



LAKES
REGION
COMMUNITY
COLLEGE

ELECTRICAL POWER & CONTROL TECHNOLOGIES

Why Electrical Power?

The Electrical Power and Control Technologies (EPCT) degree program prepares students in the electrical industry and offers an ever-increasing number and variety of employment opportunities to qualified industrial electricians. Nationwide there is a high demand for industrial electricians. Students graduating from EPCT can expect entry-level employment with rapid upward mobility in construction, industrial electricity, electrical design, or electrical inspection. Completion of this program satisfies all the related education requirements for electrical licensing within the State of New Hampshire. New Hampshire license holders receive reciprocity with the States of Massachusetts, Vermont, and Maine.

Potential Jobs/Careers:

- Electrician
(After completion of NH State licensing requirements)
- Power Plant Operations
- Building Electrical Maintenance Technician
- Machine Electrical Maintenance Technician
- Renewable Energy Electrical Technician

Potential Salary:

There is a wide range of jobs in the electrical industry. See below for the average annual salary range in NH for electrical technicians.

- Entry Level **\$40,996**
- Mid-Range **\$59,612**
- Experienced **\$68,681**

**New Hampshire Occupational Employment & Wages 2020, published by the NH Economic and Labor Market Information Bureau – Salaries are based on 40 hours of work, not including overtime.*

Estimated Program Cost:

- Year 1: \$7,525**
- Year 2: \$7,095**
- for a total of **\$14,620**

**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?

LRCC has prepared me for a job in a high demand field. The faculty stays up to date on the latest technology in the electrical field. This allows students to come out of the program with the knowledge and experience on electrical systems that are used in the field today.

— Brad Bishop, A.S. Electrical System Installation & Maintenance /Electric Power & Controls Technologies, Class of 2019

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 |
| TOTAL | | 17 |

| FIRST YEAR Spring Semester | | Credits |
|----------------------------|---------------------------------------|-----------|
| ETEC128L | Fundamentals of Electrical Control | 4 |
| ETEC130L | Rotating Machinery | 4 |
| ETEC142L | NEC II | 2 |
| MATH137L | Technical Algebra & Geometry | 4 |
| TOTAL | | 14 |

Total Credits for Year = 31

| SECOND YEAR Fall Semester | | Credits |
|---------------------------|-----------------------|-----------|
| ETEC143L | NEC III | 2 |
| ETEC215L | Photovoltaics | 3 |
| ETEC240L | Stationary Machinery | 4 |
| PHYS125L | Technical Physics | 3 |
| ELECTIVE | Liberal Arts Elective | 3 |
| TOTAL | | 15 |

| SECOND YEAR Spring Semester | | Credits |
|-----------------------------|---|-----------|
| ETEC210L | Introduction to Electrical Estimating & Design | 3 |
| ETEC234L | Construction Site Safety | 3 |
| ETEC235L | Programmable Controllers | 3 |
| ELECTIVE | Social Science Elective | 3 |
| ELECTIVE | Humanities/Fine Arts/Foreign Language Elective | 3 |
| TOTAL | | 15 |

Total Credits for Year = 30
Total for A.S. Degree = 61

CERTIFICATE Requirements

| Electrical Power & Control Technologies | | Credits |
|---|--|-----------|
| ETEC126L | Residential Wiring & Electrical Blueprint Reading | 3 |
| ETEC127L | Residential Wiring & Electrical Blueprint Reading Lab | 2 |
| ETEC124L | AC/DC Theory | 5 |
| ETEC128L | Fundamentals of Electrical Control | 4 |
| ETEC130L | Rotating Machinery | 4 |
| ETEC141L | NEC I | 2 |
| ETEC142L | NEC II | 2 |
| MATH137L | Technical Algebra & Geometry | 4 |
| ESNT120L | College Essentials | 1 |
| TOTAL | | 27 |