

ELECTRICITY

Overview

Electricity Technical Diploma

Program Code: 31-413-1

For more information: www.wctc.edu/electricity (<http://www.wctc.edu/electricity/>)

Learn to apply key electricity skills and knowledge in commercial, residential and industrial settings. Explore the National Electrical Code and emerging trends in the industry. Learn to read construction drawings and use appropriate safety measures when working with electricity.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C

General Studies Courses = C-

Program GPA = 2.0

Learning Outcomes

Program Outcomes

1. Apply electrical theory.
2. Install electrical equipment in a residential setting.
3. Install electrical equipment in a commercial setting.
4. Analyze industrial equipment.

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

Communication: Demonstrate appropriate communication.

Critical Thinking/Problem Solving: Demonstrate critical thinking skills to analyze situations and solve problems.

Relationships: Demonstrate effective interpersonal skills.

Self-management: Demonstrate responsible and respectful behavior.

Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
Core Courses		
413-301	Beginning Electrical Concepts	2
413-302	Reading Construction Drawings	2
413-308	Construction Trades Safety	1

413-309	Introduction to NEC	2
413-311	Intermediate NEC	2
413-316	Advanced Electrical Concepts	2
413-321	Res & Comm Wiring Concepts	2
Approved Substitute: 413-307 OR (413-317 and 413-319)		
413-322	Trends in Electricity	2
413-333	Industrial Wiring Concepts	2
Approved Substitute: 413-313		
605-129	Elect Pwr Ctrl & Motors	3
605-188	PLC 1	2
General Studies		
801-311	Communication in the Workplace	2
Approved Substitutes: 801-136 OR 801-223 OR 801-196		
804-310	Math for Industry	2
Approved Substitutes: 804-107 OR 804-115 OR 804-116 OR 804-118 OR 804-195 OR 804-198 OR 804-305		
Total Credits		26

Full-time Plan

First Year

Fall Term 1		Credits
413-301	Beginning Electrical Concepts	2
413-302	Reading Construction Drawings	2
804-310	Math for Industry	2
801-311	Communication in the Workplace <small>This course will run 16 weeks.</small>	2
Credits		8

Fall Term 2

413-308	Construction Trades Safety	1
413-309	Introduction to NEC	2
413-321	Res & Comm Wiring Concepts	2
Credits		5

Spring Term 1

413-311	Intermediate NEC	2
413-333	Industrial Wiring Concepts	2
605-188	PLC 1	2
Credits		6

Spring Term 2

413-316	Advanced Electrical Concepts	2
413-322	Trends in Electricity	2
605-129	Elect Pwr Ctrl & Motors	3
Credits		7
Total Credits		26