

Related Occupations

PV Entry Level Certificate

(with HS diploma or GED) ?

- 47-4099.01 Solar Photovoltaic Installer
- 41-4011.07 Solar Sales Assessor
- 13-1199.01 Energy Auditor

Technical Level

(with AA/AS degree or certificate)

- 47-1011.03 Solar Energy Installation Manager
- 47-4099.03 Weatherization Installer and Technician
- 17-3023.03 Electrical Engineering Technician

Professional Level

(with BA/BS degree)

- 17-2199.03 Energy Engineer



Merced Union High School District
A Relevant Education for All

**Merced Union High School District
Merced Adult School
50 E. 20th Street
Merced, CA 95340**



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Green Technology and Energy Conservation



Merced Adult School



Course Description

A Green Technology and Energy Conservation course is offered at Merced Adult School and at Yosemite High School. This course provides students with an in-depth understanding of the skills needed to calculate energy use in residential and commercial environments for the purpose of

1. Reducing energy consumption and/or
2. Proposing energy efficiency upgrades and
3. Designing alternative energy systems for on site energy generation.

The curriculum is aligned with California State Career Technical Education Standards, and there are textbooks and interactive projects for the students to use as learning resources.



The Green Technology and Energy Conservation is designed to assist students in working towards their NABCEP PV Entry Level Certificate

Learning Objectives



1. PV Markets and Applications
2. Safety Basics
3. Electricity Basics
4. Solar Energy Fundamentals
5. PV Module Fundamentals
6. Systems Components
7. PV System Sizing Principals
8. PV system Electrical Design
9. PV System Mechanical Design
10. Performance analysis, Maintenance and Trouble shooting

North American Board of
NABCEP
Certified Energy Practitioners

Green Technology & Energy Conservation

Utilizing renewable energy and sustainable resources will impact our future for generations to come. Hydroelectric, geothermal, and nuclear power are all part of the current resources, but what new energy technology might the future hold? Doing more with less is likely to be a focus of the future. Improving the recycling of waste materials from trash to sewage will offer many employment opportunities in the Energy and Utilities sector. In this pre-apprenticeship, students will learn about the use of green energy in residential and commercial settings. Students will become familiar with electricity and energy systems using math and technical skills. Through hands-on projects students will prepare for certification in energy

