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. We offer focus areas in Industrial Process Operations, Nuclear and Military.

Types of jobs available:
- Biofuels Production Facility Operator
- Coal-Fired Power Plant Operator
- Combined Cycle Power Plant Operator
- Heating-Cooling Plant Operator
- Hydroelectric Power Plant Operator
- Nuclear Power Plant Operator
- Pipeline Operator
- Power Dispatcher
- Process Plant Operator
- Refinery Operator
- Solar Power Plant Operator Systems Operator
- Transmission/Distribution Systems Operator
- Water/Wastewater Treatment Plant Operator
- Wind Turbine Technician

"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
Distribution Operator,
MidAmerican Energy, Des Moines, IA

Graduate Earnings
Recent graduates report an average starting wage of $27.05 per hour.

For more information contact:
John Pierce, Program Chair
402-761-8394, 800-933-7223 ext. 8394
jpierce@southeast.edu

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

Equal Opportunity/NonDiscrimination Policy - It is the policy of Southeast Community College to provide equal opportunity and nondiscrimination in all admission, attendance, and employment matters to all persons without regard to race, color, religion, sex, age, marital status, national origin, ethnicity, veteran status, sexual orientation, disability, or other factors prohibited by law or College policy. Inquiries concerning the application of Southeast Community College's policies on equal opportunity and nondiscrimination should be directed to the Vice President for Access/Equity/Diversity, SCC Area Office, 301 S. 68th Street Place, Lincoln, NE 68510, 402-323-3412, FAX 402-323-3420, or jsoto@southeast.edu.

This publication should not be considered a contract between SCC and any prospective student. SCC's Board of Governors reserves the right to make changes in this publication during the life of the publication and without notice.
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 online for a complete list.

(One class from each area below).

Oral Communications 4.5
Written Communications 4.5
Analytical, Quantitative, and Scientific Reasoning 4.5
MATH1050* or higher (Recommended)
Critical Thinking & Problem Solving 4.5
PHYS1017* or PHYS1150* or PHYS1410* or higher (Recommended)

Career and Life Skills

BSAD1010 (Recommended) 4.5

Total Core Credits: 87 hours

Core Courses:

Course #  Course title  Credit hrs.
ENER1100*  Energy Industry Fundamentals 4.5
ENER1110*  Operator Safety 4.5
ENER1115*  Mechanical & Fluid Fundamentals 4.5
ENER1210*  Electrical Power Theory 6.0
ENER1220*  Process Dynamics 4.5
ENER1235  Technical Diagrams 3.0
ENER1250  Emission Control Systems 3.0
ENER1255*  Instrumentation & Control Systems 5.5
ENER1900*  Internship 3.0
ENER2100*  Motor Controls and Switchgear 4.5
ENER2102*  Nuclear Energy 3.0
ENER2120*  Steam Turbines 3.0
ENER2130  Green Energy Technologies 4.0
ENER2140  Electric Power Transmission Fundamentals 3.0
ENER2220  Process Plant Chemistry 3.0
ACFS2020  Career Development 1.5

Total Core Credits: 87 hours

Elective Classes:

ENER1140  POSS Preparation Strategies 1.0
ENER1141  SO/PD Preparation Strategies 1.0
ENER2999  Special Project 1.0-3.0

Nuclear Focus:

Course #  Course title  Credit hrs.
ENER2150*  Atomic Structures 3.0
ENER2205*  Nuclear Power Plant Layout 4.5
ENER2220*  Reactor Materials 3.0
ENER2230*  Radiation Detection & Protection 3.0
ENER2240*  Reactor Safety 3.0

Core Credits: 87
Nuclear: 103.5 hours

Nuclear Uniform Curriculum Program Certificate

* To receive a NUCP 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.

Industrial Process Operations Focus:

Course #  Course title  Credit hrs.
ENER2300  Coal Plant Operations & Troubleshooting 4.5
ENER2400  Gas Turbines & HRSG Systems 3.0
ENER2500  Biofuels Fundamentals 4.5
ENER2520  Microbial Ecology 3.0

15.0 hours
Core Credits: 87
Industrial Process Operations: 102.0 hours

Energy Generation Operations

Military Focus:

Course #  Course title  Credit hrs.
ENER2099  Military Service Energy Generations Training 30.0-60.0**
Technrical Electives 21.5-51.5**

General Education Requirements 22.5
Military Focus: 104.0 hours

**Depends on Military Training Transcript.

The student, with approval of the program chair, will compose a set of SCC ENER courses. The student and program chair will select courses that will enhance technical and operational expertise.

Introduction to Energy Industry Certificate

Description: This certificate will introduce students to the energy industry with a close look at all aspects of energy generation and delivery. It will provide students with fundamental understandings of how the energy industry is organized and regulated. Students will also get a closer look at nuclear energy, green energy technologies, and how why and how emissions from power plants are managed.

Course #  Course title  Credit hrs.
ACFS1015  New Student Orientation 1.0
ENER1100  Energy Industry Fundamentals 4.5
ENER1220  Reactor Plant Materials 3.0
ENER1240  Reactor Safety 3.0
ENER2400  Gas Turbines and HRSG Systems 3.0
ENER2500  Biofuels Fundamentals 4.5

Total Electives: 17.0-20.5

General Education Requirements:

Diploma

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 online for a complete list.

(One class from one of the three following areas). Oral Communications, Written Communications, Analytical, Quantitative and Scientific Reasoning 4.5 hours

Total credit hours for Diploma: 45.0-48.5

Energy Systems Overview Diploma

Description: This diploma will provide a closer look at the energy industry including some of the technical aspects of the operations of various types of power plants including fossil fuels, green energy generation and nuclear power.

Course #  Course title  Credit hrs.
ENER2105  Boiler Systems 4.0
ENER2205  Nuclear Power Plant Layout 4.5
ENER2220  Reactor Plant Materials 3.0
ENER2240  Reactor Safety 3.0
ENER2400  Gas Turbines and HRSG Systems 3.0
ENER2500  Biofuels Fundamentals 4.5

Total Electives: 17.0-20.5

Plus any of the following courses to total a minimum of 17.0 credits:

ENER2120*  Nuclear Energy 3.0
ENER2130*  Green Energy Technologies 4.0
ENER2400  Gas Turbines & HRSG Systems 3.0
ENER2500  Biofuels Fundamentals 4.5

Total Electives: 17.0-20.5

Nebraska Resident tuition/fee rate is $69.50 per credit hour. Out-of-state tuition/fee rate is $83.50 per credit hour. Graduation fee is $25.

Housing is available at Beatrice and Milford campuses only. Tuition, books and fees are dependent upon classes taken each quarter.

Students should plan a budget that includes room, meals, clothing, laundry, medical care, recreation and entertainment, transportation, insurance, etc.

Nuclear Focus

103.5 credit hours
Average Tuition & Fees per quarter $1,199
Books 2,235
Tools/Supplies 300
TTP Access Fee 450
EIF Certification Exam 30
Total $10,208

Industrial Process Operations Focus

102 credit hours
Average Tuition & Fees per quarter $1,182
Books 2,410
Tools/Supplies 300
TTP Access Fee 450
EIF Certification Exam 30
Total $10,279