

Electrical Installation and Maintenance Technology

Honolulu Community College's Electrical Installation and Maintenance Technology Program (EIMT) curriculum has been designed to provide students with the entry-level knowledge and manipulative skills for employment in the electrical industry. The EIMT curriculum complies with provisions contained in the National Electrical Code.

Program Entry Requirements

English Requirements:

Completion of ENG 20 BCDE
(native speakers only)
Completion of ESL 11, 13, and 17 (non-native speakers only) with "C" or higher
OR
COMPASS* placement into ENG 21/51

Math Requirements:

Completion of Math 20 BCD
OR
COMPASS* placement in Math 53
*UH Community College System placement test

Recommended Preparation

High school algebra, blueprint reading, and physics

Costs (not including tuition)

Books and tools: \$600

Program Technical Standards



Our program technical standards have been developed to help students understand the minimum essential mental, physical, and behavioral skills necessary for participation in and completion of all core aspects of our curriculum.

As an EIMT student, you will be expected to do the following:

- General:** Apply theories and principles for proper installation, troubleshooting, maintenance and repair of electrical components and systems.
- Specific:** Read the National Electrical Code, diagrams, tables, charts and graphs.
Read residential, commercial, and industrial blueprints, schematics and wiring diagrams.
Take measurements and do conversions.
Measure and calculate electrical values.
Interpret readings on analog and digital meters, oscilloscopes, tape rules, and other measurement devices.
Identify names and functions of residential, commercial and industrial wiring circuits and systems.
Explain operating characteristics and control of AC and DC machinery.
Identify tools and materials.
Memorize safety procedures.
Inspect and test electrical components and systems.
Recognize indicators of malfunctions.
Draw conclusions based on a review of findings.
Formulate service or repair plan.
Perform electrical work according to National Electrical Code requirements.



EIMT students read residential, commercial, and industrial blueprints, schematics and wiring diagrams.

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2

EIMT student distinguishes colors of wires, push buttons, and indicating lights.



3

EIMT student uses a ladder to work at varying heights.



4

EIMT student documents work carefully.

Sensory/
Observation
skills

2

General: Use sensory cues to conduct inspections and tests to determine root causes of failures and respond properly.

Specific: Take readings with analog and digital meters, oscilloscopes, tape rulers and other measuring devices.

Distinguish identifying colors of wires, push buttons, indicating lights, and other objects.

Recognize and compare shapes and forms of objects.

Detect and respond to warning indicators of malfunctions.

Judge distance and spatial relationships of objects.

Detect and respond to sensory cues that indicate problems.

Select appropriate materials, tools and equipment for installation, maintenance and repairs.

Motor
skills

3

General: Possess sufficient physical strength, flexibility, and dexterity to safely perform electrical work.

Specific: Operate necessary tools, equipment, and machinery.

Remove and replace failed components and small parts.

Position and maneuver in confined spaces.

Work at varying heights.

Lift and transport equipment and supplies as necessary.

Communication
skills

4

General: Communicate effectively to gather and convey information.

Specific: Obtain necessary information from oral and written sources.

Express information coherently.

Document work accurately.

Behavioral
skills

5

General: Behave appropriately and safely in a cooperative learning environment.

Specific: Fulfill personal and shared responsibilities.

Work cooperatively with partners and groups.

Exercise good judgement.

Follow safety procedures.



General: Function safely in an electrical shop environment.

Specific: Work for prolonged periods amidst:

- Sharp tools and materials
- Electrical equipment
- Chemicals and toxins
- Heat, dust, and fumes
- Machinery with moving parts
- Slippery or uneven surfaces
- Variations in lighting
- Noise



EIMT student works in a confined space on a slippery and uneven surface.

For More Information

If you are interested in our program, we encourage you to meet with our EIMT counselor (phone: 845-9129) and refer to the information at <http://tech.honolulu.hawaii.edu/eimt/index.html> to decide whether the EIMT program is right for you.

Please keep in mind that you will have to fulfill additional requirements to be eligible for certification exams or licensure in the field. For more information go to

<http://www.hawaii.gov/dcca/areas/pvl/boards/electrician/> or <http://www.contractors-license.org/>

Disability Accommodations

We have developed our technical standards in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. We will provide reasonable accommodations to qualified students with disabilities. If you are interested in our program, we encourage you to review the program technical standards and course information at <http://tech.honolulu.hawaii.edu/eimt/index.html> to decide whether the EIMT program is right for you.

If you have questions about the EIMT program, please call the HCC Counseling Office at 845-9129. Individuals with hearing impairments may call 845-9270 (v/t) or use the Telecommunication Relay Service at 1-877-447-5990.

If you have questions about disability access and accommodations, please direct them to HCC's Services for Students with Disabilities (SSD) at 845-9282 (v/t), 845-9272 (v/t), or e-mail access@hcc.hawaii.edu. SSD will be happy to meet with you, evaluate your disability documentation, and, as appropriate, recommend reasonable accommodations consistent with your documented limitations and the technical standards of the program. We will keep your disability information confidential within the parameters of the accommodation process.