

Electrical Training Apprenticeship (Online)

Program Overview

Michigan State University is offering an Online Electrical Apprenticeship program. The educational experience is a four year program registered with the U.S. Department of Labor (USDOL), Office of Apprenticeship and Training. This program provides the Related Technical Instruction (RTI), that is required by the State of Michigan through Public Act 407 of 2016, Rule 338.5717. It gives the apprentice the necessary theoretical and technical knowledge needed to become a successful journey person. It also gives additional practice of job-related skills and knowledge.

Graduates are eligible for a certificate of completion by the USDOL upon completion of RTI and the necessary on the job learning/training (OJL/OJT). To earn a certificate, the USDOL standards require that a minimum of 576 hours of RTI apprenticeship training is to be earned by each trainee and 8,000 hours of on the job training with a recognized employer.



Program Outline

The M.S.U. program consists of a four-year curriculum that is designed to contain information you need to have a successful career path in the electrical industry. The material focuses on electrical theory, workplace skills, jobsite safety and an understanding of National Electrical Code®, the Michigan Residential Code and Michigan's Part 8 Electrical Rules.

The material is intended to be taught in tandem with on-the-job training provided by a licenced electrician. Each lesson is based on objectives with exercises, review questions, and quizzes designed to test the knowledge gained in each segment. The curriculum will be updated regularly to meet the changes in the electrical codes, changes in technology and the needs of the electrical contractors.

The benefits of the program include:

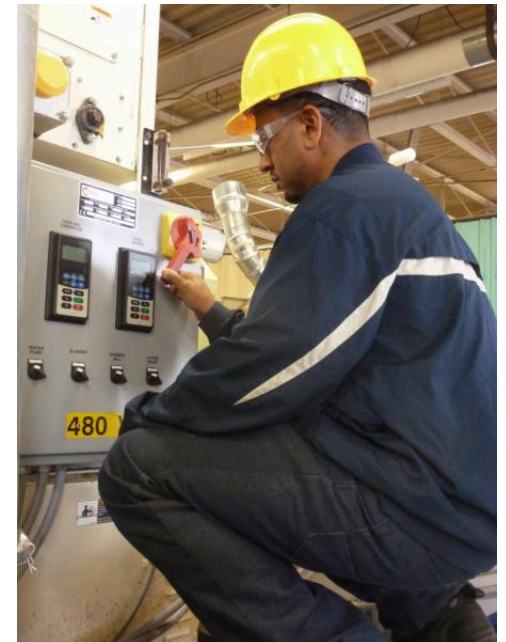
- Acquire knowledge at your own pace.
- Learn at home, so you avoid travel expenses.
- Continue educational experiences if you are working out of state.
- Learn from national experts about the National Electrical Code and apprenticeship training.

Entrance Requirements

- Have a successful academic performance that allows the apprentice to be a self-directed learner.
- Have access to a high speed Internet connection with printing capabilities.
- Educational requirements and experience counted by the State only if the apprentice is 16 years of age and older.
- [View a link for purchasing courses](#) along with instructions on how to either register yourself or how to register another person
- Pay the \$100 administrative non-refundable fee. This is completed when registering for the program. If a person only wishes to take classes for the purpose of personal development, no administrative fee is required.

Program Cost

- \$100 Administrative Fee which is non-refundable. This is completed when registering for the program. If a person only wishes to take classes for the purpose of personal development, no administrative fee is required.



- \$250 per course fee which is non-refundable. Each online course is designed for 30-hours of instruction. Upon successful completion of the course, the State of Michigan will grant up to 30 hours of electrical experience for each course completed.
- Graduates of the Michigan State University Electrical Technology Program may qualify to receive a \$200 discount per course.

The above fee structure will continue for all courses the student is enrolled in from September 1, 2010 through August 31, 2027.

Books and Learning Materials

- 2023 National Electrical Code, ISBN 978-1455929368. - Required for all courses except for ET 010.
- Electrical Motor Controls for Integrated Systems, 5th Edition, ATP. ISBN-13: 978-0826912268. – Required for courses starting with ET 030.
- Personal calculator, with manual. Calculator must be capable of performing trigonometry basic functions.

Program Time Line

Classes will be available starting anytime upon registration.

Students may complete requirements at a personal pace, however, will be limited to a maximum of six months to complete an individual class. Those taking longer than six months will be dis-enrolled in the class and must re-enroll in the course if they desire to continue in MSU's apprenticeship program.

The program is structured such that upon completion of one course, the apprentice may register for the next available course in the sequence. Once the student has demonstrated proficiency in the subject matter, they may enroll in the next course. Proficiency is determined by a course ending exam. To successfully pass a course, a minimum grade of 75% is required. If the apprentice fails the examination they will have one opportunity to re-study the course material and take a second examination. Upon failure of the second examination, the apprentice must re-enroll into the course.



Sample Course Sequence

Year One		
ET 010	Technical Mathematics	30-hours
ET 011	Electrical Fundamentals I	30-hours
ET 012	Electrical Code I	30-hours
ET 013	Electrical Circuitry	30-hours
ET 014	Electrical Wiring I	30-hours
Year Two		
ET 020	Electrical Fundamentals II	30-hours
ET 021	Electrical Applications	30-hours
ET 022	Electrical Code II	30-hours
ET 023	AC & DC Machines	30-hours
ET 024	Electrical Wiring II	30-hours
Year Three		
ET 030	Automation & Controls I	30-hours
ET 031	Transformers	30-hours
ET 032	Agricultural and Swimming Pool Wiring	30-hours
ET 033	Electrical Code III	30-hours

ET 034	Electrical Occupations	30-hours
Year Four		
ET 040	Automation & Controls II	30-hours
ET 041	Electrical Systems Planning	30-hours
ET 042	Electrical Code IV	30-hours
ET 043	Automation Systems	30-hours
ET 044	Journey Exam Preparation	30-hours
Total		600 hours

Click for a complete list of [course descriptions in pdf format](#) and a [suggested sequence in pdf format](#).

View a link for purchasing courses along with instructions on how to either register yourself or how to register another person.

Transfer from another Apprenticeship Program

A person desiring to transfer from another apprenticeship program must provide documentation from that program of the subjects completed and instructional hours accumulated in each subject category. A proficiency test may be given to the transferee to evaluate the appropriate starting level.

Contact

Jon Althouse
Program Coordinator
524 S. Shaw Lane
114 Farrall Hall
Michigan State University
East Lansing, MI 48824
517.353.4896
althous2@msu.edu

canr.msu.edu

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(<https://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/childrens-online-privacy-protection-rule>).