



**Associate of Applied Science Degree
Diploma
Certificate**

Credit Hours Required for Graduation:

AAS Degree:..... 66.5
Diploma:.....30.0-32.0
Certificate:..... 13.0



For more information contact:

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or the College Admissions Office
Milford 402-761-8243, 800-933-7223 ext. 8243

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A0722 - ENER (08/19)

Are you looking for a bright future with dozens of career opportunities? Plant operators must understand and oversee all aspects of an industrial facility, whether it generates electricity or processes fluids for many different types of industrial processes. Plant operators are the “control/command” group in an industrial facility, ensuring smooth, safe operations.

Why SCC?

SCC's Energy Generation Operations program is the only one like it in the United States.

SCC has a unique control room simulator that can replicate real-time operations of a coal-fueled power plant, a gas turbine-powered power plant and an electric transmission operations control center for an entire state.

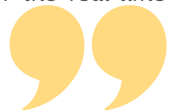
We offer core curriculum and exceptional hands-on lab equipment that is designed to prepare students to operate successfully in a wide variety of industrial facilities.



“Attending Southeast Community College was the best decision I’ve ever made, and the Energy Generation Operations program changed my life tremendously. I wouldn’t be where I am today if it wasn’t for



instructors John Pierce, Doug Burks and David Madcharo. They have many years of experience, are dedicated and very knowledgeable. The program prepares you for the real-time work setting. It also prepares operators to be alert, proactive and safe. SCC Milford is a small, friendly community that really cares about its students.”



-Renee Peters

Associate Distribution Operator, Lincoln Electric System



Top Career Options

- Facility operator at a plant for biofuels production, coal-fired power, heating-cooling, hydroelectric power, nuclear power, solar power, and water/wastewater treatment



Graduate Earnings

Recent graduates report an average starting wage of \$26.95 per hour.



2019-2020 Tuition/Fee Rate Per Credit Hour	
Nebraska Resident	\$108
Out-of-state tuition/fee rate	\$129
Estimated Expenses	
Tuition/Fees	\$ 7182
Books	2410
Special Fees	480
Tools/Supplies	300
Total:	\$10,372

Program overview

This program provides three semesters of common core curriculum for several types of processing operations. Operators must understand and oversee all aspects of process operations facilities, including power-generating facilities, fuel-processing facilities and many other industries. Students will study a wide range of necessary topics to gain this broad understanding of plant operations and maintenance.

In the fourth semester, specific types of operations will be covered in detail to prepare students for careers in the type of processing plant of their choice. These courses will be offered as 10 electives from which a minimum of 10 credits must be selected. Other types of processing plants include water/wastewater treatment plants, refineries, breweries, food and pharmaceutical manufacturing, steel and concrete manufacturing, among many others.

In addition to an Associate of Applied Science degree, certificate and diploma options also are offered.

Students who wish to pursue a bachelor's degree after completing their coursework at SCC may do so, thanks to a number of transfer agreements. Energy Generation Operations students can transfer credits to Bismarck State College (Energy Management) or Thomas Edison State University (Energy Systems Technology, Nuclear Energy Engineering Technology and Technical Studies) and obtain a bachelor's degree online.

Special Program Requirements

All prerequisite courses must be completed with a "C" or higher to progress through the program.

Students will be required to provide their own transportation, room and board for the internship course (ENER1900).

Certain "Fitness for Duty" requirements may be required by many employers as a condition of employment as an operator.

Most employers require applicants to pass a Criminal Background Check as part of their conditions for employment.

General Education Requirements

Contact your program advisor to select general education courses from each category, which will meet your program's graduation requirements. See the General Education pages for a complete list.

(One class from each area below).

GELO #1:	Oral Communications	3.0
GELO #2:	Written Communications	3.0
GELO #3:	Critical Thinking & Problem Solving PHYS1017 or PHYS1150* or PHYS1410 (Recommended)	3.0-5.0
GELO #5:	Analytical, Quantitative, and Scientific Reasoning MATH1050* or higher (Recommended)	3.0
GELO #6:	Career and Life Skills BSAD1010 Microsoft Applications I (Recommended)	3.0 15.0-17.0

Core Courses

Course #	Course title	Credit hrs.
ENER1100*	Energy Industry Fundamentals	3.0
ENER1110*	Operator Safety	3.0
ENER1115*	Mechanical & Fluid Fundamentals	3.5
ENER1210*	Electrical Power Theory	4.0
ENER1220*	Process Dynamics	3.0
ENER1235	Technical Diagrams	2.0
ENER1250	Emission Control Systems	2.0
ENER1255*	Instrumentation & Control Systems	4.0
ENER1900*	Internship	3.0
ENER2100*	Motor Controls and Switchgear	3.0
ENER2102*	Nuclear Energy	2.0
ENER2120*	Boilers and Steam Turbines	3.0
ENER2130	Green Energy Technologies	3.0
ENER2530*	Process Plant Chemistry	2.0
ACFS2020	Career Development	1.0
		41.5

Plus minimum of 10 credits from the following electives

Course #	Course Title	Credit hrs.
ENER2135*	Atomic Structures	2.0
ENER2140	Electric Power Transmission Fundamentals	2.0
ENER2205*	Nuclear Power Plant Layout	3.0
ENER2220*	Reactor Plant Materials	2.0
ENER2230*	Radiation Detection & Protection	2.0
ENER2240*	Reactor Safety	2.0
ENER2300	Coal Plant Operations & Troubleshooting	3.0
ENER2400	Gas Turbines & HRSG Systems	2.0
ENER2500	Biofuels Process Fundamentals	3.0
ENER2520	Industrial Microbiology	2.0

Total credit hours for Associate of Applied Science Degree: 66.5

Elective Classes

ENER2999	Special Project	1.0-3.0
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* To receive a Nuclear Uniform Curriculum Program Certificate issued by the Cooper Nuclear Station, in addition to the A.A.S. degree, these courses require a final grade of 80% or above.



Nuclear Energy Scholarship Program

The Nuclear Regulatory Commission has awarded SCC a grant which is to be used for scholarships for students concentrating in nuclear-related associate degree programs. The project goal is to help develop a workforce capable of supporting the design, construction, operation, and regulation of nuclear facilities and the safe handling of nuclear materials.

Awards are up to \$3,000 per year per eligible student as long as funding is available. Degree-seeking students who are accepted into or enrolled in the program are encouraged to submit an application for a scholarship from the Nuclear Regulatory Commission's Nuclear Energy Scholarship Program.

Incoming students must meet the course-placement score for the program to which they applied. www.southeast.edu/nesp