EZHI-ONAPIDEG WAASAMOWIN

How electricity is harnessed.

ELECTRICAL TECHNICIAN

DIPLOMA

The LLTC Electrical Technician program offers an industry recognized curriculum providing the basic knowledge and skills in applied electrical theory; residential wiring, blueprint reading, construction safety and The National Electrical Code. Students gain valuable electrical experience through coursework, lab instruction and hands on work. As a graduate of the Electrical Technician program you are equipped to enter the workforce as an apprentice/mentee, depending on your interest or skill level.

Graduates may choose to work in an electrical construction related field as an apprentice or further their educational experience at an approved Minnesota Department of Labor and Industry Apprenticeship Program. An emphasis on sustainable residential electricity will introduce students for careers in the emerging green technology field. The one-year Electrical Technician certificate is an excellent way to record an individual's course work in transcript form and prepare individuals for a career in construction electricity.

Program Learning Outcomes

Graduates will be able to:

- Demonstrate professionalism and related employability skills.
- Develop skills necessary to enter an apprenticeship/mentorship program in the electrical construction field.
- Use National Electrical and Fire Codes to implement all electrical design and installation methods.
- Apply problem solving and/or mathematical strategies to electrical circuitry.
- Build, install and repair residential electrical systems in a lab setting.
- Demonstrate knowledge of common safety rules with equipment operation and practices.
- Successfully complete the OSHA 10 competency exam.
- Work with the LLTC Carpentry Program to develop and practice the skills of time management and collaboration on a construction project, such as building a house.

Electrical Technician 2025-2027 Program of Study

General Education Courses: 4 credits			Cr.	Pre-Req	Term	CK
	MATH 140	Math Concepts	4		FA/SP	

Electrical Technician Program Requirements: 26 credits			Cr.	Pre-Req	Term	CK
	ELEC 110	Intro to Electrical Circuit Theory	4		Fall	
	ELEC 114	Materials and Codes	2		Fall	
	ELEC 116	Introduction to Residential Wiring	3		Fall	
	ELEC 118	Electrical Circuit Theory	4		Spring	
	ELEC 120	Residential Wiring & the NEC (Nat'l Elect. Code)	3		Spring	
	ELEC 122	Electrical Services	3		Fall	
	ELEC 124	Electrical Blueprints	2		Spring	
	ELEC 216	Motors and Controls	3		Spring	
	ENER 210	Intro to Solar Energy	3		Fall	
		Total=	**30 Credits**			

**Some prerequisites may be waived with instructor approval if you already have the required skills or knowledge.*