied toward the college's Associate of Applied Science degree in Technical Studies/Electrical and Instrumentation Technology.

Admission Requirements

Students who meet the admission requirements to the College are eligible for enrollment into the program. Individuals are expected to be proficient in basic English, mathematics and reading. Appropriate developmental courses are available for those who need to update their skills.

Program Description

Nearly all residential and commercial buildings have electrical power, lighting, communications and control systems that must be properly installed, maintained and upgraded throughout their lifetime by qualified, competent electricians and technicians. Also, modern manufacturing facilities often utilize complex production systems involving the coordinated interaction of electrical, electronic, mechanical and computer components and devices. To ensure the safety of the public, state and local governments require that electrical power and equipment installations be performed and maintained by appropriately trained, experienced and licensed personnel. Electrical licensing in Virginia is regulated by the Virginia Board of Contractors/Department of Professional and Occupational Regulation (DPOR). Licensing is available at the Journeyman, Master and Contractor levels. One of the pathways to journeyman electrical licensure requires 240 clock hours of formal training and four years work experience before taking the journeyman electrical exam.

Residential electricians and (commercial) inside electricians are examples of such types of workers. Residential electricians install wiring and troubleshoot electrical problems in people's homes. Inside electricians install wiring and troubleshoot electrical problems in commercial buildings, and may also install, maintain and repair large motors, equipment, and control systems in businesses and factories.

Employment Outlook

Possible job titles include, but are not limited to, residential electrician, inside electrician, commercial electrician, industrial electrician, maintenance electrician, and journeyman electrician.

The Bureau of Labor Statistics has projected that employment of electricians will grow 20 percent from 2012 to 2022. This is far above the projected national overall average occupations growth of 11 percent for the same time period.

1000 Dabney Drive
Clifton Forge, Virginia 24422
540.863.2820
SSFrontDesk@dslcc.edu

35 Vista Links Drive
Buena Vista, Virginia 24416
540.261.1211
RRCFrontDesk@dslcc.edu

Course Number	Course Name	Cr.	Pre/Co Requisites	Semester	Grade
Fall Semester					
ELE 138	National Electrical Code Review I	3		F	
ELE 150	A.C. and D.C. Circuit Fundamentals	3		F	
ITE 115	Introduction to Computer Applications & Concepts	3		All	
MTH 131	Technical Mathematics	3	Prerequisite: MTE 1 - 6	F	
Spring Semester					
ELE 149	Wiring Methods in Industry with Lab	3		SP	
ELE 156	Electrical Control Systems with lab	3		SP	
ELE 175	Industrial Solid-State Devices and Circuits with Lab	2	Prerequisite: ELE 150	SP	
ELE 239	Programmable Controllers with Lab	3		SP	

Credit hours required for career studies certificate: 23

TRANSFER OPTIONS

Agreements exist between Dabney S. Lancaster Community College and various four-year colleges and universities. Contact Student Services for information about further study after graduation from DSLCC.

DISCLAIMERS

Every effort is made to ensure accuracy, but the College reserves the right to make edits with respect to course offerings, programs and requirements contained in this publication. This information is provided for the convenience of the reader and DSLCC disclaims any liability.

Please note that not all courses are offered at all locations or during all sessions. Check class sites and times when registering. Most programs of study begin in the fall semester. Please note that while new students are welcome to enroll in any session, those who enter in spring or summer will likely find that completion of requirements may take longer.