

Maine Electrical Institute School Policies/Catalogue

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Approved and Regulated by the State of Maine Electrical Examination Board

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Introduction

The Maine Electrical Institute (hereinafter referred to as M.E.I.) offers the finest technology and equipment for student training and is staffed with qualified, approved, and dedicated instructors. We are committed to providing relevant training and high-quality education so that you are confident in your trade and can not only know how to perform a task, but the “why” behind it.

Our Mission

To be the premier educational provider in the State of Maine and to produce a safe, qualified, professional workforce that is confident in their trade and able to serve Maine communities at a high level of service.

Faculty Members

Chief Executive Officer: Matthew Flaherty

Director of Education: Adam Lee

Admissions and Program Coordinator: Lindsay LeBlanc

Admissions and Enrollment: Sarah Lee

Courses Offered per Half-Program

First Half

The first half of the program includes 45 hours of instruction in each of the following:

- Basic Electricity I
- Basic Electricity II
- Controls I
- Blueprint Reading
- National Electrical Code
- Either Conduit Bending (if taken In-Class) or Transformers (if taken via Self-Paced learning)

NOTE: The first half includes all the classes required to sit for the State of Maine "Limited to Residential" exam. The student will still need the required work hours in the field before sitting for the exam.

Second Half

This second half of the program includes 45 hours of instruction in the following core classes:

- Math
- Controls II
- Transformers (if taken In-Class – included in 1st half if taken via Self-Paced learning)
- Motors
- Electronics

Three Electives are included in the Two-Year Program.

If taken In-Class, the first one is taken during the 1st half and the next two are taken during the 2nd half:

- Advanced Industrial Controls – In-Class only (included as standard)
- Advanced Code Level II – Self-Paced only (included as standard)
- Fire Alarm Systems (Levels I-III) – In-Class only

If taken via Self-Paced learning, the following options are available (3 need to be selected):

- Advanced Code Level II
- Business Communications
- Intro to Business
- Business Management

NOTE: The student who completes both halves of the program will have the required 576 hours of education to sit for the State of Maine Electrical Journeyman exam. The student will still need the required work hours in the field before sitting for the exam.

Course Descriptions

Each of these courses is approved by the State of Maine Electrical Examination Board.

Basic Electricity I (45 Hours)

This course is an introduction to DC circuits. Basic electrical safety, atomic structure, Ohm's law, static electricity, magnetism, resistors, series circuits, parallel circuits, combination circuits, measuring instruments. By the end of this course, students will have a basic command of Ohm's law and calculations of DC electricity.

This course is offered via Self-Paced study for \$400 or In-Class/Livestream as part of the Journeyman program.

***Materials Required (see appendix)

Basic Electricity II (45 Hours)

This course is an introduction to AC circuits and the theory around it. With a firm foundation established in Basic Electricity I, this course introduces induction and capacitance and all the effects upon a circuit that are associated with them. True power, reactive power, apparent power, and more are introduced and discussed.

This course is offered via Self-Paced study for \$400 or In-Class/Livestream as part of the Journeyman program.

***Materials Required (see appendix)

Prerequisites: Basic Electricity I

Blueprint Reading (45 Hours)

This course is a comprehensive study in blueprints of various systems. It will prepare the student in residential, commercial, and industrial building plans—including elevations, plan view, risers and more. A thorough study of symbology throughout the trades will be key as the student learns to read prints with other trades in mind.

This course is offered via Self-Paced study for \$400

***Materials Required (see appendix)

Prerequisites: None

Controls I (45 Hours)

This course focuses on wiring methods and materials pertaining specifically to residential applications. Starting with the outside service and proceeding toward the interior wiring, both materials and methods are covered. Students in class settings will receive many hours of lab time. **NOTE: Those taking the course via correspondence will receive instruction through the chapter reading only.** By the end of this course, students should be able to identify materials and properly install devices commonly found in residential applications. Layout of various residential rooms will be covered, and students should be able to lay out a room to comply with the NEC.

This course is offered via Self-Paced study for \$400 or In-Class as part of the Journeyman program.

***Materials Required (see appendix)

***Tools Required for in-class option (see appendix)

Prerequisites:

Basic Electricity I (or permission from the instructor), Basic Electricity II (or permission from the instructor)

Intro to the NEC (45 Hours)

This course is an in-depth look at chapters 1-4 of the National Electrical Code, and an overview of chapters 5-8. These chapters lay the foundation for all installations.

Students benefit greatly from access to a video series to aid them as they study on their own.

This course is offered via Self-Paced study for \$300

***Book/Materials Required (see appendix)

Electronics (45 Hours)

This course is introductory in nature and exposes the student to a wide variety of electronic considerations. Upon completion, the student will have a basic understanding of RLC networks, diodes, power supplies, transistors, amplifiers, oscillators, digital circuits, integrated circuits, and more.

This course is offered via Self-Paced study for \$400 or In-Class as part of the Journeyman program.

***Materials Required (see appendix)

Prerequisites:

Basic Electricity I, Basic Electricity II,
Proficiency in basic math skills is required

Advanced Industrial Controls (45 Hours)

This course is rich in hands-on labs as students learn to wire and troubleshoot fault conditions in motors, motor controls, and VFDs. Students will be able to demonstrate proficiency in measuring and testing components, troubleshooting, and repairing faults within motor controls, and VFDs. In-depth training on motors, controls, and VFDs will be provided. Setting up, operating, and controlling VFDs is central to the course. This is an instructor-led program where students will need to be present in the classroom to do the labs and pass the exams.

This course is offered In-Class as part of the Journeyman program

***Materials/Tools Required (see appendix)

Prerequisites:

Basic Electricity I, Basic Electricity II, Controls I and II, Motors

Conduit Bending & Cable Pulling (45 Hours)

<<<ELECTIVE>>>

This course is a very hands-on course, designed to be taken only in classroom locations with lab activities. This course will provide the student with proper safety procedures, mathematics, and theory behind bending. Students will be introduced to a variety of different conduit materials. Hands-on experience with hand benders, threaders, and reamers as well as power benders and threaders are central to this course. Additionally, certification on various cable-pulling machines is provided. Proficiency tests are conducted throughout the class culminating in a final testing on proficiency in order to receive a Greenlee certification as well as pass the exam.

This course is offered In-Class as part of the Journeyman program.

***Materials Required (see appendix)

Prerequisites: None

Advanced Code - Level II (45 Hours)

<<<ELECTIVE>>>

Provided via video series, this course focuses on the second half of the code book with Chapters 5-8. The student will gain understanding on the structure of the code book and the rules governing each chapter of the code. Special occupancies, special equipment, special conditions, and communications are discussed in detail. Time will be spent on the more often neglected formulas and calculations in order to aid the student seeking to become a Master Electrician or Journeyman Electrician. This course is approved as both a “Trade Related” and “Non-Trade Related” course to satisfy the electives for either Journeyman or Master.

This course is offered via Self-Paced study for \$400

***Book/Materials Required (see appendix)

Prerequisites:

Intro to the NEC Highly Advised

Fire Alarm & Security (45 Hours)

<<<ELECTIVE>>>

This course is designed to satisfy part of the 126 hours of electives required to become a Journeyman electrician in the state of Maine. Students will receive an introduction to fire alarm systems. We cover portions of NFPA 72, characteristics of fire alarm systems, and components. Students will get hands-on experience wiring a basic circuit for simple output devices and installation of smokes, horns, strobes, etc. in order to gain basic familiarization with equipment. Students will do a “take off,” create a riser from a floor plan, create a submittal package, and review occupancy classes. Additionally, students will install a conventional fire alarm system, to further strengthen their understanding and confidence in FA systems. Further study in codes that govern installations will be central. Students will have eight (8) hours to fully design, build, and install a complete Fire Alarm System from a set of documents provided. This project will be inspected, and the student’s grade based fully on the knowledge provided.

This course is offered In-Class for \$500

***Materials/Tools Required (See appendix)

Prerequisites:

Basic Electricity I, Basic Electricity II

Business Communications (45 Hours)

<<<ELECTIVE>>>

This course is designed to satisfy one of the elective classes required for the Master Electrician license. Students will learn the importance of effective business communications and the many different delivery methods to choose from. Additionally, students will learn to identify obstacles of communication and how to overcome them. Good writing practices are thoroughly discussed. Business presentations, positive and negative communication methods, and more are discussed.

This course is offered via Self-Paced study for \$400

Foundations of Business (45 Hours)

<<<ELECTIVE>>>

This course is designed to satisfy one of the elective classes required for the Master Electrician license. Students will learn the foundational principles of business, economics, and problems that often arise. Additionally, ethics, social responsibilities, the global environment, and forms of ownership are discussed. The many challenges of starting a business will be identified—recruiting techniques, marketing strategies, accounting principles and habits, as well as other financial dimensions will be explored.

This course is offered via Self-Paced study for \$400

Small Business Management (45 Hours)

<<<ELECTIVE>>>

This course is designed to satisfy one of the elective classes required for the Master Electrician license. Students will learn the principles of management, gain an understanding in the various personalities, attitudes, and work behaviors likely to be experienced while managing in the work force, as well as understanding the value and process of developing a mission and vision statement. Additionally, topics such as strategizing, setting goals and objectives, organizational structures and culture, networking, decision making, and more are covered in this course.

This course is offered via Self-Paced study for \$400

GENERAL POLICIES FOR ALL STUDENTS

Entrance Requirements

M.E.I. does not discriminate based on race, sex, religion, ethnic origin, or disability.

Prospective students must have a high school diploma or its equivalent to be accepted for enrollment. If neither of these are met, special consideration may be granted if the student shows aptitude in the areas of the trade, or if a minor, with the permission of the parent or legal guardian.

Students enrolled in high school may enroll prior to graduation with parental consent, must be 16 years old prior to starting, and show proficiency in understanding basic math skills.

Sponsorship Accountability

M.E.I. recognizes that many students are sponsored by their employer to further their career and professional development. As such, there is a fiduciary responsibility to the sponsor to ensure that the student is doing the required work. Therefore, it must be understood that the student's progress records, including grades, attendance, and participation may be reported to the sponsor at any time, either upon the request of the sponsor, or if there is concern from the instructor that the sponsor should be made aware of.

Grading System

A minimum of 70% overall grade is required. Grading is based on a weighted method where the following portions are averaged together to get the overall grade:

1. Completion of reading assignments: Prerequisite to finishing the course. A grade will not be issued until necessary reading is completed.
2. Homework assignments: All assignments will be averaged together, and that portion of work will represent 40% the total grade. (The exception to this is the Blueprint Reading course, in which the homework represents 75% of the total grade.)
3. Final Exam: Where a final exam is required, the exam is considered open notes, and the grade will represent 60% of the class grade. If a class allows for open book, it will be stated in the course syllabus for that specific course. (The exception to this is the Blueprint Reading course, in which the Final Project represents 25% of the total grade.)

Requirements for Successful Completion

- Read all required assignments by the completion date established
- Attend classes as required and perform any necessary labs
- Complete all “end of chapter” assignments by the completion date established
- Pass the final exam (under the supervision of a proctor if online/correspondence)

All classes completed will be recorded on the student’s official transcript and will be provided to the student upon completion of the program.

If a student is unable to get a passing grade, reasonable effort to remediate the student will be made. If after two (2) attempts at passing the final exam, the student still fails, additional costs to student may be required, up to and including the full course price for additional training.

Book Usage Policy—The Lending Program

In order to keep the cost down as much as possible, books are not required to be purchased. Books will be issued to a student at the start of each class and upon completion of the course, the book must be turned back in prior to issuance of certificate or transcripts. In the event that a book is lost or severely damaged, a prorated fee will be charged depending on the condition of the book when it was signed out.

NOTE: The only book that is required to be purchased on your own is the National Electrical Code book, as this is central to your career and will be part of your tool kit for the rest of your tenure in the electrical industry.

Payment Policy & Transcript Release Agreement

Payment is required in full or enrollment in a program for an alternative payment plan before the registration deadline.

Transcripts will not be released until all tuition is paid in full, and all books are returned.

Address Changes

It is a student’s responsibility to update their address on file with us if there are any changes.

Payment Options—In-Class or Livestream

OPTION #1: PAID IN FULL: \$6,000 if paid in full before the program starts. This price includes 3 electives which may be distance or in-class depending on the electives chosen.

OPTION #2: SPLIT PAYMENT: \$7,000 total. If full payment cannot be made, the student may pay \$3,500 at the time of enrollment and the second half (\$3,500) by February 1, prior to the start of the second school year.

Individual Courses: Any 45-hour course can be purchased as a stand-alone course for \$500.

Payment Option—Self-Paced Learning

OPTION #1: Year One Only PAID IN FULL: \$2,250. This includes 6 classes.

OPTION #2: Two-Year Program PAID IN FULL: \$4,400 if paid in full before the program starts. *Note: There are some electives which are only offered in the classroom, so if those are chosen, the pricing will increase.

OPTION #3: Two-Year Program Split-Payment: \$4,500 in total. If enrolled in both years of the program, but full payment cannot be made, the student may pay \$2,250 at the time of enrollment and the second half (\$2,250 1 year from the date of enrollment in the program). *Note: There are some electives which are only offered in the classroom, so if those are chosen, the pricing will increase.

Individual Courses: Any core class can be purchased as a stand-alone course for \$400. (Except the Intro to the NEC, which is \$300.)

Refund Policy

All Students

It is a student's responsibility to update their address(es) on file with us. In the event that an old address is used to process a refund, and a check has to be cancelled and re-issued as a result of this oversight, a \$50 stop-payment fee will be deducted from the amount of the refund.

In ALL cases, any books or other resources that have been provided by the Maine Electrical Institute must be returned before any refund is issued.

In-Class or Livestream

Individual Classes - Students who cancel their enrollment with the school within ten (10) business days of original date of enrollment are entitled to a refund of tuition and fees paid except a 30% cancellation charge based on the price of the course or program enrolled in, or \$150—whichever is smaller. Students who withdraw after ten (10) business days, but before commencement of class, are entitled to a refund of tuition and fees paid except a 40% cancellation charge based on the price of the course or program enrolled in, or \$250—whichever is smaller. In the case of students withdrawing after classes begin, no refund is available.

Full Program Students (Two-Year Program) - Students who cancel their enrollment with the school within ten (10) business days of original date of enrollment are entitled to a refund of tuition and fees paid except a 30% cancellation charge based on the price of the course or program enrolled in, or \$150—whichever is smaller. Students who withdraw after ten (10) business days, but before commencement of classes, are entitled to a refund of tuition and fees paid except 15% of the yearly program cost. In the case of students withdrawing after classes begin, no refund will be issued for that year's tuition. If a student withdraws in the first year of a two-year program, the second year of the program will be refunded as though they paid for the non-discounted one-year program.

Self-Paced Learning

Individual Classes - Students who cancel their enrollment with the school within five (5) business days of original date of enrollment AND HAVE NOT YET BEGUN THEIR COURSE OF STUDY are entitled to a refund of tuition and fees paid except a 30% cancellation charge based on the price of the course or program enrolled in, or \$150—whichever is smaller. Students who withdraw after beginning their course of study will receive no refund for any classes they have begun. Classes that have not been started are subject to a 30% cancellation charge based on the price of the course or program enrolled in.

Full Program Students (One Year Only or Two-Year Program) - Students who cancel their enrollment with the school within five (5) business days of original date of enrollment AND HAVE NOT YET BEGUN THEIR COURSE OF STUDY are entitled to a refund of tuition and fees paid except a 30% cancellation charge based on the price of the program enrolled in, or \$250—whichever is smaller. Students who withdraw after beginning their course of study will receive no refund for any classes they have begun. Students who have been enrolled in a program beyond 30 days are not entitled to any refund, regardless of the progress or lack thereof.

POLICIES FOR SELF-PACED STUDENTS

In addition to the General Policies for all students, the following policies also apply to students using Self-Paced course instruction:

Required Progress:

Students enrolled in any self-paced class must finish at least one course within four months to remain in active status. Students who do not show this rate of progress will be placed on an inactive roster and a 10% administrative fee will be applied if the student desires to finish the course after that time. If placed on inactive status, books must be returned to the school.

Since we partner with another company for the business courses, students enrolled in those courses must complete two courses in a one-year time frame or pay a 50% administrative fee to continue.

Proctored Exams:

Students who are enrolled in Self-Paced classes can either arrange to take their final exams at the M.E.I. facility or will need to arrange an approved proctor prior to the time of the final exam. If a proctored exam is necessary, you will be given the additional instructions and requirements for such arrangements. The proctor agreement form must be completed and returned to M.E.I. prior to the start of the first exam.

Exams are considered open note exams (not open book) and the grade will represent 60% of the class grade. If a class allows for open book, it will be stated in the course syllabus for that specific course.

Minimum Completion Times for Self-Paced Students:

To ensure that students are employing good study habits (and not just searching for answers), a minimum of 30 days are required to pass from the time of enrollment to the time of a proctored exam. This will ensure that at least the minimum required time is spent in each course of study.

IN-CLASS (OR LIVESTREAM) POLICIES

Postponement of Start Date

If a course is postponed for any reason, the course will be extended on the back end of the program schedule.

Each class has a student minimum in order to begin the class. If the student minimum has not been reached within one week of the start date, M.E.I. reserves the right to postpone the class until the minimum student threshold is met. If the new dates of the class are not acceptable to the students currently enrolled, either another date will be offered which the student can attend, or a full refund will be issued.

Enrollment Period

Enrollment into a full In-Class/Livestream Two-Year Program follows the traditional school year, starting in September and ending late June. Enrollment into a program closes 10 business days before school starts. Late applications may be accepted if there is still room, but special arrangements may be needed.

Closure & School Cancellation Policy

When an unexpected closure occurs due to extraordinary conditions such as inclement weather, students will be notified as soon as possible by phone, text, and/or email. Morning class cancellations will be announced by 6am. Afternoon/evening classes will be announced by noon of that day. Students must check their messages to stay up to date. Classes are not held on the following:

Memorial Day, Independence Day, Labor Day, the week of Thanksgiving, and the weeks of Christmas and New Year's Day.

Attendance Requirements

Students are expected to arrive on time for class with proper materials. An overall attendance rate of at least 85% is required. Instructors may request your withdrawal from a course or program if absences or tardiness exceed 70%.

Each time a student is absent, five (5) points will be deducted from your final grade.

Students who are unable to continue classes for medical reasons or severe personal problems will be required to take a leave of absence until they are able to return to class. Proper documentation will be required to substantiate a student's withdrawal.

If a student is absent and M.E.I. has video instruction available for the course, the instructor may require the student to review the video content to receive credit for attendance in the course.

Class will begin PROMPTLY at the posted times. Arrival to class prior to start time is required. We are training trade professionals whom customers expect to arrive on time. As such, we expect you to practice that while in school. Students who are tardy will receive a two (2) point deduction off their final grade for each instance of tardiness. Three accumulative tardies for one course will equal an absence and be treated as such.

Tools Required

Portions of certain classes will be lab work. You must bring your hand-tools each class session to participate and receive credit for completing the lesson. See "Required Hand Tools" list in the addendum and the list of classes that these will be required for. Not all classes are labs, so depending on your course selection, you may or may not need these tools.

Books Required

Many of the classes require you to bring your books to class. Do not show up without your books as this will not only hinder your learning, it will hinder the class as a whole.

Appendix

TOOLS

The following is a list of tools that are required for certain in-class labs. The brand and model are only a recommendation so you have an idea of what you should get. These brands and models are professional grade. However, if you have these items around the house already, do not feel compelled to go buy this specific brand or model. If you can purchase the right tools from the beginning of your career, it will only benefit you. However, another grade tool will get you through the class—you may just need to work harder because the tool is not as good a grade as one on this list. The model # assigned will help you find the item on Amazon for reference.

- Milwaukee 18v drill/impact driver set and 2 batteries
- Klein Dual Wire Strippers (K1412CAN)
- 8” Needle Nose Pliers (Klein D203-8)
- Utility Knife—Retractable
- 9” Lineman Pliers (Klein D213-9NE)
- 9” Diagonal Cutters (Klein D2000-49)
- 8” (overall) #2 Phillips Screwdriver
- 8” (overall) #2 Flathead Screwdriver (Klein 600-8)
- 16 oz. Electricians Hammer (Klein 808-16)
- Large Beater Screwdriver (Klein 602-7DD)
- 8” Torpedo Level (Magnetic edge)
- 25’ Tape measure (Stanley 11’ standoff 33-725)
- Plug checker (Gardner Bender GFI- 3501)
- Fluke Hot Stick (non-contact wiggie) (Fluke 1AC-A1-II)
- 4” long #2 Phillips drill bit
- 4” long #2 Square drive drill bit
- ¼” nut driver & 5/16” nut driver drill bit
- 9-3/4” Crimping tool (Klein 1005)
- 8” (overall) #2 Square drive screwdriver (Klein 662)
- Swivel Flathead screwdriver (Klein 670-6)
- Wire nut spinner (Ideal 30-902)
- Greenlee Conduit Reamer (9753-11C)
- Greenlee L77 Conduit Bending Level
- Swanson 12” Speed Square

MATERIALS:

The following is a list of materials required and the courses they are required for.

For all courses except the NEC & Business courses):

- Scientific Calculator (capable of SIN, COS, TAN functions) (Texas Instruments TI-30XIIS)

Blueprint Reading course:

- Graph paper with 1/4" graphing squares...at least 8.5 x 11" size paper.
- Architectural Scale 12" Ruler - Do not use an Engineering Scale.

Motors, Math, Intro to the NEC, and Advanced NEC courses:

- Because the Code Book is a central part of the electrician's career, it is required that each student purchase their own current copy of the [code book](#). This is the only book M.E.I. requires the student to purchase.
- For the NEC courses you will also need a set of the handbook [index tabs](#). These can be purchased directly from the NFPA website.
(NOTE: DO NOT put the tabs in the code book until directed to do so in the course. We will provide some tips and tricks on best practices at the beginning of the course.)
- For the NEC courses, you will also need a set of at least 6 different colored chisel-tipped highlighters.