

Energy Generation Operations Program

Degree: Associate of Applied Science

Length of Program: 18 months (begins January 2011)

Program Location: Milford Campus and online classes

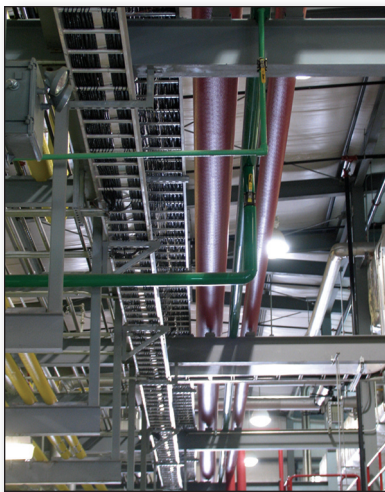
Program Description: Graduates from this program

will be prepared to operate a variety of energy generating facilities, dependent upon their choice of one of the following four focuses.

- Biofuels
- Fossil Fuels (coal, natural gas)
- Nuclear
- Wind

Potential Earnings:

Biofuels: According to the 2010 Ethanol Industry survey, the average compensation for an ethanol plant operator is around \$67,500 per year (\$32/hour).



Fossil Fuels: According to the Nebraska Department of Labor, the average compensation for power plant operators in Nebraska is \$62,475 per year (\$30/hour).

Nuclear Plants: According to the Nuclear Energy Institute, the nationwide average

compensation for non-licensed nuclear plant operators is \$70,793 per year (\$34/hour).

Wind Technology: According to the American Wind Energy Association, wind turbine technicians earn \$47,840 per year (\$23/hour) on average.

Important Additional Information:

SCC's Energy Generation Operations program carries certifications from the Nuclear Energy Institute and the American Wind Energy Association,

providing graduates with nationwide opportunities for jobs in these very lucrative and rapidly expanding fields. Growing energy needs, expanding power plant and biofuels production, plus critical infrastructure needs due to an aging workforce, all conspire to create many very lucrative job opportunities in these exciting fields.

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Curriculum

The first five quarters will involve core classes, including:

General Education
Introduction to Power Generation
Mechanical and Fluid Fundamentals
Process Dynamics
Electrical Fundamentals
Power Generation Technologies
Data Collection
Emission Controls

Refrigeration
Instrumentation and Controls
Water and Wastewater Technology
Motor Controls
Boiler Systems
Steam Turbines
Operator Safety
Internship
Biology (Biofuels focus)
Atomic Structures (Nuclear focus)
Computer Applications
Electrical Schematics

Four focuses are offered to students during their sixth quarter. Students will choose a focus during their fourth quarter. The final quarter will include courses specific to the focus chosen. Those focuses are:

Biofuels Focus
Fossil Fuels Focus (Coal, Natural Gas)
Nuclear Focus
Wind Technology Focus