

THE RISE UP SCHOLARSHIP

Providing free solar training to individuals from historically underserved populations.

With over 100 scholarship recipients to date, the Midwest Renewable Energy Association (MREA) partners with community-based organizations to provides recipients of the Rise Up Scholarship with free, industry-leading solar technical training and opportunities to engage with potential employers and explore career pathways in the solar industry.

By bringing mobile, in-person courses to targeted communities, the program reduces barriers related to travel and cost, increasing regional access to high-quality solar training. Through these efforts, the program seeks to build a more diverse and skilled clean energy workforce while creating pathways to stable, well-paying jobs in the solar industry.

TRAINING PROGRAM

The Rise Up Scholarship enrolls students in the MREA's Introductory Solar Training Package, an in-person training that enhances the MREA's courses by expanding their duration and integrating hands-on activities. This approach provides students with an in-depth presentation of the concepts, going beyond a general overview to offer a more immersive introduction. Over the course of five days, students will complete phase one of the training program — PV 100: Introduction to Solar Energy Work and PV 101: Basic Photovoltaics courses.

Introduction to Solar Energy Work (PV 100)

This course introduces participants to the basics of solar electricity and what to expect in a solar career. Starting with the fundamentals of how electricity and photovoltaic (PV) systems work, learners will explore PV system types, components used in each system, mounting options, and wiring methods.

Basic Photovoltaics (PV 101)

In this course, participants will learn how photovoltaic (PV) cells, panels, and systems work, compare and contrast different PV system types (grid-tied or battery-based), identify system components, and understand the best applications for each system type.







Students who would like to continue onto more advanced training, will be invited to enroll in phase two of the scholarship training which includes the remaining courses necessary to be eligible to sit for the North American Board of Certified Energy Practitioners (NABCEP) PV Associate credential — an industry-recognized credential that validates technical knowledge and significantly enhances job prospects. The phase two courses include PV 201: PV Site Assessment, PV 202: PV System Design, PV 304: PV Labs and Design Scenarios, and PV 220: PV Exam Prep.



PV Site Assessment (PV 201)

This course demonstrates how to recommend a PV system size and type, estimate its annual energy production, propose a location for the array and balance of system components, and summarize the economic impact of a residential (or small commercial) project by performing a site assessment.

PV System Design (PV202)

This course teaches the step-by-step process of designing grid-tied and battery-based PV systems. Participants will explore sizing strategies, select appropriate equipment for each system type, identify mounting methods and related equipment needed for a safe and structurally sound installation, and calculate voltage, current, and power of the system to ensure its safe operation and code-compliant electrical installation.

PV Labs and Design Scenarios (PV 304)

This course demonstrates PV system design principles and proper installation practices through the construction of two PV systems using a portable lab assembled at ground level. Participants will work from line diagrams, manufacturer data sheets, and the National Electrical Code (NEC) to build a grid-tied PV system and a battery-based PV system. Proper mechanical and electrical connections will be verified and tested to commission each system.

PV Exam Prep (PV 220)

This course is designed for those who are preparing to take the NABCEP PV Associate exam. Beginning with a general explanation of how standardized test questions are created and written, participants will learn the logistics of the exam and know what to expect: format, number of questions, time limit, items allowed and not permitted, passing score, etc. The course concludes with a 50-question practice exam.



ABOUT THE MREA

The Midwest Renewable Energy Association promotes renewable energy, energy efficiency, and sustainable living through education and demonstration.

STAY IN TOUCH:

midwestrenew.org courses@midwestrenew.org 7558 Deer Rd, Custer, WI 54423