

## Associate in Applied Science

# NUCLEAR ENERGY TECHNOLOGY:

## NON-LICENSED OPERATOR TRACK

### Program Information

The Nuclear Energy Technology program prepares students to move directly into the workforce upon graduation. Students will be qualified for entry-level positions in nuclear power maintenance and technology. Courses provide students with a solid foundation in basic scientific principles as well as mathematics. Students are exposed to the theory, materials and equipment necessary to work in the nuclear technology field. Special emphasis is placed on nuclear safety and procedures.

The program offers three tracks, each leading to a distinct skill set in the nuclear energy industry: instrumentation and control maintenance, electrical maintenance and non-licensed operator.

The non-licensed operator track focuses on the principles and components associated with various plant systems. It provides students with the knowledge and skills necessary to operate and monitor systems and components for which the non-licensed operator is responsible.

Upon successfully completing this program, students should be able to:

- communicate effectively in a professional manner, demonstrate an understanding of scientific inquiry and application,
- demonstrate an understanding of nuclear power fundamentals, work safely and effectively in the field of nuclear maintenance,
- demonstrate an understanding of the basic operation of a nuclear power plant, and
- demonstrate readiness for employment in the nuclear energy field.

### Transfer of Credits

Although this program is designed for immediate career preparation, some credits may transfer to an associate or bachelor's degree program. Please direct specific questions to a Student Affairs advisor.

**Nuclear Energy Technology students must complete all developmental English and mathematics courses, if needed, before enrolling in NET 111 and NET 115. Students must successfully complete all developmental English and mathematics courses, if needed, before applying to the Nuclear Energy Technology program.**

Admission to this program may be limited due to space availability. Please see page 107 for additional admissions information.

\* Students should select from the following courses: ETH 200, ECO 201, ECO 202, GEO 101, POL 101, POL 102, PSY 101, PSY 111 or SOC 101.

\* Students with previous computer science experience may substitute another computer science course for CSC 115.

# NET 200 Nuclear Energy Internship may be used to fulfill this elective.

### CREDITS

#### FIRST SEMESTER

<input type="checkbox"/>	CSC 115	Computer Applications*	3
<input type="checkbox"/>	ENG 101	English Composition I	3
<input type="checkbox"/>	NET 111	Mathematics for Energy Technicians	4
<input type="checkbox"/>	NET 115	Mechanical Sciences	3
<input type="checkbox"/>		Social Science or Humanities Elective*	<u>3</u>
			16

#### SECOND SEMESTER

<input type="checkbox"/>	ENG 122	Business and Occupational Writing	3
<input type="checkbox"/>	MAT 137	College Algebra	3
<input type="checkbox"/>	NET 130	Applied Physics and Chemistry	4
<input type="checkbox"/>	NET 131	Nuclear Industry Fundamental Concepts	3
<input type="checkbox"/>	NET 133	Electrical Science	<u>4</u>
			17

#### THIRD SEMESTER

<input type="checkbox"/>	NET 211	Heat Transfer and Fluid Flow	3
<input type="checkbox"/>	NET 213	Instrumentation and Control I	3
<input type="checkbox"/>	NET 261	Nuclear Plant Systems and Components: PWR	3
<input type="checkbox"/>	PHY 101	Physics I	4
<input type="checkbox"/>		Open Elective#	<u>3/4</u>
			16/17

#### FOURTH SEMESTER

<input type="checkbox"/>	ENG 202	Introduction to Speech Communication	3
<input type="checkbox"/>	NET 221	Nuclear Science	4
<input type="checkbox"/>	NET 223	Reactor Plant Protection and Safety	4
<input type="checkbox"/>	NET 263	Nuclear Plant Systems and Components: BWR	<u>3</u>
			14

TOTAL CREDITS: **63/64**

### N.J. GENERAL EDUCATION COMPONENT FOR NUCLEAR ENERGY TECHNOLOGY

<b>Communication:</b>	ENG 101, ENG 122
<b>Math/Science/Technological Competency:</b>	MAT 137
<b>Social Science:</b>	Social Science Elective or Humanities Elective
<b>Humanities:</b>	
<b>History:</b>	not required
<b>Cultural/Global Awareness:</b>	not required
<b>Unassigned:</b>	CSC 115, ENG 202, PHY 101