



OZARKS TECHNICAL COMMUNITY COLLEGE

Electrical Distribution Systems Program (EDS)

Program Overview

Ozarks Technical Community College is planning to offer an Electrical Distribution Systems (Lineworker) associate degree at the Lebanon Education Center beginning in fall 2018. Electric utility line technicians install and repair poles, conductors, cables, and operate and maintain equipment used in electrical power and distribution systems. Students in this program will learn to climb wood pole structures, operate equipment, and build and maintain electrical distribution systems. An emphasis on safe work practices and critical thinking skills will be a part of all coursework. The degree program is intended to prepare individuals for employment at any utility offering an apprenticeship program. Program enrollment is limited and students are selected on a competitive basis.

Frequently Asked Questions

When do classes start?

- Classes will begin on August 20, 2018.

How long are the classes?

- Classes will be semester-long, 16 weeks each for fall and spring. There will be one required summer session (internship) during the program and the length may vary.
- Lab classes for the commercial driver's license (EDS 152) will have a required amount of driving/training time. This will be subject to scheduling with available fleet vehicles, student preparation to complete the labs, and weather conditions.

Are the classes during the day or in the evening?

- Classes will be offered based on student need and may include evening hours.

Will some courses be online?

- All general education courses are available online as well as seated.
- Lab courses will not be offered online.

Where are classes held?

- The Electrical Distribution Systems program classes will be taught by OTC instructors at the OTC Lebanon Education Center or online.
- Clement Truck Driving Academy will teach driver training classes at their facility, 16755 State Highway W, Phillipsburg, MO 65722.

Are there any special admission requirements for this major?

- After a student applies to OTC, several special items are needed:
 - A valid driver's license from any state is required.
 - Students must be able to maintain a driving record that is *eligible* for Missouri Class A commercial driver's license (CDL) without restriction. The CDL licensing requires a DOT physical examination and drug screen, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply and are not a part of the tuition.
 - Students must be able to climb and lift/carry 30 pounds or greater. In addition, walking, standing, some pulling, pushing, stooping, kneeling and reaching are required. There is also exposure to oil, dirt, water and weather extremes.
 - Students will be expected to successfully complete College Algebra (MTH 130) with a grade "C" or better as the first level math course in the program. Students with a qualifying ACT score for the math section (22 or higher is needed for a student to start in MTH 130, and 26 or higher is needed for a student to start in MTH 131) may be eligible to waive MTH 130 and enroll in Trigonometry (MTH 131), thus reducing the math credit required by one course.

What are the lab components?

- Lab fees will cover consumable costs associated with fuel, equipment operation, maintenance, and demonstration/simulation activities.
- Lab fees will cover the exam for a Missouri Class A CDL taught by Clement Truck Driving Academy, 16755 State Highway W, Phillipsburg, MO 65722. The CDL licensing requires a DOT physical examination and drug screen, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply and are not a part of the tuition.

What if I already hold a valid Missouri Class A Commercial Driver's License?

- Students who already have a valid Missouri Class A CDL will not need to enroll in the CDL lecture or lab courses (EDS 151 & EDS 152). Any course fees related to EDS 151 & EDS 152 will not be applicable. Persons with this credential will need to provide evidence of this on their program application materials. The states of Illinois, Maryland and South Carolina will not accept a Missouri CDL to be transferred back to that state. If a student has a valid license from another state, it will work in Missouri for employment.

Do students begin lineworker activities immediately after enrolling in the EDS program?

- Yes! Full-time students will be outside climbing utility poles, operating trucks and equipment, and practicing safety and prevention methods in the first few weeks of classes. OTC wants students to begin training as soon as possible so they can complete their degree in two years.

What degree will a student complete?

- This degree will be an Associate of Applied Science (A.A.S.) in Electrical Distribution Systems Technology and Pre-Apprenticeship Certificate.

How long does the entire degree take?

- In order to earn this degree, students must earn 69 credits. Students who are able to take 16-18 credit hours per semester and are available for one summer semester course can complete the degree in two years.

What type of gear or supplies will I need?

- **Climbing Tools:** Equipment Bag, Climbing Belt, Fall Protection System, Climber, Climber Pads, Tool Holster, Ditty Bag, Hard Hat, Leather Gloves, Safety Glasses, and Climbing Boots.
- **Hand Tools:** Hammer, Adjustable Wrench 10", Ratchet Wrenches 5 pc, Screwdriver, Wood Ruler, Skinning Knife, Lineman Pliers, and Sidlock Pliers.

Supplies available through the bookstore or other entities

What is the total cost of the degree?

- Students will be charged the normal OTC Tier II tuition rate for classes, which is currently \$110 per credit hour for in-district students for the 2017-2018 school year. This figure does not include general OTC fees which vary based on the semester and total hours taken.
- The lab fees for the commercial driver's license instruction are \$3,506. This is the total for the lab portion of the program. These fees are comparable to most driver training schools.

Course Cost Sheet for program:

EDS Semester 1

<u>Class (Hours)</u>	<u>In-District</u>	<u>Out-of-District</u>	<u>Out-of-State</u>
EDS 100 Intro to EDS & Transmission (3)	330.00	472.50	621.00
EDS 120 Safety & Prevention (4)	440.00	630.00	828.00
EDS 160 Pole Climbing Skills (4)	440.00	630.00	828.00
EDS 151 Commercial Driver License (3)	330.00	472.50	621.00
EDS 152 CDL Lab (3)	330.00	472.50	621.00
<u>Semester Fees</u>			
Application Fee (One-Time)	100.00	100.00	100.00
Student Fee (\$15/hour)	255.00	255.00	255.00
Technology Fee (\$7/hour)	119.00	119.00	119.00
Security Fee (\$3/hour)	51.00	51.00	51.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$50/semester)	50.00	50.00	50.00
Lab Fees (\$75-100/course + CDL)	3705.50	3705.50	3705.50
Books & Supplies (Estimate)	750.00	750.00	750.00
<u>Semester Total Cost</u>	<u>6801.00</u>	<u>7608.50</u>	<u>8450.00</u>

EDS Semester 2

<u><i>Class (Hours)</i></u>	<u><i>In-District</i></u>	<u><i>Out-of-District</i></u>	<u><i>Out-of-State</i></u>
EDS 150 Equipment Operation (4)	440.00	630.00	828.00
EDS 170 Overhead Power Distrib. (4)	440.00	630.00	828.00
ENG 101 Composition I (3)	324.00	445.50	594.00
CHM 101 Introductory Chemistry (4)	432.00	594.00	792.00
MTH 130 College Algebra (3)	324.00	445.50	594.00
<u><i>Semester Fees</i></u>			
Student Fee (\$15/hour)	270.00	270.00	270.00
Technology Fee (\$7/hour)	126.00	126.00	126.00
Security Fee (\$3/hour)	54.00	54.00	54.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$50/semester)	50.00	50.00	50.00
Lab Fees (\$75-100/course)	225.00	225.00	225.00
Books & Supplies (Estimate)	750.00	750.00	750.00
<u>Semester Total Cost</u>	<u>3435.00</u>	<u>4220.00</u>	<u>5111.00</u>

EDS Semester 3 (Summer)

<u><i>Class (Hours)</i></u>	<u><i>In-District</i></u>	<u><i>Out-of-District</i></u>	<u><i>Out-of-State</i></u>
EDS 290 Co-Op/Internship (1)	110.00	157.50	207.00
<u><i>Semester Fees</i></u>			
Student Fee (\$15/hour)	15.00	15.00	15.00
Technology Fee (\$7/hour)	7.00	7.00	7.00
Security Fee (\$3/hour)	3.00	3.00	3.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$50/semester)	50.00	50.00	50.00
Lab Fees (\$60/course)	0.00	0.00	0.00
Books & Supplies (Estimate)	50.00	50.00	50.00
<u>Semester Total Cost</u>	<u>360.00</u>	<u>407.50</u>	<u>457.00</u>

EDS Semester 4

<u><i>Class (Hours)</i></u>	<u><i>In-District</i></u>	<u><i>Out-of-District</i></u>	<u><i>Out-of-State</i></u>
EDS 200 EDS & Transmission II (4)	440.00	630.00	828.00
EDS 237 Transformer Theory (4)	440.00	630.00	828.00
EDS 246 Service Instal. & Metering (3)	330.00	472.50	621.00
EDS 250 Intro to Live Line Proced. (3)	330.00	472.50	621.00
MTH 131 Trigonometry (3)	324.00	445.50	594.00
<u><i>Semester Fees</i></u>			
Student Fee (\$15/hour)	255.00	255.00	255.00
Technology Fee (\$7/hour)	119.00	119.00	119.00

Security Fee (\$3/hour)	51.00	51.00	51.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$50/semester)	50.00	50.00	50.00
Lab Fees (\$75-100/course + CDL)	150.00	150.00	150.00
Books & Supplies (Estimate)	750.00	750.00	750.00
<u>Semester Total Cost</u>	<u>3006.00</u>	<u>3792.50</u>	<u>4634.00</u>

EDS Semester 5

<u>Class (Hours)</u>	<u>In-District</u>	<u>Out-of-District</u>	<u>Out-of-State</u>
EDS 270 Underground Power Dist. (3)	330.00	472.50	621.00
EDS 260 Distribution Systems Maint. (4)	440.00	630.00	828.00
EDS 272 Fus., Substat., & Volt. Reg. (3)	330.00	472.50	621.00
COM 105 Public Speaking (3)	324.00	445.50	594.00
PLS 101 American Gov. & Politics (3)	324.00	445.50	594.00
<u>Semester Fees</u>			
Student Fee (\$15/hour)	240.00	240.00	240.00
Technology Fee (\$7/hour)	112.00	112.00	112.00
Security Fee (\$3/hour)	48.00	48.00	48.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$50/semester)	50.00	50.00	50.00
Lab Fees (\$60-100/course)	250.00	250.00	250.00
Books & Supplies (Estimate)	750.00	750.00	750.00
<u>Semester Total Cost</u>	<u>3198.00</u>	<u>3919.00</u>	<u>4708.00</u>
Total Program Cost/2yr	<u>In-District</u> \$16,790.00	<u>Out-of-District</u> \$19,947.50	<u>Out-of-State</u> \$23,360.00

- These fees are all inclusive assuming a student completes the lab components in the average amount of time needed by students. If a student is unable to complete the lab portion of the commercial driver's license course within the scheduled hours then the student would be charged for additional training time at the listed hourly rate. The CDL licensing requires a DOT physical examination and drug screen, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply and are not a part of the tuition.

Can students use Financial Aid, A+ Scholarships, or Veterans benefits?

- The program is financial aid eligible. Students are eligible for all state and federal aid, foundation, and institutional scholarships. Keep in mind all grant, loan and scholarships will have dollar limits.
- Students who are qualified A+ scholarship recipients will be eligible to use those fund benefits toward the cost of the program. These dollars are applied to the tuition and common course fees. This scholarship does **not** cover lab fees.

What college credit can transfer?

- OTC will work with our four year partner universities to develop a possible transferable degree option. This is still a work in progress since the first group of students has not completed the program.
- The following general education courses will transfer to any public college or university in the State of Missouri under the CORE 42 statewide general education transfer program:
 - English Composition I (ENG 101); substitutions allowed include ENG 100/100A, ENG 102 and ENG 150
 - College Algebra (MTH 130)
 - Trigonometry (MTH 131)
 - Introductory Chemistry (CHM 101)
 - Public Speaking (COM 105)
 - American Government and Politics (PLS 101)

Can students test out of any courses?

- Students will be expected to successfully complete College Algebra (MTH 130) with a grade "C" or better as the first level math course in the program. Students with a qualifying ACT score for the math section (22 or higher is needed for a student to start in MTH 130, and 26 or higher is needed for a student to start in MTH 131) may be eligible to waive MTH 130 and enroll in Trigonometry (MTH 131), thus reducing the math credit required by one course.
- Students may also take the CLEP exam to test out of ENG 101, MTH 130, HST 120/130. For more information, please visit:
http://academics.otc.edu/media/uploads/sites/26/2015/12/CLEP_Equivalences_at_OTC.pdf
- Students may also ask to apply any eligible credit earned through dual credit courses by providing a transcript showing the course name and grade. These will be evaluated and applied on a case by case basis.

Can a students take EDS classes at other campuses besides Lebanon?

- All EDS courses will only be offered at the OTC Lebanon Campus, but the General Education courses are offered at other campuses and online.

How many people are in each class?

- Seated lecture and lab courses taught by OTC faculty for the EDS program are capped at 24 students.

Do students need their own computers?

- Although it is possible to be successful without a personal computer, computers and the Internet are used. Computers are available at all OTC locations for student use. Computer costs will not be covered by financial aid up front, but any refund given from financial aid can be used in the purchase of the item (if there is a refund).
- All necessary equipment, excluding textbooks, will be provided through the course fee.

What is the preferred course sequence?

**ELECTRICAL DISTRIBUTION SYSTEMS TECHNOLOGY
Preferred Course Sequence**

Semester One		Credit Hours	Lab Fee
EDS 100	Intro to Electrical Distribution & Transmission	3	
EDS 120	Safety & Prevention Methods (<i>includes OSHA 10, CPR/First Aid, Flagger</i>)	4	\$100.00
EDS 160	Pole Climbing Skills	4	\$100.00
EDS 151	Commercial Driver License	3	
EDS 152	Commercial Driver License Lab	3	\$3,506.00
		17	

Semester Two			
EDS 150	Equipment Operation	4	\$75.00
EDS 170	Overhead Power Distribution	4	\$75.00
ENG 101	English Composition I (<i>allow ENG 100/100A, ENG 102 and ENG 150 as substitutions</i>)	3	
CHM 101	Introductory Chemistry (<i>allow PHY 105 as substitution</i>)	4	\$75.00
MTH 130	College Algebra (<i>could be waived if ACT Math Score is high</i>)	3	
		18	

Semester Three (Summer)			
EDS 290	Co-Operative Ed/Internship (1-3)	1	
		1	

Semester Four			
EDS 200	Electrical Distribution & Transmission II	4	\$75.00
EDS 237	Transformer Theory	4	\$75.00
EDS 246	Service Installation & Metering	3	
EDS 250	Gloving & Intro to Live Line Procedures	3	
MTH 131	Trigonometry	3	
		17	

Semester Five			
EDS 270	Underground Power Distribution	3	\$75.00
EDS 260	Distribution Systems Maintenance	4	\$100.00
EDS 272	Fusing, Substations, & Voltage Regulation	3	\$75.00
COM 105	Public Speaking	3	
PLS 101	American Government & Politics (<i>allow HST 120 or HST 130 as substitution</i>)	3	
		16	

PROGRAM TOTAL 69