NC CLEAN ENERGY TECHNOLOGY CENTER

NC STATE UNIVERSITY

Upcoming Training Courses

FSPV: Fundamentals of Solar PV Design & Installation - $1,725

In-person | September 14-18, 2026
Early-bird pricing ends Aug. 7 - $1,500

ASPV: Advanced Solar PV Design &Installation - $2,150

In-person | October 26-30, 2026
Early-bird pricing ends Sept. 25 - $1,875

O&M: Operations & Maintenance of Photovoltaic Systems - $1,000

In-person | November 16-17, 2026
Early-bird pricing ends Oct. 9 - $875

REPD: Renewable Energy Project Development - $1,125

Online | February 1 - April 11, 2027
Early-bird pricing ends Dec. 18 - $1000

REGISTERED PROVIDER NABCEP PHOTOVOLTAIC ASSOCIATE

REGISTERED PROVIDER NABCEP CONTINUING EDUCATION

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Questions? Contact Us:
cleanenergy@ncsu.edu

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FSPV: Fundamentals of Solar PV Design & Installation

Course Description: This 40-hour course is dedicated to the technical aspects of PV design and installation. It focuses on system types, components, applications, design, and best practices for installation, maintenance, and troubleshooting. The first four days are taught in a classroom format and focus on technical theory. On the fifth day, the class installs a fully integrated grid-tied PV system, combining the classroom content with hands-on experience.

ASPV: Advanced Solar PV Design & Installation

Course Description: This 40-hour advanced photovoltaic course covers advanced topics on the design and installation of residential and commercial PV systems. This course delves into the details of electrical standards and codes. The bulk of this week-long course covers topics relating to the National Electrical Code® (NEC) requirements for PV systems and proper code compliance in the design and installation phases of the systems.

O&M: Operations & Maintenance of Photovoltaic Systems

Course Description: This 16-hour course focuses on the operation and maintenance of PV systems. The first part covers evaluating system performance, including specific data collection and evaluation, arc flash requirements finding ground faults, thermal imaging, IV curve tracing, and fuse servicing. The second part involves various hands-on activities in which participants are able to practice and utilize the skills they have learned throughout the course.

Solar Storage Workshop *Under redevelopment*

Course Description: This 24-hour course covers fundamental principles of battery-based systems, including understanding customer needs; specifying and sizing a battery bank, inverters, and charge controllers for battery-based systems; defining system architecture and functionality; battery metering; and understanding the code implications of these systems. The course will end with a tour of a commercial PV installation with a battery system.

REPD: Renewable Energy Project Development

Course Description: The goal of the 40-hour, 9-week online course is to provide a sound foundation regarding existing renewable energy technology applications, solar fundamentals, and business practices of project development. The course will delve into the policies that currently dictate the market, options for funding a project and financial modeling, and what considerations need to be made when developing a project. The course includes live and pre-recorded webinars and assignments completed virtually. Students are required to submit a final project report to successfully complete the course.