



# OZARKS TECHNICAL COMMUNITY COLLEGE

## Electrical Distribution Systems Program (EDS)

### **Program Overview**

Ozarks Technical Community College offers an Electrical Distribution Systems (Lineworker) associate degree at the Lebanon Education Center, which began in the 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**

#### ***Does this class count as part of the Lineperson Apprenticeship?***

- This course is considered a pre-apprenticeship course. Some electrical providers have stated they would consider this degree as the first year or two of the apprenticeship, so it is best if you have a specific place in mind to visit with them about how they view the degree.
- Many electrical providers have gone to a policy of requiring applicants to have a degree related to the field before they will even interview them. This degree meets that requirement and prepares students to hit the ground running as a useful member of the team ready to fine tune their base skills.

#### ***Does OTC help students with internships and job placement?***

- We will do all we can to help students with their internships, but we do not have reserved slots with various electrical providers at this time. Students who get into the program are strongly encouraged to reach out to electrical service providers in their area or ones they would like to work for early in the fall to see if they have any openings for internships.
- We continue to work to build relationships with various electrical providers and have had great success with the first cohort of students finding internships.
- We have a career employment services sector that helps all OTC students and alumni track down jobs. We also have an active advisory committee and we are working on other avenues to keep up with job openings and opportunities there may be out there for students. We are still

in the first year of a new program so this is developing area of the program. The projected need for this field is over 6000 openings in the next few years.

***When do classes start?***

- Classes will begin on August 19, 2019.

***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.

***How many days a week are the classes?***

- The EDS classes are scheduled for two days a week with the first year being Tuesday and Thursday and the second year being Monday and Wednesday.
- The driving portion of the CDL will require at least one extra day per week for the last 8 weeks (two months) of the first fall semester.
- The summer internship between year one and two will likely be a standard workweek, but could include some weekend work or other odd schedules.
- We will have general education classes scheduled on the days EDS students are here, but students are free to take those classes at locations and times of their choosing. This means students could have class more days per week.

***Are the classes during the day or in the evening?***

- Currently the classes start between 8 and 8:30 am and may run as late as 5:30 or 6:00pm, based on the number of credit hours required/taken in the semester.
- The general Education classes taken after the EDS classes could have students here as late as 7:00-9:00pm.

***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:
  - This is a selective admission program based on a points system. The top scoring students will be accepted into the program first, with ties being broken by a committee's review of the applicants' one-page essay, recommendation letter(s), related experience from their resume (if applicable), and other relevant submitted item. (see application packet for more information)
  - 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, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply.
  - Students must be able to pass a drug screen and maintain a drug free system to be eligible to participate in the CDL training courses and EDS lab activities.
  - 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.
  - Student must be able to properly utilize the safety equipment used for climbing the poles and keep said equipment in good working order throughout the course. Training on how to use the safety equipment is provided in the course.
  - There will be a safety equipment fitting day and possible one or two other special meetings that students in the program will be required to attend. If students are unable to make the required meeting(s), they will be responsible for certain tasks on their own time or risk removal from the program.

***What are the lab components?***

- Course fees will cover consumable costs associated with fuel, equipment operation, maintenance, and demonstration/simulation activities.

- Course 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, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply.
- The DOT physical and drug screen is a separate cost not covered in the lab fee structure.

***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.
- The current procedure is to provide a copy of your current Class A CDL with no restrictions and a copy of a passed drug screen that is no more than 1 year old to get credit for prior learning for the EDS 151 & 152 class. This should be completed at the beginning of the first semester.

***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 and will be climbing the poles week one. 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, Bashlin Climbing Belt, Patriot Fall Protection System, Bashlin Climbers with Pads, Magnetic Gaff Guards, Tool Holster, Ditty Bag, Hard Hat, Leather Gloves, Safety Glasses, Work Shirt and Climbing Boots.
  - **Note:** The climbing boots are not a part of the equipment kit that students purchase through OTC and thus a separate cost/responsibility.
- **Hand Tools:** Heavy-Duty Straight Claw Hammer, Adjustable Wrench 10", 5-in-1 Lineman Wrench, Demolition Screwdriver, 6 ft. Fiberglass folding Ruler, Skinning Knife, Lineman Pliers, Handline Hook, and Pump Pliers.

- **Fitting Day:** There will be a required attendance equipment fitting day(s) in June of 2019. Those purchasing their equipment through the bookstore will make their order that day, but no payment is required at that time. Those that have their equipment already will need to bring it to the fitting day for instructor approval to use it in the course.
- Students who do not have the proper equipment cannot participate in the EDS labs.

*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 \$117 per credit hour for in-district students for the 2019-2020 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 CDL (EDS 151 and 152) and is a pass through fee with no increase on the OTC side of things. 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)	351.00	507.00	642.00
EDS 120 Safety & Prevention (4)	468.00	676.00	856.00
EDS 160 Pole Climbing Skills (4)	468.00	676.00	856.00
EDS 151 Commercial Driver License (3)	351.00	507.00	642.00
EDS 152 CDL Lab (3)	351.00	507.00	642.00
<u>Semester Fees</u>			
Application Fee (One-Time)	100.00	100.00	100.00
Registration fee (per semester)	50.00	50.00	50.00
Student Fee (\$15/hour)	255.00	255.00	255.00
Technology Fee (\$8/hour)	136.00	136.00	136.00
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)	3606.00	3606.00	3606.00
Books & Supplies (Estimate)	2800.00	2800.00	2800.00
<u>Semester Total Cost</u>	<u>9037.00</u>	<u>9921.00</u>	<u>10686.00</u>

## EDS Semester 2

<u>Class (Hours)</u>	<u>In-District</u>	<u>Out-of-District</u>	<u>Out-of-State</u>
EDS 150 Equipment Operation (4)	468.00	676.00	856.00
EDS 170 Overhead Power Distrib. (4)	468.00	676.00	856.00
EDS 237 Transformer Theory (4)	468.00	676.00	856.00
PLS 101 American Gov. (3)	339.00	492.00	630.00
TEC 108 Applied Tech. Math (3)	339.00	492.00	630.00
<u>Semester Fees</u>			
Registration fee (per semester)	50.00	50.00	50.00
Student Fee (\$15/hour)	270.00	270.00	270.00
Technology Fee (\$8/hour)	144.00	144.00	144.00
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)	0	0	0
<u>Semester Total Cost</u>	<u>2875.00</u>	<u>3805.00</u>	<u>4621.00</u>

## EDS Semester 3 (Summer)

<u>Class (Hours)</u>	<u>In-District</u>	<u>Out-of-District</u>	<u>Out-of-State</u>
EDS 290 Co-Op/Internship (1-3)	351.00	507.00	642.00
<u>Semester Fees</u>			
Registration fee (per semester)	50.00	50.00	50.00
Student Fee (\$15/hour)	45.00	45.00	45.00
Technology Fee (\$8/hour)	24.00	24.00	24.00
Security Fee (\$3/hour)	9.00	9.00	9.00
Online Course Fee (\$65/course)	optional	optional	optional
Facilities/Infrast. (\$30/semester)	30.00	30.00	30.00
Lab Fees (\$60/course)	0.00	0.00	0.00
Books & Supplies (Estimate)	0.00	0.00	0.00
<u>Semester Total Cost</u>	<u>509.00</u>	<u>665.00</u>	<u>776.00</u>

#### EDS Semester 4

<u>Class (Hours)</u>	<u>In-District</u>	<u>Out-of-District</u>	<u>Out-of-State</u>
EDS 200 EDS & Transmission II (4)	468.00	676.00	856.00
EDS 246 Service Instal. & Metering (3)	351.00	507.00	642.00
EDS 250 Intro to Live Line Proced. (3)	351.00	507.00	642.00
PLS 101 American Gov. (3)	339.00	492.00	630.00
ENG 101 Composition I (3)	339.00	492.00	630.00
<u>Semester Fees</u>			
Registration fee (per semester)	50.00	50.00	50.00
Student Fee (\$15/hour)	255.00	255.00	255.00
Technology Fee (\$8/hour)	128.00	128.00	128.00
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 (\$75-100/course + CDL)	75.00	75.00	75.00
Books & Supplies (Estimate)	150.00	150.00	150.00
<u>Semester Total Cost</u>	<u>2604.00</u>	<u>3430.00</u>	<u>4156.00</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)	351.00	507.00	642.00
EDS 260 Distribution Systems Maint. (4)	468.00	676.00	856.00
EDS 272 Fus., Substat., & Volt. Reg. (3)	351.00	507.00	642.00
COM 105 Public Speaking (3)	339.00	492.00	630.00
TES 140 Applied Tech. Physics (4)	468.00	676.00	856.00
<u>Semester Fees</u>			
Registration fee (per semester)	50.00	50.00	50.00
Student Fee (\$15/hour)	240.00	240.00	240.00
Technology Fee (\$8/hour)	136.00	136.00	136.00
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 (\$60-100/course)	375.00	375.00	375.00
Books & Supplies (Estimate)	0	0	0
<u>Semester Total Cost</u>	<u>2879.00</u>	<u>3760.00</u>	<u>4528.00</u>

<b>Total Program Cost/2yr</b>	<b><u>In-District</u></b>	<b><u>Out-of-District</u></b>	<b><u>Out-of-State</u></b>
	<b>\$17,904.00</b>	<b>\$21,581.00</b>	<b>\$24,767.00</b>

- 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. The CDL licensing requires a DOT physical examination, a state certified birth certificate, or valid passport. Additional fees for CDL licensure will apply.

### ***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.
- 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 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](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 25 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 and the personal student tools and safety gear, will be provided through the course fee.

**What is the preferred course sequence?**

<b>ELECTRICAL DISTRIBUTION SYSTEMS TECHNOLOGY</b>		
<b>Preferred Course Sequence</b>		
<b>Semester One</b>	<b>Credit Hours</b>	<b>Lab Fee</b>
Intro to Electrical Distribution & Transmission	3	
Safety & Prevention Methods ( <i>includes OSHA 10, CPR/First Aid, Flagger</i> )	4	Varies
Pole Climbing Skills	4	\$100.00
Commercial Driver License	3	
Commercial Driver License Lab	3	\$3,506.00
	<b>17</b>	
<b>Semester Two</b>		
Equipment Operation	4	\$75.00
Overhead Power Distribution	4	\$75.00
Transformer Theory	4	\$75.00
American Government & Politics ( <i>allow HST 120 or HST 130 as substitution</i> )	3	
Applied Technical Mathematics ( <i>allow MTH 130 as substitution</i> )	3	
	<b>18</b>	
<b>Semester Three (Summer)</b>		
Co-Operative Ed/Internship (1-3)	3	
	<b>3</b>	
<b>Semester Four</b>		
Electrical Distribution & Transmission II	4	\$75.00
Service Installation & Metering	3	
Gloving & Intro to Live Line Procedures	3	
Social Science Elective	3	
English Composition I ( <i>allow ENG 100/100A, ENG 102 and ENG 150 as substitutions</i> )	3	
	<b>16</b>	
<b>Semester Five</b>		
Underground Power Distribution	3	\$75.00
Distribution Systems Maintenance	4	\$100.00
Fusing, Substations, & Voltage Regulation	3	\$75.00
Public Speaking	3	
Technical Physics ( <i>allow PHY 105 as substitution</i> )	4	\$125.00
	<b>17</b>	
<b>PROGRAM TOTAL</b>	<b>71</b>	

**Please complete this page and return a signed copy if you are applying for the Electrical Distribution Systems (EDS) program. You can drop this by the Lebanon Center office or email a scanned copy to [eds@otc.edu](mailto:eds@otc.edu) . If you have any questions, please feel free to email Keith Dinwiddie at [eds@otc.edu](mailto:eds@otc.edu) or call 417-447-8146**

I \_\_\_\_\_ have read the frequently asked questions about the Electrical Distribution Systems program. I understand that I am responsible for knowing the content of this document and asking any additional questions I may have.

Signed,

Printed Name \_\_\_\_\_