

GREEN TECHNICIAN CERTIFICATE OF CAREER PREPARATION

This program is designed to provide students with fundamentals of renewable energy systems and related sustainability concepts that will prepare them for entry level jobs. DC and AC electrical theory, solar power systems design, installation and maintenance issues, along with OSHA construction safety are covered. Entry-Level certification into the Solar Photovoltaic Industry.

Code	Title	Units
Required Courses:		
ELECTR 110	Direct Current Circuit Analysis	3
ELECTR 111	Direct Current Circuit Laboratory	1
ELECTR 115	Alternating Current Circuit Analysis	3
ELECTR 116	Alternating Current Circuit Laboratory	1
ELEC 091	Fundamentals of Solar Energy	3
OSHA 030	Federal OSHA Outreach: Construction Industry Safety	2
Total Units		13

Program Learning Outcomes

At the completion of this program, students will be able to:

- Sit for industry/Federal-style examinations on the theory and procedures of Solar Technology, such as NABCEP.
- Use quantitative measurement of electrical circuit parameters utilized in Solar photovoltaic systems design and implementation; assemble and test, both direct current (DC), and alternating current (AC), series, parallel, and combination series parallel circuits.
- Effectively communicate with and advise customers and co-workers, both written and orally, regarding the design and installation of Solar systems based on field parameters.
- Select and operate electronic test equipment during troubleshooting and repair operations, with an emphasis on safety in use and accuracy in results.
- Analyze, interpret, and blueprints and diagrams used in the Solar system installation field.