



LAKES  
REGION  
COMMUNITY  
COLLEGE

# ELECTRICAL SYSTEMS INSTALLATION & MAINTENANCE

## Why Electrical Systems Installation & Maintenance?

The ESIM program provides the skills and education needed for employment opportunities in the Electrical Industry as Electricians or Technicians in residential, commercial, and industrial establishments. Graduates find upward mobility and good wages in an industry that is undergoing rapid expansion with fewer workers available. The Industry offers a wide range of jobs in building construction, industrial and institutional facilities, estimating and project management, solar photovoltaics, product sales, design, and inspection. Curriculum meets licensing requirements as set forth by the State of New Hampshire.

### Potential Jobs/Careers:

- Electrician
- Industrial Maintenance Technician
- Project Manager and/or Estimator
- Electrical Inspector

### Potential Salary:

There is a wide range of jobs in the Electrical Industry. See below for average hourly pay range in NH for:

#### Electrician:

- Entry Level \$16.38/Hour
- Mid-Range \$26.66/Hour
- Experienced \$31.81/Hour

#### Maintenance:

- Entry Level \$26.12/Hour
- Mid-Range \$31.74/Hour
- Experienced \$34.56/Hour

#### Repair:

- Entry Level \$26.12/Hour
- Mid-Range \$31.74/Hour
- Experienced \$34.56/Hour

### Estimated Program Cost:

- Year 1: \$7,718
  - Year 2: \$7,270
- for a total of \$14,988

\*Costs are based on in-state tuition and do not include fees, supplies, or books. Additional fees may apply; all prices are subject to change.

## Did you know?

*“The ESIM Program at LRCC has opened up numerous employment opportunities for myself and the other students...by graduation every student in the class was gainfully employed in the field. This program leaves students well prepared for a seamless transition into the Electrical Industry. The program is very hands on and thorough, and results in a college degree without breaking the bank.”*

— Coleman Mason, Student, LRCC 2017-2019  
A.A.S. Electrical Systems Installation and  
Maintenance, Class of 2019, Joe Mastrullo  
Scholarship Award Recipient

## Degree & Certificate Requirements

### DEGREE Requirements

FIRST YEAR Fall Semester		Credits
ETEC126L	Residential Wiring & Electrical Blueprint Reading	3
ETEC127L	Residential Wiring & Electrical Blueprint Reading Lab	2
ETEC124L	AC/DC Theory	5
ETEC141L	NEC I	2
ENGL100L	English Composition	4
ESNT120L	College Essentials	1
<b>TOTAL</b>		<b>17</b>

FIRST YEAR Spring Semester		Credits
ETEC123L	Wiring Theory & Techniques (Commercial)	6
ETEC142L	NEC II	2
MATH137L	Technical Algebra & Geometry	4
ELECTIVE	Social Science Elective	3
<b>TOTAL</b>		<b>15</b>

**Total Credits for Year = 32**

SECOND YEAR Fall Semester		Credits
ETEC143L	NEC III	2
ETEC215L	Photovoltaics	3
ETEC230L	Electrical Motor Control	3
PHYS125L	Technical Physics	3
ELECTIVE	Open Elective	3
<b>TOTAL</b>		<b>14</b>

SECOND YEAR Spring Semester		Credits
ETEC210L	Introduction to Electrical Estimating & Design	3
ETEC224L	Wiring Theory & Techniques (Industrial)	4
ETEC234L	Construction Site Safety	3
ELECTIVE	Humanities/Fine Arts/Foreign Language Elective	3
ELECTIVE	Liberal Arts Elective	3
<b>TOTAL</b>		<b>16</b>

**Total Credits for Year = 30**  
**Total for A.A.S. Degree = 62**

### CERTIFICATE Requirements

		Credits
ETEC126L	Residential Wiring & Electrical Blueprint Reading	3
ETEC127L	Residential Wiring & Electrical Blueprint Reading Lab	2
ETEC123L	Wiring Theory & Techniques (Commercial)	6
ETEC124L	AC/DC Theory	5
ETEC141L	NEC I	2
ETEC142L	NEC II	2
ETEC143L	NEC III	2
MATH137L	Technical Algebra & Geometry	4
ESNT120L	College Essentials	1
<b>TOTAL</b>		<b>27</b>

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