

LANSING COMMUNITY COLLEGE

Computer, Engineering/Manufacturing Industrial Technologies

Curriculum Code: 1468
(Effective Fall 2017 –
Summer 2022)

Electrical Utility/Lineworker C.A. Pathway

Note:

ELTE 272, ELTE 274 and ELTE 276 are scheduled in a ten-week block typically offered during Summer Semester. Enrollment is restricted to students who have received department approval and who have completed all other courses on the curriculum with a minimum 2.5 grade except for both sections of PFFT 182 & PFFT 183 and ELTE 182 which must be passed with a minimum 3.0 grade. Students must receive a 2.5 in ELTE 272, ELTE 274 and ELTE 276 in order to successfully complete the program.

| Semester I SUMMER | Course Title | Prerequisites | Credit/Billing Hours |
|--|------------------------------|---|----------------------|
| Program of Study Requirements | | | |
| ELTE 181 | Pole Climbing I | Department Approval | .5 / 1 |
| Fitness and Vehicle Operations Electives - <i>Select one or more courses, a minimum of 1 credit</i> <i>A minimum of 2.5 credits is required for this certificate. Courses may not be duplicated.</i> | | | |
| ELTE 194 | Utility Vehicle Operation I | Department Approval | .25 / .5 |
| ELTE 195 | Utility Vehicle Operation II | Department Approval | .25 / .5 |
| PFFT 181 | Lineworker Fitness A | Program Approval for Acceptance into the Electrical Utility/Lineworker Curriculum and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 182 | Lineworker Fitness B | Minimum 3.0 in PFFT 181 or 2 minutes or better on LPAT score and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 183 | Lineworker Fitness C | Reading Level 3 and Writing Level 2 | 2 / 4 |
| Credits | | | 1.5 / 3 |

| Semester II FALL | | Course Title | Prerequisites | Credit/Billing Hours |
|--|----------|--------------------------------|--|----------------------|
| Program of Study Requirements | | | | |
| ELTE 102 | | Industrial/Construction Safety | Reading Level 3 and Writing Level 2 | 2 / 3 |
| METS 140 | | Rigging | Minimum 2.0 in (METS 102 or DCTM 102 or ELTE 102 or HVAC 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 4 | 3 / 4.5 |
| Fitness and Vehicle Operations Electives - <i>Select one or more courses, a minimum of 1 credit</i> <i>A minimum of 2.5 credits is required for this certificate. Courses may not be duplicated.</i> | | | | |
| ELTE 194 | | Utility Vehicle Operation I | Department Approval | .25 / .5 |
| ELTE 195 | | Utility Vehicle Operation II | Department Approval | .25 / .5 |
| PFFT 181 | | Lineworker Fitness A | Program Approval for Acceptance into the Electrical Utility/Lineworker Curriculum and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 182 | | Lineworker Fitness B | Minimum 3.0 in PFFT 181 or 2 minutes or better on LPAT score and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 183 | | Lineworker Fitness C | Reading Level 3 and Writing Level 2 | 2 / 4 |
| Program of Study Requirements | | | | |
| 1st 8 Weeks | ELTE 104 | Employee Worksite Basics | Reading Level 3 and Writing Level 2 and Math Level 3 | 1 / 1 |
| 1st 8 Weeks | ELTE 108 | Practical Electricity I | Minimum 2.0 in (ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and Reading Level 3 and Writing Level 2 and Math Level 3 | 2 / 3 |
| 2nd 8 Weeks | ELTA 106 | Basic Electrical Calculations | Reading Level 3 and Writing Level 2 and Math Level 4 | 2 / 2 |

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|---|----------|------------------------------|---|-----------------------------|
| 2nd 8 Weeks | ELTE 109 | Practical Electricity II | Minimum 2.0 in ((ELTE 102 or DCTM 102 or HVAC 102 or METS 102 or WELD 102 or concurrently) and (ELTE 108 or ELTE 118 or concurrently)) and Reading Level 3 and Writing Level 2 and Math Level 3 | 2 / 3 |
| Short Courses | ELTE 182 | Pole Climbing II | Minimum 3.5 in ELTE 181 | .5 / 1 |
| Short Courses | ELTE 185 | Pole Climbing Practice I | Minimum 3.5 in ELTE 181 | .25 / .5 |
| Short Courses | ELTE 270 | Lineworker Fundamentals | Department Approval | 1 / 1.5 |
| Credits | | | | 14.75 / 21.5 |
| Semester III SPRING | | Course Title | Prerequisites | Credit/Billing Hours |
| Electrical Electives - <i>Select 1</i> | | | | |
| ELTE 131 | | Machine Controls I | Minimum 2.0 in (ELTE 110 or ELTE 108 or ELTE 118) and Reading Level 3 and Writing Level 2 and Math Level 3 | 4 / 5 |
| ELTE 154 | | Utility Prints and Diagrams | Minimum 2.0 in (ELTA 120 or ELTE 121 or concurrently) and Reading Level 3 and Writing Level 2 and (minimum 2.0 in ELTA 106 or Math Level 5) | 3 / 3 |
| Fitness and Vehicle Operations Electives - <i>Select one or more courses, a minimum of .5 credit</i> <i>A minimum of 2.5 credits is required for this certificate. Courses may not be duplicated.</i> | | | | |
| ELTE 194 | | Utility Vehicle Operation I | Department Approval | .25 / .5 |
| ELTE 195 | | Utility Vehicle Operation II | Department Approval | .25 / .5 |
| PFFT 181 | | Lineworker Fitness A | Program Approval for Acceptance into the Electrical Utility/Lineworker Curriculum and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 182 | | Lineworker Fitness B | Minimum 3.0 in PFFT 181 or 2 minutes or better on LPAT score and Reading Level 3 and Writing Level 2 | 1 / 2 |
| PFFT 183 | | Lineworker Fitness C | Reading Level 3 and Writing Level 2 | 2 / 4 |

| Program of Study Requirements | | | | |
|--------------------------------------|----------|---------------------------------|--|------------------------------|
| 1st 8 Weeks | ELTA 120 | AC Fundamentals - Electrician | Minimum 2.0 in ((ELTE 110 or ELTE 108 or ELTE 118 or concurrently) and (minimum 2.5 in (ELTA 106 or MATH 114 or Math Level 5)) and Reading Level 3 and Writing Level 2 | 2 / 3 |
| 1st 8 Weeks | ELTE 173 | Energy Industry Fundamentals I | Reading Level 4 and Writing Level 4 and Math Level 4 | 2 / 2 |
| 2nd 8 Weeks | ELTA 155 | Transformer Fundamentals | Minimum 2.0 in (ELTE 121 or (ELTA 120 or concurrently)) and Reading Level 4 and Writing Level 2 | 2 / 3 |
| 2nd 8 Weeks | ELTE 174 | Energy Industry Fundamentals II | Minimum 2.0 in (ELTE 173 or concurrently) and Reading Level 4 and Writing Level 4 and Math Level 4 | 2 / 2 |
| Short Courses | ELTE 186 | Pole Climbing Practice II | Minimum 2.5 in ELTE 182 or passing grade in ELTE 185 | .25 / .5 |
| Credits | | | | 11.75-12.75/14.5-16.5 |
| Semester IV SUMMER | | Course Title | Prerequisites | Credit/Billing Hours |
| Program of Study Requirements | | | | |
| ELTE 272 | | Electric Basic Line Climbing | Department Approval | 4 / 6 |
| ELTE 274 | | Ground/Utility Worker | Minimum 3.5 in ELTE 272 | 6 / 9 |
| ELTE 276 | | Energized Secondary Worker | Minimum 3.5 in ELTE 274 | 5 / 8 |
| Credits | | | | 15 / 23 |
| Total Credits | | | | 43-44 / 62-64 |