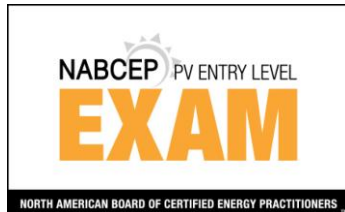


# NABCEP Solar PV Entry Level Exam Prep and Hands-On Installation Course

Offered by Lane Community College and Northwest Energy Education Institute



## **Date and Location**

August 23rd - 26th  
Lane Community College  
4000 E 30th Ave  
Eugene, OR 97405

## **Brief Description of the Course**

This course is designed for individuals who have a working knowledge of general electrical concepts and photovoltaics. This intensive four day class is structured to prepare participants to take the North American Board of Certified Energy Practitioners (NABCEP) PV Entry Level exam.

This class will consist of both classroom activities as well as hands on installation at Lane Community College. Students will be given the opportunity to participate in a new installation as well as install PV components in lab settings.

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. Confirmation will be granted to those who successfully participate in the course and pass the two-hour, 60-question exam that will be administered at the end of the course.

**Prerequisites:** Students must know basic electrical concepts and terminology, be able to use a digital multi-meter, calculate simple circuit calculations and describe general safety procedures when working with electrical systems. Participants will be provided with NABCEP Entry Level Learning Objectives upon registering for the course. In addition, a short assignment will be provided before class to familiarize the participants with fundamental concepts and terminology. This material will be drawn from and referenced to the text book listed below.

**Materials:** Photovoltaic Systems Text (to be purchased prior to attending class) from ATP Publishers [www.go2atp.com](http://www.go2atp.com). Additional course materials are provided by instructor.

## **Registration**

[www.nweei.org](http://www.nweei.org) or 541.463.4729

\$725 includes on site test fee

**Final Day to Register is August 16th, 2010**

**Course Objective:** To prepare students for the North American Board of Certified Energy Practitioners (NABCEP) Entry Level Certificate of Knowledge 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, installation practices and performance analysis and troubleshooting.

8 hours of continuing education credit for State of Oregon electrical license holders is available for this course.

### **Instructor**

Ryan Mayfield is a NABCEP Certified PV Installer and ISPQ Certified Master Trainer for the 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. 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.