



LICENSED ELECTRICIAN GUIDE FOR FOREIGN-TRAINED ELECTRICIANS IN MAINE



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FOR FOREIGN-TRAINED ELECTRICIANS IN MAINE

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New Mainers Resource Center – Who We Are. The New Mainers Resource Center (NMRC) is a program within Portland Adult Education serving area immigrants and refugees. Our offerings are designed to help new Mainers overcome barriers to enter the US workforce. These include career guidance and employment case management, assistance with credential review and licensing requirements, intensive classes focused on job readiness skills, networking groups, workshops, and other offerings.

The Purpose of this Guide The purpose of this guide is to provide foreign-trained electricians, engineers, and electrical engineers with the information they need to make informed decisions about job opportunities and pursuing licensure in Maine. **Please note, that there may have been changes in information since the date of this publication.**

For additional information or assistance from the New Mainers Resource Center contact: New Mainers Resource Center, *Maine's Welcome Back Center*, Portland Adult Education 14 Locust St. Portland, Maine 04101 Phone: 207 874-8155, Website: www.nmrcmaine.org, email: Sally Sutton, Program Coordinator, suttos@portlandschools.org.

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Decide

After reviewing the process and requirements, you need to decide if pursuing a Maine electrician license is right for you, and if it is, what type of license should you apply for. The electrician licenses in Maine will depend on training and experience. The Journeyman, Master Electrician, and Limited Electrician require the completion of certain courses, hours of work experience, and passing the corresponding exam. If you were an electrician before coming to the US, most likely you will be applying for a Journeyman License. If you were an engineer or electrical engineer prior to coming to the US, you may need to complete all of the required electrical courses in order to qualify for certain licenses.

Overview of the Process

Obtaining your electrician's license will qualify you for many electrical jobs including working for a large company, on building and construction sites, or working independently. You will also be qualified to install solar and clean energy systems. Below is an overview of the licensing process. More details on each step are in this guide. An electrician's license may also be an option for people who have similar training and experience as an electrical engineer.

Education. You will need to have completed specific electrical courses and training to apply for your exam and will need to provide transcripts and translations and possibly evaluations.

Work Experience. To apply for the exam, you will need to provide documentation that you have worked a certain number of hours as an electrician or under the supervision of an election. All documents must be translated into English.

Credit for Previous Experience.

The Electrician's Examining Board Licensing will decide if your education and experience will qualify you to take the exam. Once you have prepared your documents and applied to take the exam, contact the Board and talk to someone about your application. For instance, if you are not able to obtain a particular document, they may have alternative ideas to help you receive credit. Also, they will be able to tell you if you have any classes or work hours missing

Pass the Electrician's Exam. Once you have been approved to take the exam, which could take between 30 days or more depending on when your application is completed, you can take the exam. You will need to be familiar enough with the US National Electrical Code and have the English proficiency to pass the 3 to 4 hour test with a score of at least 70%.

National Electrical Code (NEC) Course. To take the exam, you must take the current 45-hour NEC course. The course cost is between \$300-\$500. The course is offered online and in the classroom.

Tools. You may be required to buy your tools for work or any classes. Tools usually cost in the range of \$300 - \$600.

Definitions of Maine Electrician Licenses

Helper Electrician

Assist with electrical installations in the employment of a master electrician, limited electrician, or electrical company and under the direct supervision of a master, journeyman, or limited electrician. There is no exam required, only an application and a \$46.00 fee.

Apprentice Electrician

Works under a licensed electrician to learn the job. Hours can be used to fulfill the hourly requirements needed to obtain a journeyman license. There is no exam required, but you must be registered in an approved apprenticeship program, submit an application, and a \$46.00 fee.

Journeyman Electrician

A journeyman electrician makes electrical installations in the employment of and under the supervision of a master electrician, or electrical company. The license requires certain courses, experience, and passing the journeyman exam, and a \$171 fee.

Master Electrician

A master electrician installs electrical wires, conduits, apparatus, fixtures, and other electrical equipment. The license requires certain courses, experience, and passing the master exam, and a \$171 fee.

All licenses require a criminal background check. The cost is already included in the licensing fee.

Limited Electrician

A limited electrician is an individual doing work to install and service the electrical work related to a specific type of electrically operated equipment or specific electrical installations only authorized by this license. The license requires certain courses, experience, and passing the limited exam, and a \$171 fee.

Do I Need A License to Work as an Electrician?

Yes. You will need to obtain a license to work as an electrician. To apply for the Journeyman, the Master, the Limited Electrician, or the Apprentice license, you must first be approved by the Maine Electrician Examining Board to take the appropriate exam or be enrolled in an approved apprenticeship program.

While you are working on the licensing process or working under the direct supervision of a licensed electrician, you may apply to become a Helper Electrician which will permit you to work in a limited capacity in the field.

What Jobs Can I Get Without a License or a Helper Electrician License?

In Maine, virtually all electrical-related jobs require some type of license. However, the helper electrician license does not require any prior proof of education or experience and will permit you to work in the electrical field right away. The helper electrician is simple to obtain with a \$46.00 fee and no other documentation or requirements. The apprentice electrician fee is also \$46.00 and requires that your future employer sign the *Certificate of Apprentice* provided in your application form. Salary and job duties may vary with a helpers license depending on the employer. Below are examples of jobs that you could apply for with a helper or apprentice License and also jobs that are related but require no license at all. Some of these jobs require that you have a drivers' license and/or be able to travel to various locations for job sites.

Helper or Apprentice Electricians

Both small and large commercial and residential contracting companies frequently hire both positions. The work is assisting lead electricians, installers, or project managers with electric installations. Some aspects of the jobs include assisting with project loading to ensure all necessary materials and tools arrive on the job site, overall crew and job site safety, help maintain tools and trucks in excellent condition, and assist with general site preparation and clean up. Wage rates are generally from \$15-30 per hour with the and most companies offer health benefits and in-house apprenticeship programs.

Solar Installer, PV Installer, Solar Technician Depending on the job and company, you will need either a helper or apprentice license for these jobs. The position will be part of solar electric installation teams in both residential and commercial settings. Work includes loading/unloading equipment, staging, and ladder work, using hand tools and carrying equipment on rooftops, installing conduit, wiring, and monitoring systems. Wage rates are generally between \$18-35 per hour and some companies offer health benefits, training and some level of support toward an advanced electrician license.

Electrical Engineer Technician Assist engineers, design and develop computers and other electrical and electronic equipment. Usually hands on including working with equipment for manual and automatic production including things like operating equipment, programming, and troubleshooting. This job requires levels of engineering experience and education. Wages may range from \$15-35 per hour.

Mechanical Electrical Maintenance Technician or Electromechanical Technician Work with mechanical and electrical concepts related to industrial manufacturing equipment, maintain, repair, install, and upgrade electrical and mechanical equipment, components, tools, and machinery. Requirements usually include both electrical and mechanical experience. Wages range from \$13-24 per hour.

Electrical/Electronic Technicians A wide range of job descriptions including entry-level electronics manufacturing and assembly, installation maintenance of security systems, lead electrical assembly, and participating in project design, safety, and training, among other things. Requirements are some experience and an associate degree in an electrical or electrical engineering field. Wages range from \$14-27 per hour.

Applying for an Electrician's License as a Foreign-Trained Electrician

If you were an electrician or electrical engineer before coming to the US and are seeking an electrician's license in Maine, you will need to provide documentation of your education and experience to move forward with the process. The Board will evaluate your credentials and work with you during the process. Obtaining an electrician's license is a three-part process that includes applying for the required exam, passing the exam, and then applying for your license. There is no English proficiency requirement, however, you will need to have enough English to pass the electrician exam.

Apply for the Exam

You will need to submit an application and provide documentation of your experience and education to qualify to take the journeyman or master exam. If you have and are able, to provide proof of, the work and education requirements, the Board will permit you to take the exam. Since you have been a practicing electrician before coming to the US, you will want to have as much of that education and experience be recognized by the Board during your application process. An evaluation of your degree or any college courses you have previously taken could assist the Board with assessing your education.

You will need to complete a current National Electrical Code (NEC) course, to demonstrate an understanding of the US codes and systems. Directions on how to find NEC courses are on page 10.

Receive Credit for Prior Experience

The Electrician's Examination Board has the authority to give you credit for your experience and education outside of the US that may count toward obtaining a license if they are comparable to the needed requirements. The Board will review the materials and documentation that you provide in your exam application and decide after your application has been submitted. The

Board will then determine and often will let you know what education or experience that you may need to complete to take the exam. It is extremely important that you provide all the information possible. Transcripts and documents must be translated. Documentation of your previous work experience could potentially count toward some of the hourly requirements for licensure. It usually takes about 30 days **after** you submit a completed application to get a response.

If you do not have all of the required training and experience to apply for the exam and are missing either courses or work hours, please review the resources provided in this guide as well as seek advice about the best way to complete the requirements.

Requirements for Journeyman Exam

Below are the required documents for the journeyman exam. The master electrician license requires more training and hours, and the limited electrician license requires less and is focused on a specific type of work.

- NEC Course. Proof of completing the 45-hour National Electrical Code course approved by the Maine Electricians Examining Board. You can find information about the list of providers who offer this course and the costs on **page 10**.
- Work Experience. Documentation that you have worked at least 8,000 hours in the field of electrical installations as a licensed electrician including helper and apprentice, under the direct supervision of a master electrician, journeyman electrician, or limited electrician. There are affidavit forms included in the application to use. A supervising electrician can sign the affidavit forms attached to the examination application. If you have worked as an electrician in which a license was not required or are unable to have a supervising electrician sign the form, you should provide any documentation proving the amount and type of electrical work performed. This could include letters from community members, customers, or any other licensing or work documentation.
- Education. Transcripts demonstrating the completion of 45-hour courses each in (1) Electricity I; and (2) Electricity II; and (3) Math I; and (4) Controls I; and (5) a current National Electrical Code course. Also, 351 hours of electives all trade-related courses or a minimum of 225 hours of trade-related courses and 135 hours of degree-related courses in mathematics, science, business, human relations, and communication; and have completed a program of study consisting of 576 hours (including a current 45-hour National Electrical Code course) as approved by the board. While your transcripts do not need to be official, the Board may ask you to provide more details or official transcripts. All transcripts must come with English translations.
- Completed Examination Application.

Taking the Exam

Once you have been approved, you will be able to schedule your exam. The exams are administered by *Prov* and you will need to go to their website or call to request a time and location to take the test. It is important that you review the [Candidate Information Bulletin](#) for

directions about the specific test you will be taking. Tests are offered remotely or at test centers in Portland, Auburn, Bangor, Machias, and Presque Isle. The exam costs \$90 for the journeyman and master electrician and \$60 for the limited electrician.

The test is in English and is computer-based but no computer or typing experience is necessary. You will be given verbal instructions as well as an interactive tutorial before testing. You will want to make sure that you review the Candidate Information Bulletin for instructions about the test day requirements and preparation.

The test is an open-book format with limited reference material permitted. The journeyman exam is 3 hours with 80 questions and the master electrician is 4 hours with 100 questions. The limited electrician exam varies depending on which sub-license you apply for. The test questions used on the examinations have been prepared by the board and cover a wide range of topics candidates would normally encounter in the field.

To pass the test, you will need a score of **70%** or higher. Scores are available immediately after taking the exam. Failed examinees can retake the test after 24 hours. You have up to 2 years to take the exam once approved. There is no limit to how many times you can take the test. However, if you do not take or pass the exam within 2 years of Board approval, must reapply as a new applicant.

Studying Guides and Prep Resources

There are many books and online courses to help prepare for your exams. The prices range from \$40 - \$300 depending on the program. If you are working in a related job or taking a class for your license, check with your job or school, they may have free materials you could use.

Maine Electrician's Study Guide
www.tests.com/practice/journeyman-electrician-practice-test

Maine Electrician License (Master, Journeyman) NEC Exam Review <https://www.athomeprep.com/product-category/exam-prep-electrical-maine-construction-and-trades/>

Maine Journeyman Exam Prep
<https://thompsonlearningco.com/product/pass-your-maine-journeyman-electrical->

Maine 2020 Journeyman Electrician Exam Question and Study Guide
<https://bookshop.org/books/maine-2020-journeyman-electrician-exam-questions-and-study-guide-400-questions-for-study-on-the-national-electrical-code/9798645997441>

Maine Journeyman Electrician Exam Prep Package <https://1examprep.com/products/maine-journeyman-electrician-exam-prep-package>

Applying for your license after passing the exam

Submit the licensing application and a fee of \$171.00. Usually, no additional documents will be required. Your exam score will be automatically sent to the Board. While there are no set processing times, your application will be reviewed only if it is complete. You can check online to see the status of your application

Electrical Coursework and Programs

If you are missing coursework to apply for your licensing exams, you are going to need to take those courses. Below are programs that offer electrical degrees or certificates in Maine. You can look up the course offerings online or contact the school to find out if they will offer the course that you need. Many of the classes will be online, so it is important to check with schools that may not be close to where you live.

Southern Maine Community College, South Portland

Offers an [Electrician Technology Certificate](#) and an Associate Degree (AD) in Electrical Engineering technology. Both programs include courses needed for the journeyman electrician license exam. The AD program allows transition into University of Maine and University of New England electrical and engineering 4-year degree programs. You can take many classes without being enrolled in the program. Tuition is \$96 per credit not including fees.

Maine Electrical Institute, Portland, Maine

Offers the coursework needed for a journeyman electrician license and allows for single subject classes without the need to enroll in the program. Many courses are online and self-paced. To take a class, you must have a high school diploma or equivalency diploma to be accepted for enrollment, or if neither of these is met, special consideration may be granted if the student shows aptitude in the areas of the trade. Courses vary in cost from \$375-\$500

Central Maine Community College, Lewiston

Offers an [Electromechanical Associate of Applied Science](#) and Electromechanical Technology Certificate which include courses required to apply for the Journeyman License exam. You do not have to be in the program to take classes, though some prerequisites may apply. Tuition is \$96 per credit not including fees.

Kennebec Valley Community College, Fairfield, Rockland

Offers an [Electrical Technology Associate Degree](#) and related certifications which include courses for electricians' licenses. You can take single classes as a non-degree student. Prerequisites may be required by course. Tuition is \$96 per credit not including fees.

Eastern Maine Community College, Bangor, Maine

Offer an Associate Degree in [Electrical and Automation Technology](#) and related certificates which include the coursework necessary to apply for the Journeyman License exam. You can take classes without enrolling in the program. Tuition is \$96 per credit not including fees.

Apprenticeships In the Electrical Industry

Apprenticeships provide an opportunity to train and work and earn wages and possibly benefits while learning the skills of licensed electricians. Some employers offer apprenticeships and hire people directly into these programs. Additionally, the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) offer a joint apprenticeship training program. Each apprenticeship might have some qualifications that will need to be met around English proficiency, math, etc. The NECA-IBEW apprenticeship requires passage of the NJATC Aptitude Test as part of the application. You will be eligible to take the Journeyman License Exam after completion of the apprenticeship.

Resources

45 Hour National Electrical Code (NEC) Course

To apply for a Maine electrician license, you must have completed a 45 NEC Course that is approved by the Maine Electricians Examining Board. Courses can be completed online or in the classroom. To find a list of approved course providers, and courses go to the [Maine Electrician Examining Board](#) website section called [Search License Information](#). Scroll down to the bottom of the page and select [Search Courses](#). In the Content Area Box, choose “45-hour NEC” and hit search. A list of courses and course providers will come up. Here is the link to [Search Course Providers](#). You are going to have to call or go to the course provider website if one is available, to find out details like costs.

Candidate Information Bulletin, Prov information about the exams:

<https://www.maine.gov/pfr/professionallicensing/professions/electricians/pdf/PROV%20Bulletin.pdf>

Electricians Examining Board

<https://www.maine.gov/pfr/professionallicensing/professions/electricians/index.html>

Prov Exam Demonstration Video <https://youtu.be/h3T9svnldLY>

Prov - to schedule your exam online or by phone

www.provexam.com Phone: 866-720-7768.

Electricians’ Examining Board – Applications and Forms

Includes applications for different license types, license renewals, exam applications for each license type, forms for such things as work experience affidavit. Filing electronically is recommended by the board.



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