College EUT Programs – New England

Energy Utility Technology (EUT)

December 2014

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Agenda

1. Quinsigamond Community College (QCC)
2. North Shore Community College (NSCC)
3. Middlesex Community College (MCC)
4. Community College of Rhode Island (CCRI)

Quinsigamond Community College (QCC)

- Energy Utility Technology Certificate
- Inception Date: Fall 2007
- Students receiving certificate: 120 (thru 5/2014)

QUINSIGAMOND Community College

QCC – Program Description

- The Energy Utility Technology certificate program is designed to prepare students for entry-level positions in the electrical and/or gas utility industry.
- The program includes courses that provide students with an introduction to the energy industry; knowledge of direct and alternating current circuits; generation, transmission and distribution of electricity; industrial safety; and computer applications.
- In addition, students will gain hands-on experience through a practicum in the second semester.

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QCC- Curriculum

Course Code	Title	Credits
EUT 110	Electrical Principles I	4
MAT 108	Applied Technical Math	4
CIS 111	Introduction to Microcomputer Applications	3
EUT 101	Fundamentals of the Energy Industry	4
EUT 115	Generation, Transmission, and Distribution	4
EUT 120	Industrial Safety	**3**
EUT 111	Electrical Principles II	4
EUT 190	**Energy Utility Practicum**	**3**
	Total Credits	**29**

EUT 190 is supported by National Grid and classes are delivered at the Millbury Learning Center. Classroom lecture, hands-on activities,and physical tasks, are completed in indoor laboratories and in the outdoor yard.

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EUT 190 Energy Utility Technology (QCC)

- Overhead Construction and Techniques
- Safety and Tools In the Utility Business
- Natural Gas Utility Overview
- Secondary Service Installations
- Pole Climb- Step Poles
- Underground Distribution Techniques
- Substation Maintenance Techniques
- Grounding and Grounding Techniques
- Metering Overview

Instructor : Bob McDonald and 1-2 Adjuncts
Time: 8:30A – 2:00P
Duration: 9 Weeks (once per week)
Location: Millbury Learning Center

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Agenda

1. Quinsigamond Community College (QCC)
2. North Shore Community College (NSCC)
3. Middlesex Community College (MCC)
4. Community College of Rhode Island (CCRI)

North Shore Community College –(NSCC)

- Energy Utility Technology Certificate
- Inception Date: Fall 2007
- Students receiving certificate: 104 (thru 5/2014)

NSCC – Program Description

- The Energy Utility Technology Certificate is a 29 credit program offered over two semesters. Students will be introduced to the energy utility industry and participate in classroom and laboratory experiences that focus on electrical generation processes, power plant systems and functions, industry safety, and the transmission and distribution of electric power.
- This certificate program is designed to fill a critical need for qualified entry level workers in the Energy Utility Industry. Job opportunities exist for line workers, meter workers and sub-station maintenance workers.

NSCC- Curriculum

Course Code	Title	Credits
IEL 101	Electrical Principles I	4
MAT 135	Applied Technical Mathematics I	4
CPS 190	Introduction to Computer Applications	3
EUT 102	Introduction to the Energy Utility Industry	4
EUT 104	Generation, Transmission, and Distribution	4
EUT 106	Energy Industrial Safety	**3**
IEL 102	Electrical Principles II	4
EUT 108	**Energy Utility Practicum**	**3**
	Total Credits	**29**

EUT 108 is supported by National Grid and classes are delivered at the Millbury Learning Center. Classroom lecture, hands-on activities, and physical tasks, are completed in indoor laboratories and in the outdoor yard.

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EUT 108 Energy Utility Technology (NSCC)

- Overhead Construction and Techniques
- Safety and Tools In the Utility Business
- Natural Gas Utility Overview
- Secondary Service Installations
- Pole Climb- Step Poles
- Underground Distribution Techniques
- Substation Maintenance Techniques
- Grounding and Grounding Techniques
- Metering Overview

Instructor : Bob McDonald and 1-2 Adjuncts
Time: 8:30A – 2:00P
Duration: 9 Weeks (once per week)
Location: Millbury Learning Center

OurAcademy

Agenda

1. Quinsigamond Community College (QCC)
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Middlesex Community College – (MCC)

- Energy Utility Technology Certificate
- Inception Date: Fall 2007
- Students receiving certificate: 115 (thru 5/2014)

MCC – Program Description

- The Energy Utilities Technology Certificate is a 10-month program designed to prepare students for entry-level positions in the electrical utility industry.
- The industry has forecasted a strong need for new employees in the next several years for positions such as line workers, meter workers and substation maintenance personnel.
- The program includes courses that give students an introduction to the energy utilities industry; knowledge of direct and alternating current circuits; generation, transmission and distribution of electricity; industrial safety; and computer applications.

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MCC- Curriculum

Course Code	Title	Credits
EUT 111	Principles of Electricity 1	4
TMA 095	Applied Technical Mathematics	4
EUT 101	Introduction to Energy Industry	3
EUT 171	Generation, Transmission, and Distribution	4
CAP 101	Computer Applications	3
EUT 151	Industrial Safety	**3**
EUT 161	Principles of Electricity 2	4
EUT 181	**Energy Internship**	**3**
	Total Credits	**28**

EUT 181 is supported by National Grid and classes are delivered at the Millbury Learning Center. Classroom lecture, hands-on activities, and physical tasks, are completed in indoor laboratories and in the outdoor yard.

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EUT 181 Energy Internship (MCC)

- Overhead Construction and Techniques
- Safety and Tools In the Utility Business
- Natural Gas Utility Overview
- Secondary Service Installations
- Pole Climb- Step Poles
- Underground Distribution Techniques
- Substation Maintenance Techniques
- Grounding and Grounding Techniques
- Metering Overview

Instructor : Bob McDonald and 1-2 Adjuncts
Time: 8:30A – 2:00P
Duration: 9 Weeks (once per week)
Location: Millbury Learning Center

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3. Middlesex Community College (MCC)
4. Community College of Rhode Island (CCRI)

Community College of Rhode Island – (CCRI)

- Energy Utility Technology Certificate (ETUT)
- Inception Date: Fall 2012
- Students receiving certificate: 40 (thru 5/2014)

Community College of Rhode Island

CCRI – Program Description

- This Certificate Program provides students with a core set of skills and competencies required by the energy industry. Course work covers technical math, safety, AC and DC circuits and controls, the business side of the energy industry, operations and technology.
- Workplace readiness skills are integrated into the curriculum including critical thinking, problem solving, time management and teamwork.
- Students are required to complete experiments with lab reports, special projects and a portfolio illustrating key learning outcomes.

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CCRI - Curriculum

Course Code	Title	Credits
Math 1750	Applied Technical Mathematics	3
ETEE 1050	Introduction to Electromechanical Systems	3
ETEE 1060	Energy Industry Safety	3 *
ETEE 1800	Introduction to Digital Systems	3
ETUT 1160	Introduction to Energy Utility Industry	3
ETEE 1500	Electrical Systems 1	3
ETEE 2390	Electrical Power Systems	3
PHYS 1070	Introduction to Renewable Energy	3
ETUT 2500	**Energy Industry Capstone and Practicum**	**3**
	Total Credits	**27**
	***includes OSHA 30 General Industry Certification**	

ETUT 2500 is supported by National Grid and classes are delivered at the Millbury Learning Center. Classroom lecture, hands-on activities, and physical tasks, are completed in indoor laboratories and in the outdoor yard.

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ETUT 2500 Energy Industry Capstone/Practicum (CCRI)

- Overhead Construction and Techniques
- Safety and Tools In the Utility Business
- Natural Gas Utility Overview
- Secondary Service Installations
- Pole Climb- Step Poles
- Underground Distribution Techniques
- Substation Maintenance Techniques
- Grounding and Grounding Techniques
- Metering Overview

Instructor : Bob McDonald and 1-2 Adjuncts
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