SP1 020 Solar PV Design and Installation

This hybrid course is designed for technical professionals who are interested in installing, servicing, and designing solar PV systems. This course will provide training for installers who wish to pursue NABCEP Solar PV Installer Certification. The target candidate for NABCEP installer certification is the person responsible for the system installation (e.g., contractor, foreman, supervisor, or journeyman). The NABCEP Installer Exam is offered twice a year at regional testing centers and must be scheduled through NABCEP. It is highly recommended that all students have taken the Solar PV for the Entry Level Candidate Course as this pre-existing knowledge base is expected.

<table>
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<tr>
<th>Courses</th>
<th>Contact Hours</th>
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<tbody>
<tr>
<td>SP1 020 Solar Photovoltaic Design and Installation (hybrid Course)</td>
<td>40</td>
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<td></td>
<td>16 Online Contact Hours/24 Onsite Contact Hours</td>
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Course Descriptions

This hybrid course will cover the principles of solar photovoltaic (PV) technology of both grid-tie and stand-alone solar PV systems. Students receive online and onsite instruction in topics consistent with the NABCEP Solar PV Installer Job Task Analysis (JTA). Percentage of time spent on course topics, and the weight placed on assessments match the percentage of examination questions established by NABCEP’s JTA. Online subject matter will focus on the knowledge base required to properly design and install solar PV systems. This knowledge base will be refined and reinforced with design and installation lab activities during the subsequent three day onsite training.

Topical Outline:

A. Verify System Design (30%)
B. Managing the Project (17%)
C. Installing Electrical Components (22%)
D. Installing Mechanical Components (8%)
E. Complete System Installation (12%)
F. Maintenance & Troubleshooting (11%)


Prerequisites: Any one or more of the following

- Apprentice, Journeyman, Master or Technician License
- NABCEP Entry Level Solar PV recognition
- Employed by company involved in the installation of solar PV systems
- Two or Four Year Degree
- Professional license in engineering or architecture
- Two years of experience installing two Solar PV systems per year
- Three years of experience in a government or trade union approved apprentice program with training relevant to installing Solar PV systems
- Acceptance for the NABCEP Solar PV Installation Professional Exam
- NABCEP Certified Solar Heating Installer

Course costs DO include: meals/snacks and textbooks/materials.
Course costs DO NOT include: optional reference manuals, tools and equipment