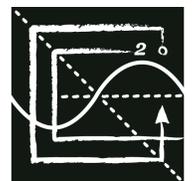


CRITERIA FOR EVALUATING THE ADMINISTRATION OF NCEES EXAMINATIONS AT NON-U.S. SITES

August 2014



NCEES

Under existing NCEES examination policies, NCEES may contract to provide examinations to a foreign entity (outside the geographic jurisdiction of a member board), subject to the approval of the Council. The examinations may be used to assist examinees interested in applying for licensure as a professional engineer or surveyor with an NCEES member board as well as an assessment tool to assist in measuring the outcomes of a foreign-based education system.

NCEES Examination Policies

The relevant examination policies adopted by the Council that impact the foreign administration of NCEES examinations are as follows:

Exam Development Policy (EDP) 14 Foreign Language

NCEES shall prepare examinations only in the English language.

Exam Administration Policy (EAP) 5 NCEES Examinations Offered by a Member Board Within Its Jurisdiction

- A. A member board may offer NCEES examinations only in its jurisdiction. The member board must make suitable arrangements to protect the confidentiality and security of the examinations according to NCEES guidelines. Administration of examinations must conform to the NCEES scheduled timeframes for examinations. Individual applicants should apply to the sponsoring jurisdiction in accordance with that jurisdiction's operating policies and procedures. This policy does not preclude an examinee from sitting for a CBT examination in a different jurisdiction.
- B. NCEES may provide directly to a university or college FE or FS examination data that will help measure learning outcomes of the total engineering or surveying education.
- C. Member boards are encouraged to sponsor or otherwise facilitate use of the FE and FS examinations results for internal use of institutional outcomes assessment, but such use should not subordinate or endanger the function, concept, or security of the FE or FS examination's primary purpose as the first examination for professional licensure, in keeping with the underlying mission of safeguarding the health, safety, and welfare of the public.
- D. This policy does not preclude a member board from offering the examinations at an NCEES-approved site to U.S. military personnel stationed at military bases outside the United States.

EAP 10 NCEES Examinations Offered to a Foreign Entity

Upon receiving a request, the chief executive officer may be authorized by the NCEES board of directors to enter into discussions with a foreign entity concerning the administration of NCEES examinations at a foreign site. The discussions will include an assurance that NCEES examinations will be administered in full compliance with all NCEES examination policies and procedures. All costs borne by NCEES to carry out this provision will be reimbursed.

The NCEES board of directors is authorized to permit all computer-based examinations to be administered at an NCEES-approved test site to students in their senior year and graduates of foreign engineering programs that have attained ABET accreditation or the equivalent as determined by NCEES. At a minimum, all costs borne by NCEES to carry out this provision will be reimbursed. Computer-based examinations shall not be administered at a foreign site outside the NCEES-approved testing windows.

NCEES may contract to provide administration of NCEES examinations that are offered in pencil-and-paper format to a foreign entity subject to the approval of the Council. Based upon a determination that these conditions will be met, a draft agreement that defines areas of responsibility for the foreign entity and NCEES may be created. The agreement will require, at a minimum, that all costs borne by NCEES to carry out the provisions of the agreement will be reimbursed.

For any approved agreement, NCEES will establish minimum criteria for candidates of the foreign entity that are in general conformance with the existing NCEES *Model Law* and *Model Rules*. NCEES will retain the score

information for examinees of foreign entities and will transmit that information to any member board when requested.

The examinations may be used to assist examinees interested in applying for licensure as a professional engineer or surveyor with an NCEES member board as well as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system.

However, in the event that the examinee elects to use the results of the examination for the purpose of applying for licensure, the member board may not be precluded from imposing any additional requirements related to state licensure, including but not limited to educational and experience requirements.

Examinee performance data from examinations provided to a foreign entity shall not be included in exam evaluation or development, used to establish cut scores, or included in exam result statistics for NCEES jurisdictions. Examinee performance data from exams provided to a foreign entity may be evaluated and reported separately.

NCEES may release examinee performance data to an ABET-accredited foreign educational program or to the foreign governing body or professional organization as provided in the contract or as approved by the board of directors.

History

The strategy for allowing NCEES exams to be offered at foreign sites has evolved through the years. It initially started as a service to members of the U.S. military stationed overseas but gradually increased to local civil servants employed at U.S. military facilities. The initial examination policy governing the administration of NCEES exams at foreign sites was established in 1983 and stated that “a state board may offer NCEE examinations at a Canadian site and that the administration of the examination may be delegated to the proper Canadian authority.” This policy was amended in 1992 and provided that “a member board may offer NCEES examinations at a university or a foreign country site and that the administration may be delegated to the proper university or foreign country authority by the member board.” Also in 1992, the Council adopted a new policy in which “NCEES was authorized, with the approval of the Council, to contract to provide NCEES examinations or assistance in preparing examinations to an appropriately sanctioned licensing body of a foreign government.”

The Oregon board was the first to have a formalized agreement that authorized examinations to be offered to members of the U.S. military and members of the Japan PE/FE Engineers Council (JPEC) in Tokyo. The Oregon board provided a chief proctor for each administration, and JPEC supplied floor proctors through its membership. Subsequent to the events of 9/11, the Oregon board ceased offering the Principles and Practice of Engineering (PE) exam to candidates in Japan but continued to offer the Fundamentals of Engineering (FE) examination. In 2004, the Oregon board entered into an agreement for NCEES to administer examinations for all candidates of the Oregon board. As a condition of this agreement, NCEES was requested to continue the administration of examinations to Oregon candidates in Japan. NCEES held various exchanges with JPEC, conducted a site visit to meet with JPEC officials, and confirmed that JPEC had been properly sanctioned by the Japanese government per policy. The NCEES board of directors then recommended and the Council authorized NCEES to enter into an agreement with JPEC to continue offering examinations in Japan. NCEES began overseeing the JPEC examination administration in 2005.

After entering into the agreement with JPEC, NCEES received a similar request from the Korean Professional Engineers Association (KPEA). NCEES made the proper inquiries, conducted a site visit, and determined that KPEA had been sanctioned by the South Korean government. After a favorable recommendation from the NCEES board of directors, in 2008 the Council approved for NCEES to enter into an agreement with KPEA to allow NCEES examinations to be offered in Seoul.

Simultaneous to the request from KPEA, NCEES received a request from the American University of Cairo (AUC) for authority to offer NCEES examinations. In a preliminary review of the request, NCEES determined that three of the engineering programs offered by AUC were fully accredited by EAC/ABET. Based on the requirement in place at the time, NCEES conducted a site visit and obtained confirmation from the Egyptian Engineering Syndicate that AUC was properly sanctioned by the Egyptian government. As a result and upon a favorable recommendation from the NCEES board of directors, in 2008 the Council also approved entering into an agreement with AUC to allow the administration of NCEES examinations.

Based on increased concern over the security of NCEES examinations and the proliferation of foreign engineering programs gaining EAC/ABET accreditation, the Council amended EAP 5 in 2009. The amended policy directed that a member board could offer NCEES examinations only in its jurisdiction. The policy's one exception is that a member board is not precluded from offering the examinations to U.S. military personnel stationed at military bases outside the United States.

The Council also amended EAP 10 to provide that NCEES may contract to provide its examinations to a foreign entity (outside the geographic jurisdiction of a member board), subject to the approval of the Council. This modification eliminated the requirement that the foreign entity be "an appropriately sanctioned licensing body of a foreign government," thus authorizing NCEES to consider future agreements with foreign professional engineering societies as well as educational institutions.

Following the revision to EAP 10, the Council approved agreements to expand the foreign administration of examinations to the following:

- Saudi Council of Engineers (SCE)
- Istanbul Technical University (ITU)
- American University of Sharjah (AUS)

In a separate but related action, at the 2002 NCEES annual meeting the Council was requested to ratify an action taken by the NCEES board of directors to negotiate a contract with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) in Canada. The contract was to authorize examinations and examinations services to be offered per existing examination policies. During the debate, the motion was modified to authorize the NCEES chief executive officer to negotiate for examinations and examination services to be provided to any Canadian licensing authority. The Council approved this motion. As a result, an agreement was struck between NCEES and APEGA, and NCEES examinations have been offered in Alberta, Canada, since 2008.

Between 2005 and 2012, NCEES received additional requests from a number of foreign entities. Only two requests have been denied thus far, and both were on the basis of political instability in each respective country and a concern over the ability to ensure the security of the NCEES examinations.

In 2014, the Council amended EAP 10 to provide authority to the NCEES board of directors to authorize the administration of all computer-based examinations at an NCEES-approved test site to students in their senior year and graduates of foreign engineering programs that have attained ABET accreditation or the equivalent as determined by NCEES.

Current Position of NCEES

NCEES currently has both a policy and a position statement that reflect the Council's view on international licensure. They are as follows:

Professional Policy (PP) 4 International Relations

NCEES will be actively involved in all matters relating to the foreign qualifications of professional engineers and surveyors. The long-range objectives will be:

- A. To expand the understanding of the licensure and regulation of professional engineers and professional surveyors on an international basis through participation in relevant international meetings and establishing NCEES in a leadership role at such meetings (at relevant international meetings)
- B. To promote and establish a program for maintaining relationships with foreign licensure authorities

Position Statement (PS) 21 International Activities

- A. The Council should continue its current involvement in the international arena within the following guidelines:
 1. All substantive agreements and model documents shall be approved by the full Council before execution.
 2. Access to non-CBT examinations by either educational institutions or national organizations shall be approved by the full Council before execution.

3. Access to CBT examinations at an NCEES-approved test site for applicants from an ABET-accredited program or the equivalent as determined by NCEES may be approved by the board of directors.
 4. All agreements and model documents shall be clearly non-binding on member boards.
 5. Unless specifically provided for in the Council budget, services rendered to other nations shall be funded by the requesting nation to a level that ensures no net loss of Council funds.
- B. In identifying the qualifications for the right of licensure to practice engineering and surveying, NCEES shall always inform foreign jurisdictions that the qualifications for licensure in the United States, by and through its state and territorial jurisdictions, include education, experience, and examination. NCEES shall further emphasize safeguarding the health, safety, and welfare of the public. Constraints such as citizenship, residency, establishment of local office, or similar restrictions shall be discouraged.
 - C. NCEES shall stress to all national and foreign jurisdictions the need for the development of a database of their licensing requirements. All requirements for practice should have a goal of global mutuality.
 - D. NCEES shall work with foreign jurisdictions toward establishment of an international system for evaluation of education, experience, examination, practice, and ethical conduct.
 - E. NCEES shall function as a resource for other nations that desire to establish or improve their education, experience, examination, and ethics requirements for licensure to practice engineering and surveying.
 - F. NCEES shall work with foreign jurisdictions toward mutual development of international law enforcement procedures.
 - G. NCEES shall work with foreign jurisdictions to emphasize the importance of current international intellectual property protection.

Further, the NCEES board of directors identified and incorporated into the NCEES Strategic Plan a strategic issue recognizing that NCEES examinations will increasingly be used outside the United States as an outcomes assessment tool and will assist in determining minimum competency.

Criteria for Evaluating Requests for NCEES Examinations to Be Administered Outside the United States

The NCEES chief executive officer is authorized to receive and evaluate initial requests from foreign entities interested in administering NCEES examinations. A number of elements will be taken into consideration when conducting these initial evaluations. The most significant of these are locations that have favorable reports regarding security and economic climate from the U.S. Department of State, locations where the examination administration process can replicate the NCEES administration process in the United States, locations that are generally regarded by the U.S. government and industry as areas that minimize risk, anticipated customs issues when shipping secure or confidential material, and the experiences of other high-stakes testing programs and test services in international markets.

Upon receipt of an inquiry from a foreign entity, the chief executive officer will provide the following to the requesting entity:

- A general overview of the NCEES examinations and examination administration processes
- Information on how the NCEES examinations may be used to assist examinees interested in applying for licensure with an NCEES member board as well as an outcomes assessment tool to assist in measuring the outcomes of a foreign-based education system
- The criteria that will be used to evaluate any requests for foreign administration of NCEES examinations
- A description of the relationship between NCEES and its member boards (making it clear that only member boards may issue a license)

During preliminary discussions, the chief executive officer will request background information from the foreign entity to ascertain the following:

- The rationale for requesting access to the NCEES examinations
- The type of organization making the request, i.e., educational institution, professional society, or government-sanctioned organization

- Potential population of candidates
- The foreign entity's ability to adhere to NCEES examination administration requirements

After conducting base discussions with the foreign entity and accruing information about the organization and its motivation for wanting to offer the NCEES examinations, the chief executive officer will prepare a report with recommendations for the NCEES board of directors. This matter will be placed on the next board agenda for review and any action deemed appropriate.

At the next meeting, the board will evaluate the request, any supporting documentation, and the recommendations of the chief executive officer.

The board will deny requests in which the probability for any of the following conditions apply:

- Concern for the security of the NCEES examinations to include
 - Loss or theft
 - Misuse or inappropriate distribution
 - Violation of copyright of test items
- Concern for the safety of NCEES personnel
- Inability to administer examinations in full compliance with NCEES policy
- Lack of authorized Pearson VUE test centers for computer-based examinations
- Any additional mitigating or aggravating circumstances that would suggest that a potential partnership would not be in the best interest of NCEES

For all other requests, the board of directors may direct the chief executive officer to obtain additional information or conduct additional research to resolve any pending questions. For computer-based examinations, this may include information concerning the local Pearson VUE test center, including its history, the type and number of examinations currently offered, and general information concerning the operation of the specific test center. For pencil-and-paper examinations, this may include general information concerning the proposed examination site, available facilities to provide for the secure storage of examinations, and information concerning the proctors who will assist with the administration of the examinations.

In the case of computer-based examinations, a site visit may be required based on circumstances that are revealed during the review. If there are no issues with the specific Pearson VUE test center, the board may waive a site visit. If a determination is made that a site visit is required, the current NCEES president, the chief executive officer, and any additional individuals deemed necessary by the NCEES president will conduct a site visit. All expenses for conducting a site visit will be borne by the foreign entity requesting access to NCEES examinations. After the site visit, the chief executive officer will prepare a report detailing the findings of the NCEES visiting team, along with recommendations for board action.

For pencil-and-paper examinations, a site visit will be required prior to any action by the NCEES board of directors. The current NCEES president, the chief executive officer, and any additional individuals deemed necessary by the NCEES president will conduct the site visit. The purpose of the site visit will be to view potential examination sites and to meet personally with representatives of the foreign entity to further evaluate the possibility of entering into a partnership. All expenses for conducting a site visit will be borne by the foreign entity requesting access to NCEES examinations. After the site visit, the chief executive officer will prepare a report detailing the findings of the NCEES visiting team, along with recommendations for board action.

After full consideration of all information to include the results of a site visit, if required, the matter will be placed on the next agenda of the NCEES board of directors for action. If the board recommends the request be denied, correspondence will be provided to the foreign entity detailing the board's decision and rationale. If the board recommends that the request be endorsed, the board may authorize the chief executive officer to enter into negotiations with the foreign entity to allow the administration of all CBT examinations to candidates as described in EAP 10. For pencil-and-paper examinations, the board will introduce a motion at the next NCEES annual meeting for the Council to authorize the administration of NCEES examinations at the foreign site and for the chief executive officer to be authorized to enter into negotiations with the foreign entity to develop an appropriate agreement between the two parties.

Agreements with Foreign Entities

Upon authorization by the Council, the chief executive officer will initiate discussions with a foreign entity to develop an agreement detailing the responsibilities of both parties concerning access to and the administration of NCEES examinations. The provisions of EAP 10 will be incorporated into any agreement and include the following:

- Assurances that NCEES examinations will be administered in full compliance with all NCEES examination policies and procedures
- Pencil-and-paper NCEES examinations shall not be administered at a foreign site prior to the examinations being administered in member boards' jurisdictions, and computer-based NCEES examinations shall not be administered at a foreign site outside the approved testing windows.
- All costs borne by NCEES to carry out the provisions of the agreement will be reimbursed.

Any agreement will define the relationship between the two parties and will designate each party's responsibilities. At a minimum, the NCEES responsibilities will include the following:

- Providing criteria for identifying candidates qualified for seating for NCEES examinations
- Processing electronic registration information and receiving fees for NCEES exams
- Providing admission forms and materials related to policies governing the examinations to the foreign entity for dissemination to qualified candidates
- Producing rosters of eligible applicants for each exam administration
- Providing all test materials and related supplies to administer each exam
- Providing a chief proctor at each exam site to oversee the administration of the exams, as required for all non-CBT exams
- Ensuring proper collection and disposition of examination materials
- Scoring the examinations and transmitting the results directly to the candidate/foreign entity
- Providing verification of scores to any individual candidate, the foreign entity, or NCEES member board upon receipt of written request

Responsibilities assigned to the foreign entity will include the following:

- Communicating with prospective candidates, receiving their applications as required, and making a threshold determination as to the candidate's qualifications for seating based on criteria established by NCEES
- Directing approved candidates to register and pay for the NCEES exam via the NCEES website
- Notifying NCEES which candidates have been approved for seating by prescribed deadlines prior to each administration of NCEES examinations
- For pencil-and-paper examinations, locating and contracting with appropriate facilities for the administration of NCEES examinations
- For pencil-and-paper examinations, recruiting, training, and providing an adequate number of floor proctors to assist the NCEES chief proctor(s) in the effective administration of NCEES examinations
- For pencil-and-paper examinations, receiving and providing for the secure storage of NCEES examinations prior to and subsequent to each exam administration

NCEES may enter into an agreement with a foreign entity that permits only the administration of the FE examination or that allows both the FE and PE examinations to be administered to candidates of the foreign entity. A determination as to which examinations will be offered will be based upon the objective of the foreign entity in requesting access to NCEES examinations and the foreign entity's ability to offer NCEES examinations in full compliance with NCEES policy.

Computer-Based Testing (CBT)

The NCEES FE examination is a computer-based exam and is administered only at Pearson VUE test centers. Pearson VUE has a variety of test centers that are either owned and operated by Pearson VUE or are operated in partnership with Pearson VUE. NCEES examinations are offered only at Pearson Professional Centers (PPC) and Pearson VUE Authorized Test Center Centers (PVTC), which are designated as Select centers. Both the PPCs and the PVTC Selects mandate specific security protocols that are required for examinations offered via computer.

The presence of a PPC or PVTC Select within a foreign jurisdiction does not automatically confer authority to administer NCEES examinations. It is the right and responsibility of NCEES to designate any and all Pearson VUE sites that will be authorized to administer NCEES examinations. Likewise, NCEES may revoke the authority of a specific PPC or PVTC Select for any issues of noncompliance or any potential threat to the security of the NCEES examinations.

Candidate Qualifications

Fundamentals of Engineering (FE)

The minimum qualifications for seating for the FE examination will be established based upon the outcome that the foreign entity is seeking. NCEES policy regarding the administration of examinations at foreign locations requires NCEES to establish “minimum criteria for candidates of the foreign entity that are in **general conformance** with the existing NCEES *Model Law* and *Model Rules*” (emphasis added). To date, there have been three basic motives from foreign entities requesting authorization to administer NCEES examinations. They are:

1. Facilitating the examinations process to allow candidates of the foreign entity to pursue licensure as a professional engineer in the United States
2. Offering the FE examination to obtain data on the performance of a university’s students to use as an outcomes assessment for accreditation purposes
3. Using the NCEES examinations to determine minimum competence of non-nationals providing services within the boundaries of the foreign entity

Based on the proliferation of full EAC/ABET accreditation by foreign institutions, it is anticipated that the majority of future requests will be initiated by newly accredited programs seeking access to the FE exam to use as a metric for reaccreditation purposes.

NCEES will honor all existing agreements with foreign partners regarding the minimum qualifications established for seating for the FE examination. For all agreements entered into on or after January 1, 2014, the requirements for seating for the FE examination are as follows:

- Individuals who have attained senior status in or are graduates of a four-year or more EAC/ABET engineering program, or
- A graduate of a four-year or more engineering program whose education has been evaluated by the NCEES Credentials Evaluations service and whose degree has been deemed adequate for entry into the professional practice of engineering

Principles and Practice of Engineering (PE)

For the Principles and Practice of Engineering examinations, candidates will be limited to the following:

- Candidates who are residents of or gainfully employed on a full-time basis within the boundaries of the foreign jurisdiction
- Candidates who have successfully completed the FE examination
- Candidates who attest that they have accrued a minimum of four years of progressive engineering experience

Fees

Candidates qualified to take an NCEES examination at a foreign location will pay all NCEES examination-related fees by credit card as a part of the online registration process. The fees charged will be the examination costs as established by NCEES and, for computer-based examinations, an international fee as agreed to by NCEES and Pearson VUE. For pencil-and-paper examinations, an additional fee may be included to offset any expenses associated with the shipping and secure storage of examinations and any travel-related expenses for NCEES chief proctors and observers.

Application Process

NCEES will provide to each foreign entity authorized to administer NCEES examinations an application template that will be used to qualify candidates. Candidates will complete the application and submit the form to the foreign entity, which will make a threshold determination as to the eligibility for seating for an NCEES examination.

Candidates who are approved for seating will then be directed to the NCEES website, where they will establish an account with NCEES, provide the required data prescribed in the NCEES examinee management system, and pay the designated fees via credit card. Once the online registration is complete, the candidate will receive information concerning his or her exam.

For computer-based examinations, candidates will select a Pearson VUE test center designated for their region to take the examination. After selecting the test center, candidates will be able to view available dates and times to take the examination at the specific site. Upon selecting a date and time, a seating notice will be generated, which will provide the candidate authorization for admission to the test center.

For agreements with institutions with EAC/ABET-accredited programs, NCEES may craft the agreement to eliminate the need for a formal application by students of the program. This would only occur after the development of a process that would allow NCEES to be able to affirm the applicant is a current student in an EAC/ABET program. In these cases, appropriate biographical data would be captured when the candidate completes the online registration process through the NCEES examinee management system.

For pencil-and-paper examinations, the candidate will automatically be seated at the foreign test center and an admission authorization will be generated, along with relevant information pertaining to the examination and the test site.

Examination Results

Per the final agreement between NCEES and the foreign entity, examination results may be released directly to the candidate, to the foreign entity for dissemination to the candidate, or to both the candidate and the foreign entity. NCEES will retain the results for candidates taking NCEES examinations through agreements with a foreign entity and will provide verification of those results upon requests from the candidate, the foreign entity, or an NCEES member board. NCEES will also provide data to any foreign engineering program that has received EAC/ABET accreditation on the performance of its candidates taking the NCEES FE examinations to be used for outcomes assessment purposes.



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