

LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Electrical Utility/Lineworker
Certificate of Achievement

Curriculum Code: 1468 (Effective Fall 2015 – Summer 2016)

Lineworkers install and service power lines and power line connections between electrical power plants and the customers using the electricity. These lines may be above ground on utility poles or underground. This curriculum prepares students to enter the Lineworker's Apprenticeship Program with Consumers Energy. Department approval is required to enroll in ELTE 270, ELTE 272, ELTE 274 and ELTE 276 which are typically held onsite at the Consumers Energy Training Facility in Marshall, Michigan. Interested students should contact the Utility and Energy Systems program at Lansing Community College for information.

PREREQUISITES

Students should see [Course Descriptions](#) for course prerequisite information. See [Academic Assessment and Placement Testing for Student Success](#) for skills assessment and advising information.

INFORMATION

To be considered officially enrolled in this certificate of achievement, students must have an application on file and been given department approval. Contact the Utility and Energy Systems Program, West Campus Building, Room M127, telephone number (517) 483-1570 (Website: www.lcc.edu/utility/electrical/).

REQUIREMENTS

| CODE | TITLE | TOTAL: 41.5 CREDITS CREDIT HOURS |
|----------|--|-------------------------------------|
| ELTA 106 | Basic Electrical Calculations | 2 |
| ELTA 120 | AC Fundamentals – Electrician (See Note 1) | 2 |
| ELTA 155 | Transformer Fundamentals (See Note 1) | 2 |
| ELTE 102 | Industrial/Construction Safety (See Note 2) | 2 |
| ELTE 104 | Employee Worksite Basics | 1 |
| ELTE 108 | Electric Circuits Study (See Note 2) | 2 |
| ELTE 109 | Applied Electric Circuits | 2 |
| ELTE 131 | Machine Controls I | 4 |
| ELTE 173 | Energy Industry Fundamentals I | 2 |
| ELTE 174 | Energy Industry Fundamentals II | 2 |
| ELTE 181 | Pole Climbing I (See Note 4) | .5 |
| ELTE 182 | Pole Climbing II | .5 |
| ELTE 185 | Pole Climbing Practice I | .25 |
| ELTE 186 | Pole Climbing Practice II | .25 |
| ELTE 270 | Lineworker Orientation (See Notes 3 and 5) | 1 |
| ELTE 272 | Electric Basic Line Climbing (See Notes 3 and 6) | 4 |
| ELTE 274 | Ground/Utility Worker (See Notes 3 and 6) | 6 |
| ELTE 276 | Energized Secondary Worker (See Notes 3 and 6) | 5 |
| METS 140 | Rigging (See Note 2) | 3 |

LIMITED CHOICE REQUIREMENTS**TOTAL: .5-2 CREDITS**Complete the indicated number of credits from **EACH CHOICE** listed below.**CHOICE 1: Pole Climbing Fitness****.5-2 Credits**

| | | |
|----------|----------------------------|-----|
| ELTE 187 | Pole Climbing Practice III | .25 |
| ELTE 188 | Pole Climbing Practice IV | .25 |
| PFFT 180 | Lineworker Fitness A | 1 |
| PFFT 180 | Lineworker Fitness C | 2 |

MINIMUM TOTAL**42****NOTES:**

- For those interested in pursuing other curricula in the Electrical Technology program, the following substitutions will also fulfill the requirements for the indicated courses on the Electrical/Utility/Lineworker curriculum: ELTE 121 can be taken in place of ELTA 120; and ELTE 123 in place of ELTA 155.
- Students who have already completed DCTM 102, HVAC 102, METS 102 or WELD 102 with a grade of 2.0 or higher may substitute one of these courses for ELTE 102. Any of these courses may also be used to fulfill the prerequisite for ELTE 108 and METS 140.
- ELTE 270, ELTE 272, ELTE 274 and ELTE 276 are typically offered at either the Consumers Energy Training Facility in Marshall, Michigan or at LCC's West Campus. Students will need to make their own transportation arrangements.
- ELTE 181 is a two-day course that typically meets each year in the Summer Semester. Enrollment is restricted to students who have received department approval. This course is graded on a Pass/Fail basis and students must receive a passing grade in order to continue with the program.
- ELTE 270 is a one week course that typically meets each year in between Fall and Spring semesters. Enrollment is restricted to students who have received department approval. This course is graded on a Pass/Fail basis and students must receive a passing grade in order to continue with the program.
- ELTE 272, ELTE 274 and ELTE 276 are scheduled in a ten week block typically offered at the end of Spring Semester each year during May, June and July. Enrollment is restricted to students who have received department approval and who have completed all other courses on the curriculum with a minimum 2.0 grade. Students must receive a 3.5 in ELTE 272, ELTE 274 and ELTE 276 in order to successfully complete the program.

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

| Summer | Fall | Spring | Summer |
|---------------|-------------|---------------|---------------|
| ELTE 102 | ELTA 106 | ELTA 120 | ELTE 272 |
| ELTE 104 | ELTE 108 | ELTA 155 | ELTE 274 |
| ELTE 181 | ELTE 109 | ELTE 131 | ELTE 276 |
| | ELTE 173 | ELTE 174 | |
| | ELTE 182 | ELTE 186 | |
| | ELTE 185 | ELTE 270 | |
| | METS 140 | Lim.Ch. | |