

# SUSTAINABLE ENERGY TECHNOLOGY: PHOTOVOLTAIC SYSTEMS

## Career Certificate Program

### Program Information

The Career Certificate in Sustainable Energy Technology: Photovoltaic Systems follows the North American Board of Certified Energy Practitioner's (NABCEP) requirements for completion of the Solar Photovoltaic entry-level exam and the Solar Photovoltaic installer exam. For more information, visit [www.nabcep.org](http://www.nabcep.org).

Beginning with the training to successfully take the entry-level photovoltaic examination, students are prepared through lectures, group project work and hands-on field experience in designing and installing a solar photovoltaic electrical system.

Upon successfully completing this series of courses, students should be able to:

- describe photovoltaic markets and applications;
- demonstrate an understanding of solar PV safety basics;
- demonstrate an understanding of electricity basics;
- demonstrate an understanding of solar energy fundamentals;
- demonstrate an understanding of photovoltaic module fundamentals;
- identify and describe system components;
- describe photovoltaic system sizing principles;
- design photovoltaic electrical and mechanical systems; and
- perform analysis, maintenance and troubleshooting of photovoltaic systems.

Credit may be awarded to those who pass NABCEP's Entry-Level Exam (for SET 150) and NABCEP's Advanced Photovoltaic Installer (for SET 151); contact the Director of the Energy Institute for more information.

### Transfer of Credits

Although this program is designed for immediate career preparation, students may continue their college education in either SCC's certificate program or A.A.S. program in Sustainable Energy Technology.

\* Program Electives include: BUS 102, BUS 103, SET 151 and SET 225.

CREDITS

#### FIRST SEMESTER

<input type="checkbox"/>	SET 101	Energy, The Environment and Society	3
<input type="checkbox"/>	SET 150	Solar Photovoltaic Electric Systems	<u>5</u>
			8

#### SECOND SEMESTER

<input type="checkbox"/>	CAD 101	Technical Drawing and CAD	3
<input type="checkbox"/>	NET 133	Electrical Science	4
<input type="checkbox"/>		Program Elective*	<u>3</u>
			10

TOTAL CREDITS: **18**