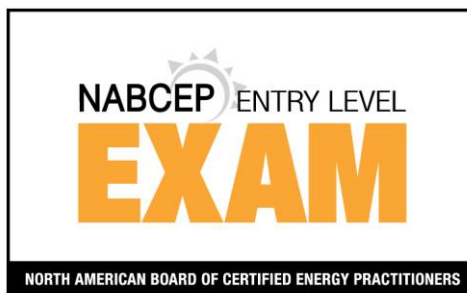




NABCEP Entry Level Program Provider Info Packet



North American Board of Certified Energy Practitioners

PHOTOVOLTAIC (PV) and SOLAR HEATING (SH) ENTRY LEVEL PROGRAMS

OVERVIEW, PROCESS & POLICIES FOR NABCEP ENTRY LEVEL EXAM PROVIDERS

About NABCEP

The North American Board of Certified Energy Practitioners (NABCEP) is the most respected, well-established, and widely recognized national certification organization for professionals in the field of renewable energy. NABCEP is a volunteer board of representatives who are chosen based on their experience and involvement in the renewable energy industry. NABCEP's mission is to develop and implement quality credentialing and certification programs for practitioners by supporting and working closely with professionals and stakeholders in the renewable energy and energy efficiency industries.

Description of the Photovoltaic (PV) and Solar Heating (SH) Entry Level Program

The North American Board of Certified Energy Practitioners (NABCEP) coordinates an Entry Level Program that provides a basis for testing an individual's knowledge of the fundamentals of various renewable energy technologies. Each technology in the program (Photovoltaics, Solar Heating, etc.) has a set of Entry Level Learning Objectives from which a NABCEP Entry Level Exam is developed.

The knowledge demonstrated by passing a NABCEP Entry Level Exam does not replace the knowledge, skills or abilities of the electrical or other construction trades, or those of other professions or degree programs that require considerably more academic and/or practical experience. This achievement demonstrates that the individual has passed an industry-designed, NABCEP-issued Exam. An Individual who passes the Exam is provided with a Passing Score Achievement -- in no way does passing the Exam indicate that an individual is "Certified" by NABCEP. NABCEP does administer several personnel certification programs including: Photovoltaic Installer, Photovoltaic Technical Sales, Solar Thermal Installer, and Small Wind Installer. For more information about NABCEP Certifications please visit www.nabcep.org.

The NABCEP Entry Level Exam is written by industry subject matter experts under the guidance of professional psychometricians (testing specialists). The NABCEP Entry Level Learning Objectives, which are also developed by industry subject matter experts, provides the blueprint for the Exam and is the primary document to reference with regards to what topics may or may not be covered on the Exam. All Candidates should be provided with a copy of these Learning Objectives (found on the NABCEP website under "Entry Level" and "Learning Objectives") at the beginning of each course that provides eligibility for the Exam.

The Entry Level Program relies on a network of Registered NABCEP Entry Level Exam Providers to offer courses that prepare individuals to sit for the Entry Level Exam. During the registration process, Exam Providers agree that they will cover all of the Entry Level Learning Objectives in their course. Completing coursework that covers the NABCEP Entry Level Learning Objectives with a Registered Exam Provider is the only requirement to sit for the Entry Level Exam; furthermore, this is the only method by which one can become an eligible Candidate for the NABCEP Entry Level Exam. Candidates are eligible to sit for the Entry Level Exam for a period of six months after completing a course with a Registered Entry Level Exam Provider.

The Photovoltaic and Solar Heating Entry Level Exams are given in two capacities to Candidates who complete coursework with a NABCEP Registered Entry Level Exam Provider: 1) on-site by pencil and paper, or 2) off-site through an independent Computer-Based Testing (CBT) center. Institutions who want to become NABCEP Registered Entry Level Exam Providers must apply directly to NABCEP, using the NABCEP Entry Level Provider Application. Before applying, the Entry Level Provider Application and

this Entry Level Provider Info Packet should be carefully reviewed. If questions remain, please contact NABCEP directly. Once registered, Providers will receive the Exam Administration Manual, which details all policies and instructions for administering the Entry Level Exam. Registered Providers agree to follow all policies and procedures for every Exam administration.

Eligible Institutions

NABCEP relies on independent, third party accreditation to determine an institution's eligibility to provide education and administer Examinations. A condition of registration is that the institution must be accredited, certified, or approved by one of the following:

- 1) Accredited by an agency recognized by the U. S. Department of Education¹
- 2) Approved Apprenticeship Program by the U.S. Department of Labor²
- 3) Institute for Sustainable Power Quality (ISPQ) Accredited Training Program or Continuing Education Provider for the course(s) or program being registered
- 4) ISPQ Certified Independent Master Trainer or Independent Instructor for the program being registered³
- 5) Accredited Training Sponsored by the National Center for Construction Education and Research for "Introduction to Solar Photovoltaics"

Application Process

NABCEP accepts Entry Level Provider applications year round and reviews applications in the order they are received. NABCEP will notify the primary contact listed in the application via e-mail when an application has been received.

Complete applications, found to meet all criteria set forth by NABCEP, will be approved for registration. The primary contact will be notified of acceptance via e-mail. Correspondence containing the requisite agreement forms and administration information will be sent via email to the Provider within five (5) business days from the time of formal notice of registration. Please be advised that an institution may in no way advertise a course or training program as offering a NABCEP Entry Level Exam or qualifying students to take the NABCEP Entry Level Exam before formal notice of registration has been given. Additionally, Candidates will not be retroactively eligible to sit for the Entry Level Exam

Incomplete applications will only be formally reviewed and accepted once they are complete. If incomplete, notification of the missing documents will be sent via email. The application will be held on file for three months. After this period, the application will be considered expired and a new application will be required.

Once an application has expired, it is the applicant's responsibility to verify that future applications being submitted are up-to-date, and the current version of the application form as posted on our website www.nabcep.org is being used. NABCEP cannot accept application forms that are more than three months out of date.

Exam Administration

Paper and Pencil Exams: To administer the Entry Level Exam by Paper and Pencil, please complete and return a signed Exam Administration Agreement Form for each **non-instruction** staff member that is involved in the NABCEP Entry Level Examination. Only one staff member may be designated as the Exam Administrator who will access the Examination and administration forms via secure website, though a Provider may have more than one designated Exam Proctor. Examinations are printed, administered and proctored by Provider personnel at a time and location determined the Provider.

¹ If Canadian, than equivalent governing body

² If Canadian, than equivalent governing body

³ ISPQ Certified Independent Instructors/Master Trainers are only eligible for off-site, computer-based testing

Computer Based Testing (CBT): All registered Providers may authorize Candidates to take the NABCEP Entry Level Exam at an off-site, independent Computer Based Testing center designated by NABCEP. These CBT centers are located throughout North America. Candidates will choose the location, date, and time for their Exam. *Please note: It is extremely important that Candidate names submitted for CBT authorization match the legal picture identification of Candidates exactly. Candidates whose names are not an exact match will not be allowed to sit for the Exam.*

Fees

Annual Fee: A \$300 annual fee is required to participate in the Entry Level Program. The initial \$300 annual fee must be submitted with the application. This fee will only be posted once the Provider has received formal notification of registration. Annual fee payments from applications that are not completed within 3 months, or that are not approved, will be voided and returned to sender.

Paper and Pencil Exam: The Entry Level Exam fee is \$75 per paper and pencil Exam. NABCEP will invoice the registered Provider upon upload of Candidate eligibility for each Exam administered. NABCEP does not accept individual payments from students for Exam fees. At their discretion, Providers may add an administration fee to the Exam fee to cover the cost of the Exam printing and administration expenses. This additional administrative fee may be retained by the Provider and shall not exceed \$75.00 per paper & pencil Exam administered.

Computer Based Testing (CBT): The fee for computer based Exams is \$95 per Exam. Providers are responsible for collecting fees and will be invoiced upon upload of Candidate eligibility. NABCEP does not accept individual payments from students for Exam fees. At their discretion, Providers may add an administration fee to the Exam fee to cover the cost of administration expenses. This additional administrative fee may be retained by the Provider and shall not exceed \$25.00 per CBT Candidate authorized.

Payment Policy

All payments to NABCEP are due within 30 days of the invoice. Any Provider with 60 day overdue accounts may be subject to suspension. It is NABCEP policy to provide warning letters and statements to Providers whose accounts are 60 days past due. It is the Provider's responsibility to ensure that their accounts are kept current. If special circumstances apply, the Provider should contact the program manager to negotiate acceptable terms. NABCEP reserves the right to withhold score reports from Providers whose accounts are more than 60 days overdue.

Please note: a \$100 reinstatement fee applies to any Provider whose account has been suspended. Additional administrative fees may be charged for processing Provider errors in Exam administration.

Instructors

NABCEP has found that courses taught by instructors who have renewable energy related training and experience have higher passing rates than those who do not. As such, NABCEP requires courses taught by registered Providers that confer eligibility for the EL Exam must be taught by a registered instructor. Each instructor must submit a resume, CV or summary of relevant experience with supporting documentation with the application. Documentation must show proof of completion of an advanced training program that is one of the following:

- ISPQ Accredited Training program
- ISPQ Continuing Education Provider program
- ISPQ Certified Master Trainer program
- ISPQ Certified Instructor program

To qualify, an instructor may also show proof of one of the following:

- A train-the-trainer program offered by the National Joint Apprenticeship and Training Committee (NJATC)
- One of the nine Regional Resource and Training Providers of the [Department of Energy's Solar Instructor Training Network](#)
- An alternative train-the-trainer program (subject to NABCEP review and approval.)
- A passing score on the NABCEP Installer Certification Exam

Field work and hands-on experience will also be taken into consideration. All installation experience submitted should include documentation.

NABCEP must be notified and provided with all necessary documentation if there is a change in instructors.

Program or Course(s) Requirements

Registered NABCEP Entry Level Exam Providers must have programs that include course(s) which have an interactive teacher-learner structure requiring a connection between a learner and a learning source. This format can include classroom time led by an instructor and/or discussion leader. It can also include activities in which a learner is engaged in a planned learning event in which he/she is separated from faculty and other students but where the learner receives feedback and progress is monitored. Examples include computer-assisted instruction, interactive video/CD/DVD and/or web site learning.

NABCEP does not review or approve curriculum, but instead requires registered Instructors to agree to cover the NABCEP Entry Level Learning Objectives. Therefore, Providers cannot claim that the course is a "NABCEP Course" or that it is "approved" by NABCEP. As noted above, the NABCEP Entry Level Learning Objectives provides the blueprint for the Exam. It is the primary resource to reference with regards to which topics may or may not be covered on the Exam. Please see the comprehensive list of Entry Level Learning Objectives posted on our website, www.NABCEP.org. Courses may include subjects beyond the scope of the Learning Objectives but all Providers must agree to cover the subjects outlined by NABCEP before administering the Entry Level Exam.

Prerequisite or bridge training and/or experience in electrical/plumbing systems, mathematics, and other subjects may be required for some students to fully comprehend and satisfactorily demonstrate knowledge of all of the Learning Objectives. **Also, for intensive short courses (e.g., 40-hour, one-week workshops) students should be encouraged to spend approximately 2-3 additional hours outside of class (for each hour in class) to review the subject matter, solve problems, and study reference materials prior to taking the Entry Level Exam. This may require the student to take the Exam at a later date rather than immediately following the course.**

NABCEP Photovoltaic Entry Level Learning Objectives

The PV Entry Level Exam program is based on a set of Learning Objectives developed by a committee of PV subject matter experts. The Photovoltaic Entry Level Learning Objectives include ten (10) major skill sets:

- PV Markets and Applications
- Safety Basics
- Electricity Basics
- Solar Energy Fundamentals
- PV Module Fundamentals
- System Components
- PV System Sizing Principles

- PV System Electrical Design
- PV System Mechanical Design
- Performance Analysis, Maintenance and Troubleshooting

NABCEP Solar Heating Entry Level Learning Objectives

Similar to the PV program, the NABCEP Solar Heating (SH) Entry Level Exam is based on a set of Learning Objectives. These were developed by a committee of Solar Heating subject matter experts. The Solar Heating Learning Objectives has six (6) major skill sets:

- Conducting a site analysis, including load analysis
- Identifying SH safety practices, standards, codes and certification
- Identifying systems for specific climates and applications
- Identifying proper orientation and installation methods
- Identifying proper use of balance of system components and materials
- Identifying common SH maintenance items

The skills identified in this analysis do not replace electrical, plumbing or HVAC trades, technician, technologist or engineering training. *See the Learning Objectives document for the full description of these skills and tasks.*

NABCEP will periodically review the Learning Objectives and make any changes according to changes in codes, standards, technology and best practices in the industry. NABCEP will notify the Provider of any modifications to the Learning Objectives.

The Exam

Providers will be required to sign a NABCEP Entry Level Exam Provider Agreement Form, agreeing to comply with NABCEP Examination administration policies (as outlined in the Exam Administration Manual), including those related to maintaining the security of the Examination, confidentiality of the test items and other related issues. The NABCEP Entry Level Exam is developed according to accepted psychometric standards of measurement; the items are written and reviewed by subject matter experts. The NABCEP Entry Level Exam is a confidential and secure measurement of knowledge that is not meant to be read, studied, discussed or taught by Exam Administrators, Exam Proctors or Instructors.

After Exam administration, answer sheets and all other Exam materials must be returned to NABCEP's testing contractor for scoring via a traceable carrier at the expense of the Provider.

Upon grading of the answer sheets, NABCEP will send Candidate scores directly to each Candidate to the mailing address submitted to the Provider on the Candidate Eligibility Form. Successful Candidates will receive a suitable-for-framing letter stating that they have achieved a passing score on the Entry Level Exam. Providers will be sent a list of the scores for each Candidate who does not specifically opt out of releasing their scores to their Provider.

Exam Administration Location

NABCEP offers the Entry Level Exam in both paper and pencil and computer-based formats. **Pencil and paper Exams may only be administered from the location covered by the Certificate of Liability insurance provided in the application.**

Providers who offer training in an online format are required to authorize Candidates to take the Entry Level Exam through NABCEP's contracted Computer-Based Testing centers. Providers that are accredited as ISPQ Certified Independent Master Trainers or ISPQ Certified Independent Instructors are also required to authorize Candidates to take the Exam via NABCEP's contracted CBT centers.

Appropriate Certificate of Insurance

All registered NABCEP Entry Level Exam Providers administering the paper and pencil Exam must submit a copy of the appropriate Certificate of Insurance(s) showing that professional liability and general liability policies are maintained with respect to the administration of Examinations.

Special Accommodations

All Providers must provide special testing accommodations and comply with the provisions of the Americans with Disabilities Act and with Title VII of the Civil Rights Act and other applicable laws. If a student requires special testing accommodations the required forms must be submitted to NABCEP for review and approval prior to granting any special testing accommodations.

Passing Score Achievement

A PASSING SCORE ON THE NABCEP ENTRY LEVEL EXAM DOES NOT CONFER THE TITLE OF A NABCEP CERTIFIED INSTALLER™ OR ANY OTHER TITLE OR CREDENTIAL FROM NABCEP. Successful Candidates may state that they have passed the Entry Level Exam issued by the North American Board of Certified Energy Practitioners (NABCEP). The passing score achievement document may only be displayed in association with the individual achieving the passing score, as the achievement is personal and may not be transferred, assigned to, displayed or used by any other individual, organization, business, or entity. Replacement documents are available from NABCEP for a fee of \$25.00.

The knowledge demonstrated by passing this test does not replace the knowledge, skills or abilities of the electrical or other construction trades, or those of other professions or degree programs that require considerably more academic and/or practical experience. This achievement demonstrates that the student has passed an industry-designed, NABCEP-issued Exam. A passing score by itself does not qualify an individual to install Photovoltaic (PV) or Solar Heating (SH) systems. In no way does passing this Exam indicate that an individual is certified by NABCEP.

If you have any questions about NABCEP, please contact

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