

## **Purpose Focused**

Alternative Learning Corporation
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## Welcome to Purpose Focused Solar Training Certification Program

Our Solar training program is designed to build Native Americans' as the Solar Technicians certified Workforce to meet the demand to design, develop, install, maintain, and repair Solar systems in all their applications as they're being deployed in the emerging clean energy economy across the country.

Purpose Focused Alternative Learning Solar *Train the Trainers* program curricula is licensed through Solar Energy International (SEI).

Graduates of Courses PV101 and PV203 are eligible to take the National Association of Energy Practitioners (NABCEP) exam. Exam Application Fee: \$25/Exam Fee: \$125

Each Course Timeline: 8 Weeks/2 days per week/8 hours per day

First Course: PV101: Solar Training - Solar Electric Design and Installation (Grid Direct)

PV101 is your gateway to a career in the solar industry. It all starts with the fundamentals, and a solid understanding of various components, system architectures, and applications for PV systems. Other topics include site analysis, system sizing, array configuration, and performance estimation; electrical design characteristics such as wiring, overcurrent protection, and grounding; a detailed look at module and inverter specifications and characteristics; mounting methods for various roof structures and ground-mounts; and an introduction to safely and effectively commissioning grid-direct PV systems. This course focuses on grid-direct PV systems, but covers material critical to understanding all types of PV systems. These core concepts are expanded on in SEI's upper level PV courses.

## Second Course: PV203: Solar Training - PV System Fundamentals (Battery-Based)

PV203 course builds a foundation for understanding many battery-based applications, in which the complexity far exceeds that of a grid-direct PV system. Load analysis is addressed along with other critical design criteria such as battery bank design, equipment options, and electrical integration of system components. Component options are covered in detail, including batteries, charge controllers, and battery-based inverters. Different battery chemistries, associated pros and cons, and cost comparisons are investigated along with safety and maintenance considerations unique to battery-based PV systems.



**IMPORTANT PRE-REQUISITE:** To demonstrate the applicants commitment to the process, and qualify for a full or partial scholarship the applicant must first complete the following (free) online courses before receiving an application from Purpose Focused Alternative Learning.

Applicants pre-requisite courses listed below: https://www.solarenergy.org/free-learning/

RE100 Introduction to Renewable Energy (6-Hours)

RE101 Fundamental Math (4 Hours)

These courses will offer each potential student baseline training to prepare them for the in-person PV101 and PV203 course work and help demonstrate their commitment to this career building opportunity. If you have any questions, or having problems accessing the on-line course, please contact us as soon as possible.

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Once the on-line courses have been completed the applications will be made available to complete and submit.

Creator says, "It's Time!" Be a Community-based Change Agent; plant a Green-seed in support of the Emerging Clean Energy Paradigm Shift.

Benefits include: Scholarships for Training. Hands on Training (Upskilling). Job Placement for Certified Solar Technician. Internships, and apprenticeship opportunities, part-time and full-time jobs with Solar Partners. Workforce Development funds to support newly hired with travel costs. Ultimately, support community-based Solar System(s) deployment to families with the highest need; namely, those living without electricity or piped water to their homes. Job opportunities for larger scale projects for public buildings.