

Solar Collector

ONLINE COURSE

An Online Introduction to Solar Photovoltaic Design & Installation

***including* NABCEP Solar PV Entry Level Exam Prep**
Offered by Lane Community College and Northwest Energy Education Institute

Brief Description of the Course

This eight week online course is designed for individuals who are looking to gain knowledge for designing and installing solar electric systems. The course is structured to prepare participants to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level exam. Individuals wishing to take the NABCEP exam will be given instructions on methods to complete a computer based exam after the course is finished.

Passing this exam allows individuals to meet of the technical requirements of the Oregon Department of Energy's Tax Credit Certified Technician (TCCT) program. Those seeking TCCT status will need to attend an additional state-sponsored training on specific program requirements.

Materials: Photovoltaic Systems Text (to be purchased prior to attending class) from either ATP Publishers or directly from the LaneCC Titan bookstore. Additional course materials are provided by instructor to reinforce learning objectives.

Course Objective: To prepare students for the North American Board of Certified Energy Practitioners (NABCEP) Entry Level Exam. By passing this exam, a candidate has demonstrated basic knowledge, comprehension and application of key terms and concepts of photovoltaic (solar electric) system operations. The Entry Level course and Exam are not prerequisites for individual to sit for NABCEP's Certified PV Installer exam.

Learning Outcomes: Students who complete this course will have knowledge in the following areas: PV markets and applications, safety basics, solar energy fundamentals, system components, PV system sizing, PV system electrical design, PV system mechanical design and performance analysis and troubleshooting.

Sign up Today!

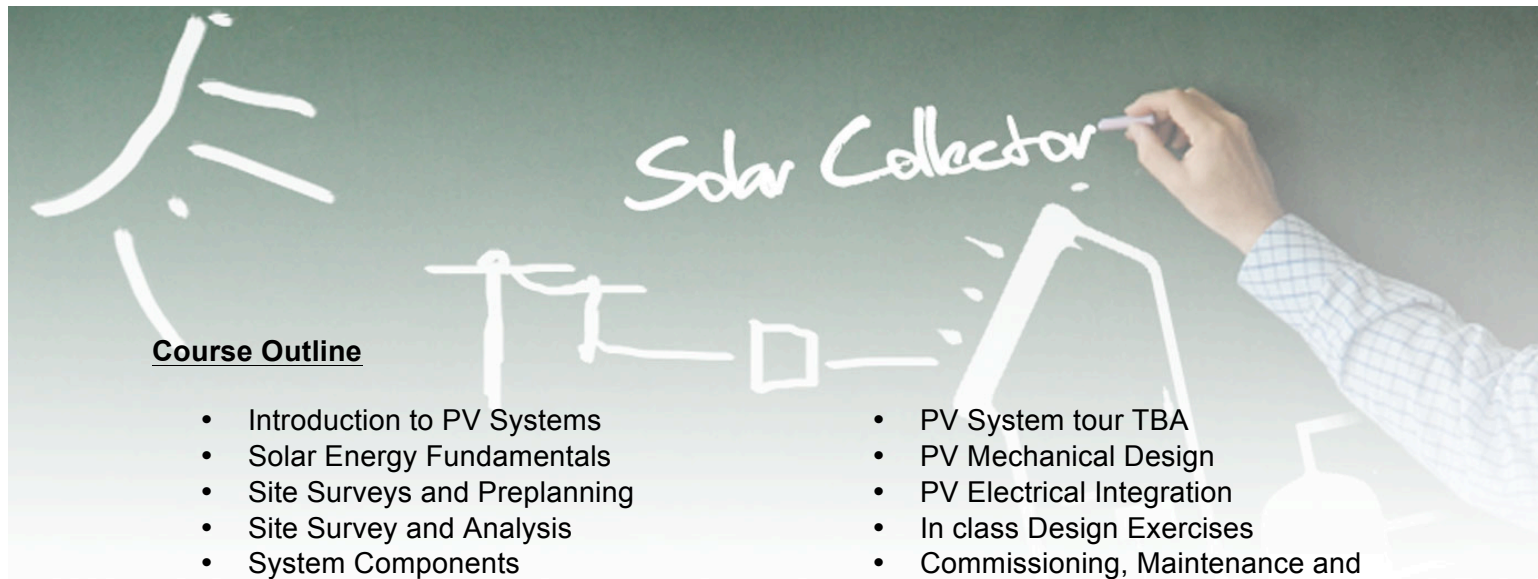
**8 Week
ONLINE
COURSE**

Begins
June 25th 2012

**Registration
Begins
May 1st 2012**

**TO SIGNUP
CONTACT**
Ginny Young at
541-463-4729
to be released
for registration

CRN #11085
4 Credit



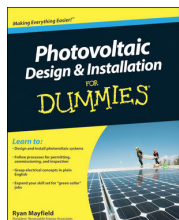
Course Outline

- Introduction to PV Systems
- Solar Energy Fundamentals
- Site Surveys and Preplanning
- Site Survey and Analysis
- System Components
- PV Module Fundamentals
- Battery Based Systems
- PV System Sizing and Performance
- PV Electrical Design
- PV System tour TBA
- PV Mechanical Design
- PV Electrical Integration
- In class Design Exercises
- Commissioning, Maintenance and Troubleshooting
- NEC and OR Solar Code
- Safety Basics

Online Course Requirements:

The course will be conducting completely online, utilizing web based videos and short video lectures. Assignments will be completed online with instructor feedback.

Instructor



Ryan Mayfield is a NABCEP Certified PV Installer who currently teaches PV courses at Lane Community College in Eugene, Oregon and is the founder and principal of Renewable Energy Associates, a consulting, design and educational firm focused on photovoltaics, small wind and micro-hydro projects. He also teaches courses for Solar Oregon, Oregon Solar Energy Industries Association and Solar Energy International and is a regular contributor for SolarPro and Home Power magazines. He earned a Bachelor of Science degree in Environmental Resource Engineering with an emphasis on Energy from Humboldt State University in Arcata, CA in 1998. His career includes positions as a Solar Energy Installer, Technical Sales and Support for a renewable energy based business, Engineering Manager for a renewable energy distributor, and an Engineer in Training in Electrical Engineering focusing on solar system design. Ryan is known throughout Oregon and the Northwest as a leader in photovoltaic training.

For additional information, contact

Ginny Young at 541-463-4729 to be released for registration
Registrations for Summer 2012 classes begin May 1st. CRN #11085 – 4 Credit

Lane Community College, www.lanecc.edu