

# SOLAR & RENEWABLE ENERGY (SOLAR)

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## **SOLAR 102 Introduction to Photovoltaic Installation 3.5 Units**

Students are introduced to solar photovoltaic (PV) power systems and their installation. Students study PV topics including jobsite safety, solar energy fundamentals, electricity basics, modules fundamentals, system components, and mechanical and electrical design. Upon successful completion the student will have a rudimentary knowledge for an entry level position in the field. The lab will provide hands-on experience with a variety of systems encountered in the industry.

Lecture Hours: 2.5 Lab Hours: 3 Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 1

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None IGETC: None District GE: None

## **SOLAR 103 NABCEP Exam Preparation 1.5 Units**

Students will review the theory of solar PV (photovoltaic) systems and their installation and prepare for the NABCEP (North American Board of Certified Energy Professionals) exam. NABCEP certification requires that students pass an industry-designed exam, based on learning objectives developed by subject matter experts. NABCEP certification is an industry recognized demonstration of basic knowledge, comprehension, and application of key terms and concepts of photovoltaic system operations. Students holding the Entry Level Certificate may find that their employment opportunities in energy careers are enhanced. Students taking the NABCEP exam at the end of the course are liable for the appropriate NABCEP fee.

Lecture Hours: 1.5 Lab Hours: None Repeatable: No Grading: L

Recommended: SOLAR 102

Advisory Level: Read: 3 Write: 3 Math: 2

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None IGETC: None District GE: None

## **SOLAR 138 Work Experience 1-8 Units**

Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/technical subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Technical Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 2.07 Repeatable: Yes Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

Advisory Level: Read: 3 Write: 3 Math: None

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None IGETC: None District GE: None