

Electrical Installation and Maintenance Technology

The Electrical Installation and Maintenance Technology (EIMT) program is comprehensive and fulfills the requirements for entry-level positions in the electrical field. EIMT provides technical knowledge needed as well as the essential hands-on skills that meet the condition for achieving success in the electrical field. Emphasis is placed on wiring in accordance with both the provisions contained in the National Electrical Code and the energy conservation codes. Successful completion of the EIMT program will prepare an individual to take the State of Hawai'i Maintenance Electrician License test.

Program Admission Requirements:

(1) Qualified for ENG 100S or ENG 106 and either qualified for MATH 100 or higher or concurrent enrollment in MATH 75X or higher; or (2) Approval of instructor.

Program Student Learning Outcomes (PSLOs) approved 09/17/2014:

1. Read and understand blueprints sufficiently to use them to plan a project.
2. Select materials properly for a given project that comply with published codes and deliver energy efficient outcomes.
3. Maintain and care for the tools required in the electrical industry.
4. Utilize Occupational Safety and Health Administration (OSHA) and State safety regulations to minimize risk and protect self and others.
5. Communicate successfully orally and in writing using computer technology.
6. Demonstrate the craftsmanship standards of dependability, punctuality, and quality.

Electrical Installation and Maintenance Technology Degrees and Certificates

Electrical Installation and Maintenance Technology: Associate in Applied Science Degree

Fall (Semester 1)

Course	Course Title/Category	Credits
BLPR 122	Blueprint Reading	3
EIMT 121	Electrical Fundamentals	3
EIMT 123	Wiring Materials, Methods, and NEC Codes	3
FENG 120	Facility Safety and Accident Prevention	1
	Social Environment: A.A.S. Core Options	3
	Thinking, Reasoning, and Mathematics: A.A.S. Core Options	3

1. Thinking, Reasoning, and Mathematics: QM 108 is recommended.

Spring (Semester 2)

Course	Course Title/Category	Credits
EIMT 131	Residential Installation Theory	4
EIMT 135	Residential Installation Lab	6
EIMT 151	Industrial Motor Controls	3
	Communication: A.A.S. Core Options	3

Fall (Semester 3)

Course	Course Title/Category	Credits
EIMT 145	Commercial Installation Theory	4
EIMT 147	Commercial Installation Lab	6
	EIMT 170 or FENG 130	3
	Cultural Environment: A.A.S. Core Options	3

Spring (Semester 4)

Course	Course Title/Category	Credits
EIMT 153	AC/DC Systems and Equipment	6
FENG 123	Plumbing Basics and Repair	2
	EIMT 175 or FENG 140	3
	Natural Environment: A.A.S. Core Options	3

1. Natural Environment: PHYS 101 is recommended.

Total Credits	62
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Category Descriptions

Communication: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Cultural Environment: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Natural Environment: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Social Environment: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Thinking, Reasoning, and Mathematics: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Electrical Installation and Maintenance Technology: Certificate of Achievement

Fall (Semester 1)

Course	Course Title/Category	Credits
BLPR 122	Blueprint Reading	3
EIMT 121	Electrical Fundamentals	3
EIMT 123	Wiring Materials, Methods, and NEC Codes	3
	Thinking, Reasoning, and Mathematics: A.A.S. Core Options	3

1. Thinking, Reasoning, and Mathematics: QM 108 is recommended.

Spring (Semester 2)

Course	Course Title/Category	Credits
EIMT 131	Residential Installation Theory	4
EIMT 135	Residential Installation Lab	6
EIMT 151	Industrial Motor Controls	3

Fall (Semester 3)

Course	Course Title/Category	Credits
EIMT 145	Commercial Installation Theory	4
EIMT 147	Commercial Installation Lab	6
	EIMT 170 or FENG 130	3

Spring (Semester 4)

Course	Course Title/Category	Credits
EIMT 153	AC/DC Systems and Equipment	6
	EIMT 175 or FENG 140	3
	Total Credits	47

Category Descriptions

Thinking, Reasoning, and Mathematics: A.A.S. Core Options

Refer to the "General Education/Skills Core Options Course List" under the "Programs (Certificates and Degrees)" section of the catalog for a list of courses that will fulfill this category.

Electrical Installation and Maintenance Technology: Certificate of Competence

Fall (Semester 1)

Course	Course Title/Category	Credits
BLPR 122	Blueprint Reading	3
EIMT 123	Wiring Materials, Methods, and NEC Codes	3
FENG 120	Facility Safety and Accident Prevention	1
	EIMT 170 or FENG 130	3

Spring (Semester 2)

Course	Course Title/Category	Credits
EIMT 121	Electrical Fundamentals	3
EIMT 151	Industrial Motor Controls	3
FENG 123	Plumbing Basics and Repair	2
	Total Credits	18

Electrical Installation and Maintenance Technology: Certificate of Competence (Mechanical, Electrical, and Plumbing)

Fall (Semester 1)

Course	Course Title/Category	Credits
BLPR 122	Blueprint Reading	3
EIMT 123	Wiring Materials, Methods, and NEC Codes	3
FENG 120	Facility Safety and Accident Prevention	1
FENG 130	Basic Fundamentals of Air Conditioning and Refrigeration	3

Spring (Semester 2)

Course	Course Title/Category	Credits
EIMT 121	Electrical Fundamentals	3
EIMT 151	Industrial Motor Controls	3
FENG 123	Plumbing Basics and Repair	2
FENG 140	Commercial Refrigeration and Air Conditioning Diagnostics	3
Total Credits		21

Electrical Installation and Maintenance Technology: Certificate of Competence (Solar Energy Technology/ Technician)

Fall (Semester 1)

Course	Course Title/Category	Credits
EIMT 123	Wiring Materials, Methods, and NEC Codes	3
EIMT 170	Renewable Energy PV	3
FENG 120	Facility Safety and Accident Prevention	1

Spring (Semester 2)

Course	Course Title/Category	Credits
EIMT 121	Electrical Fundamentals	3
EIMT 175	Advanced Renewable Energy PV	3
FENG 123	Plumbing Basics and Repair	2
Total Credits		15