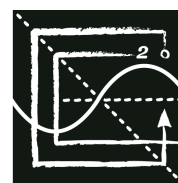


MODEL RULES

September 2021



NCEES

MODEL RULES

Revised September 2021

Vision

The vision of NCEES is to provide leadership in professional licensure of engineers and surveyors through excellence in uniform laws, licensing standards, and professional ethics in order to safeguard the health, safety, and welfare of the public and to shape the future of professional licensure.

Mission

The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.

This mission is supported through its member boards, board of directors, staff, board administrators, and volunteers by:

- Providing outstanding nationally normed examinations for engineers and surveyors
- Providing uniform model laws and model rules for adoption by the member boards
- Promoting professional ethics among all engineers and surveyors
- Coordinating with domestic and international organizations to advance licensure of all engineers and surveyors



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PREFACE

Purpose of the NCEES *Model Law* and *Model Rules*

The vision of the National Council of Examiners for Engineering and Surveying (NCEES) is to provide leadership in professional licensure of engineers and surveyors through excellence in uniform laws, licensing standards, and professional ethics in order to safeguard the health, safety, and welfare of the public and to shape the future of professional licensure. The mission of NCEES is to advance licensure for engineers and surveyors in order to safeguard the health, safety, and welfare of the public.

NCEES serves as an organization through which its members—the engineering and surveying licensure boards in all U.S. states and territories—can counsel and act together to better discharge their duties as individual, autonomous regulatory agencies. One of the primary ways NCEES fulfills its vision and supports its mission is by providing the *Model Laws* and *Model Rules* for adoption by its member boards.

The NCEES *Model Law* sets forth broad ideas about the regulation of engineering and surveying licensure. It is an enabling document that defines the board's powers and duties. It is designed to assist legislative counsels, legislators, and NCEES members in preparing new or amendatory legislation. Each line in the sections is numbered to facilitate use of this document as a working model.

The *Model Rules* complements the *Model Law* by providing model rules and regulations for the ways member boards can carry out the general concepts introduced and set forth in the law. While it is designed to explain broad provisions stated in the *Model Law* by offering the details from an administrative perspective, the *Model Rules*, just like a board's regulations or rulemaking process, functions only within the authority granted by the *Model Law*. The *Model Rules* is designed to assist NCEES member board members, board counsel, and board administrators in preparing and updating board rules.

The bracketed and italicized language throughout the *Model Law* and *Model Rules* indicates areas where language may need to be customized for a jurisdiction.

By vote, the majority of NCEES member boards have agreed that the language in the *Model Law* and *Model Rules* represents the gold standard for engineering and surveying licensure requirements in the United States. Revisions to the *Model Law* and *Model Rules* are decided at the NCEES annual business meeting, and any motion to amend the *Model Law* or the *Model Rules* presented at an annual business meeting by an entity other than the Committee on Uniform Procedures and Legislative Guidelines (UPLG) shall be referred to the UPLG Committee for review and revision of the language for inclusion before it is presented for Council vote at the next scheduled annual meeting.

The intent of NCEES in preparing these uniform model documents is to present its member boards with a high-level benchmark—and yet a sound and realistic guide—that will provide greater uniformity of qualifications for licensure, raise these qualifications to a higher level of accomplishment, and simplify the interstate licensure of engineers and surveyors.

210 INTRODUCTION

210.10 Introduction

The purpose of adopting rules is to safeguard the health, safety, and welfare of the public by ensuring the proper performance of the duties of the board and the regulation of its procedures, meetings, records, examinations, and the conduct thereof.

210.20 Definitions

The NCEES *Model Law*, Section 110.20, Definitions, provides definitions that also apply to these *Model Rules*.

210.25 Inclusions and Exclusions to the Practice of Surveying

A. Activities Included within the Practice of Surveying

Activities that must be accomplished by or under the responsible charge of a professional surveyor (unless specifically exempted in subsection B of this section) include, but are not limited to, the following:

1. The creation of maps or georeferenced databases representing authoritative locations for boundaries, the location of fixed works, or topography. This includes maps and georeferenced databases prepared by any person or government agency where that data is provided to the public as a surveying deliverable.
2. Original data acquisition, or the resolution of conflicts between multiple data sources, when used for the authoritative location of features within the following data themes: geodetic control, orthoimagery, elevation and hydrographic, fixed works, private and public boundaries, and cadastral information
3. Certification of positional accuracy of maps or measured survey data
4. Adjustment or authoritative interpretation of raw survey data
5. Geographic Information System (GIS)-based parcel or cadastral mapping used for authoritative boundary definition purposes wherein land title or development rights for individual parcels are, or may be, affected
6. Authoritative interpretation of maps, deeds, and other land title documents to resolve conflicting data elements
7. Acquisition of field data required to authoritatively position fixed works or cadastral data relative to geodetic control
8. Analysis, adjustment or transformation of cadastral data of the parcel layers with respect to the geodetic control layer within a GIS resulting in the affirmation of positional accuracy

B. Activities Excluded from the Practice of Surveying

A distinction must be made in the use of electronic systems between making or documenting original measurements in the creation of surveying deliverables, versus the copying, interpretation, or representation of those measurements in such systems. Further, a distinction must be made according to the intent, use, or purpose of measurements derived from electronic systems to determine an authoritative location versus the use of those measurements as a reference for planning, infrastructure management, and general information. The following items are not to be included as activities within the definition of the practice of surveying:

1. The creation of general maps
 - a. Prepared by private firms or government agencies for use as guides to motorists, boaters, aviators, or pedestrians
 - b. Prepared for publication in a gazetteer or atlas as an educational tool or reference publication

- c. Prepared for or by education institutions for use in the curriculum of any course of study
 - d. Produced by any electronic or print media firm as an illustrative guide to the geographic location of any event
 - e. Prepared by laypersons for conversational or illustrative purposes. This includes advertising material and users guides.
2. The transcription of previously georeferenced data into a GIS or LIS by manual or electronic means, and the maintenance thereof, provided the data are clearly not intended to indicate the authoritative location of property boundaries, the shape or contour of the earth, or fixed works
 3. The transcription of public record data, without modification except for graphical purposes, into a GIS- or LIS-based cadastre (tax maps and associated records) by manual or electronic means, and the maintenance of that cadastre, provided the data are clearly not intended to authoritatively represent property boundaries. This includes tax maps and zoning maps.
 4. The preparation of any document by any federal government agency that does not define real property boundaries. This includes civilian and military versions of quadrangle topographic maps, military maps, satellite imagery, and other such documents.
 5. The incorporation or use of documents or databases prepared by any federal agency into a GIS/LIS, including but not limited to federal census and demographic data, quadrangle topographic maps, and military maps
 6. Inventory maps or databases created by any organization, in either hard-copy or electronic form, of physical features, facilities, or infrastructure that are wholly contained within properties to which they have rights or for which they have management responsibility. The distribution of these maps or databases outside the organization must contain appropriate metadata describing, at a minimum, the accuracy, method of compilation, data sources and dates, and disclaimers of use clearly indicating that the data are not intended to be used as a surveying deliverable.
 7. Maps and databases depicting the distribution of natural resources or phenomena prepared by foresters, geologists, soil scientists, geophysicists, biologists, archeologists, historians, or other persons qualified to document such data
 8. Maps and georeferenced databases depicting physical features and events prepared by any government agency where the access to that data is restricted by statute. This includes georeferenced data generated by law enforcement agencies involving crime statistics and criminal activities.

210.30 Offering to Practice Engineering and Surveying

If the engineer or surveyor is licensed in another jurisdiction, the following items are not considered an offer to practice engineering or surveying:

- A. Advertisements published in print or electronic media, if professional services are not offered in jurisdictions where the engineer or surveyor is not licensed
- B. Responses to inquiries regarding requests for proposals, if there is written disclosure that the engineer/surveyor and firm are not currently licensed in the jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest
- C. Responses to inquiries from prospective clients, if there is written disclosure that the engineer/surveyor and firm are not currently licensed in the jurisdiction and the response is limited to inquiries regarding scope of project and to demonstrate interest
- D. Using the title/designation professional engineer, licensed engineer, P.E., professional surveyor, licensed surveyor, P.S., or other indicia of licensure in correspondence or on business cards from an office in the jurisdiction where licensure is held

Proposals may not be submitted, contracts signed, or work commenced until the engineer/surveyor and firm become licensed or authorized in the jurisdiction where the work is to be performed.

220 THE LICENSING BOARD

220.10 Board Operations

A. Meetings

1. Notices of meeting dates and times are normally given *[insert amount of time required]* in advance for all the regular meetings of the year. For special meetings, *[insert number of days]* notice must be given.
2. Place of meetings is determined in advance by members of the board.
3. All meetings are open to the public unless the meeting is closed for reasons defined by the laws of this jurisdiction.

B. Voting

All members of the board, including the chairperson, are entitled to vote and to make or to second motions. A majority vote of those present is required to pass a motion. The chairperson shall vote as a member of the board.

C. Rules of Order

The latest edition of *Roberts Rules of Order, Newly Revised* shall govern the normal proceedings of the board. Exceptions include hearings that may be disciplinary in nature.

D. Use of Forms

All applications and requests for which the board has prescribed a form must be presented on these forms.

E. Roster

A roster of all licensees and firms holding a certificate of authorization will be updated annually and shall be accessible to the public.

220.20 Adoption and Amendment of Rules and Regulations

All rules or regulations adopted, amended, or repealed by this board shall comply with the provision of the administrative procedures act of this jurisdiction *[insert chapter, title, code, jurisdiction, date]*.

220.30 Fees

A. Application Fees

1. *[\$insert amount]*—For professional engineer and professional surveyor licensure, as provided in the *NCEES Model Law*, Section 130.20 B
2. *[\$insert amount]*—For engineer intern and surveyor intern certification, as provided in the *NCEES Model Law*, Section 130.20 B
3. *[\$insert amount]*—For firm certificate of authorization, as provided in the *NCEES Model Law*, Section 160.40 B
4. When the issuance of a certificate to an applicant is denied, the fee paid shall be retained as an application fee, as provided in the *NCEES Model Law*, Sections 130.20 C and 160.40 C. Applications received without the proper fee will be returned to the applicant.

B. Examination Fees

1. Examination fees are determined from time to time by the board in accordance with the provisions of *[insert applicable jurisdiction law]*.
2. The current fees in effect may be obtained from the board.
3. Fees for manual verification of exam results are the same as those charged by NCEES.
4. The examination fees will not be returned to an applicant.

C. Roster

The fee for a copy of the *[insert annual, biennial, or other]* roster shall be determined by the board based on costs for its publication.

D. Renewal Fees

1. Renewal fees are payable before the last day of the month of *[insert month]* each year *[or other intervals]*.
2. Each licensee and firm holding a certificate of authorization will be notified by the board of the expiration date of his or her certificate of licensure or authorization and the amount of the renewal fee at least one month before the expiration date.
3. Amount of Renewal Fee—The renewal fee is set by regulation of the board in accordance with the provisions of *[insert applicable jurisdiction law]*.
4. Penalties for Late Renewal—Renewal fees in arrears are subject to a penalty for late renewal in accordance with jurisdiction law.

E. Duplicate Certificate Fees

The fee for the issuance of a duplicate certificate or enrollment document to a licensee, firm, or intern is determined by regulation of the board in accordance with the provision of *[insert applicable jurisdiction law]*.

230 CANDIDATES FOR LICENSURE

230.10 Education Requirements Approved by the Board

A. Engineering Program

The term “an engineering program of four years or more” used in Section 130.10 B.1.a of the NCEES *Model Law* is interpreted by this board to mean the following:

1. A degree from a bachelor’s or master’s engineering program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) at the time of the awarding of the degree. The board may accept the degree if accreditation is received within *[insert the prescribed time]*.
2. A degree from an engineering program not accredited by EAC/ABET but that meets the requirements of the NCEES *Engineering Education Standard*

B. Surveying Program

The following shall be considered as minimum evidence to the board that the applicant is qualified in terms of education for certification as a surveyor intern:

1. Graduation from a surveying program of four years or more accredited by EAC/ABET, the Engineering Technology Accreditation Commission of ABET (ETAC/ABET), or the Applied and Natural Science Accreditation Commission of ABET (ANSAC/ABET) at the time of awarding the degree or from a program that meets the requirements of the NCEES *Surveying Education Standard* as described in Section 130.10 C.1.a in NCEES *Model Law*. The board may accept the degree if accreditation is received within *[insert the prescribed time]*.
2. Graduation from a program related to surveying of four years or more as described in Section 130.10 C.1.b in NCEES *Model Law* is interpreted to be a bachelor’s degree including surveying courses, mathematics, and physical science.
3. Graduation from a program of four years or more as described in NCEES *Model Law* 130.10 C.1.c is interpreted to mean a program other than those defined in 1 or 2 above that is accepted by the board.

230.20 Experience

A. As a Professional Engineer¹

In evaluating experience that indicates to the board that the applicant may be competent to practice engineering, the following will be considered:

1. Experience must be progressive on engineering projects and must demonstrate an increasing quality and responsibility. Experience must be obtained in accordance with *Model Law 130.10*.
2. Only work of an engineering nature that follows graduation from a program that meets the criteria set forth in *Model Law 130.10 B.2.a(1)* is acceptable.
3. A graduate degree that is used to satisfy education requirements cannot be applied for experience credit toward licensure. To be eligible for experience credit, graduate degrees shall be relevant to the applicant's area of professional practice. Experience credit for a graduate degree cannot be earned concurrently with work experience credit.
4. Experience must be obtained in compliance with the licensure act.
5. Experience gained in the armed services must be of a character equivalent to that which would have been gained in the civilian sector doing similar work.
6. Experience should be gained under the supervision of a licensed professional engineer; if it is not, an explanation must be made showing why the experience should be considered acceptable. Experience gained under the technical supervision of an unlicensed individual may be considered if the appropriate credentials of the unlicensed supervisor are submitted to the board.
7. Sales experience must demonstrate that engineering principles were required and used in gaining the experience.
8. Teaching experience must be in engineering or engineering-related courses at a junior-, senior-, or graduate-level in a college or university offering an engineering program of four years or more that is approved by the board.
9. Experience may be gained in engineering research and design projects by members of an engineering faculty where the program is approved by the board.
10. Experience may be gained in engineering research by industry or government employees.
11. Experience must have been gained by the time of the application.
12. Experience in construction must demonstrate the application of engineering principles.
13. Experience must include demonstration of a knowledge of engineering mathematics, physical and applied science, properties of materials, and the fundamental principles of engineering design.
14. Experience must include demonstration of the application of engineering principles in the practical solution of engineering problems.
15. The board may deem professional experience acquired by applicants outside the United States to be equivalent to the minimum board requirements established by regulations for professional experience in that jurisdiction.

B. As a Professional Surveyor²

In evaluating experience that indicates to the board that the applicant may be competent to practice surveying, the following will be considered:

1. Experience must be progressive on surveying projects and must demonstrate an increasing quality and responsibility. Experience must be obtained in accordance with *Model Law 130.10*.
2. Experience must be obtained in compliance with the licensure act.

¹ Experience may be summarized as shown in Appendix A, Suggested Guidelines for Evaluating Progressive Engineering Experience. Appendix A is for reference only, and the language should not be adopted into the board rules.

² Experience may be summarized as shown in Appendix B, Suggested Guidelines for Evaluating Progressive Surveying Experience. Appendix B is for reference only, and the language should not be adopted into the board rules.

3. Experience gained in the armed services must be of a character equivalent to that which would have been gained in the civilian sector doing similar work.
4. Experience should be gained under the supervision of a licensed professional surveyor or, if not, an explanation must be made showing why the experience should be considered acceptable. Experience gained under the technical supervision of an unlicensed individual may be considered if the appropriate credentials of the unlicensed supervisor are submitted to the board.
5. Teaching experience must be in surveying or surveying-related courses at a junior-, senior-, or graduate-level in surveying or surveying-related courses approved by the board.
6. Experience related to property conveyance and/or boundary line determination must be demonstrated.
7. Experience in the technical field aspects of the profession must be demonstrated.
8. Experience must have been gained by the time of the application.
9. Experience must include demonstration of the application of surveying principles in the practical execution of surveying tasks.
10. Experience may be gained in surveying research projects by members of a surveying faculty where the program is approved by the board.
11. Experience may be gained in surveying research by industry or government employees.
12. The board may deem professional experience acquired by applicants outside the United States to be equivalent to the minimum board requirements established by regulations for professional experience in that jurisdiction.

230.30 References

References are individuals who have personal knowledge of an applicant and are able to assess an applicant's experience, ability, character, or reputation.

- A. For licensure as a professional engineer or professional surveyor, an applicant must submit five references, three of whom shall be licensed engineers, licensed surveyors, or other individuals deemed acceptable to the board, who have personal knowledge of the applicant's engineering or surveying experience. In addition, for each employment period, individuals familiar with the applicant's experience for that period must be identified. Engineering applicants must have licensed engineer references, and surveying applicants must have licensed surveyor references.
- B. Relatives may not be used as references.
- C. No current board member shall be used as a reference.
- D. Each applicant should inform the individuals being used as references that they will be sent a reference form to complete and return.
- E. It is the responsibility of the applicant to ensure that the individuals giving the reference return a completed reference form to the board within a reasonable time. All reference materials must be complete before any board action may be taken on an application.
- F. References are considered to be confidential, nonpublic records that will not be divulged except as required by law.

230.40 Examinations

A. Classification of Engineering Examinations

This jurisdiction or its designee will provide the following examinations, prepared and furnished by NCEES, meeting the requirements of this jurisdiction for licensure as a:

1. NCEES Fundamentals of Engineering (FE) examination—The examination consists of subject matters in the fundamentals of engineering. Passing this examination qualifies the examinee for certification as an engineer intern, provided the examinee has met all other requirements for certification required by these Rules.
2. NCEES Principles and Practice of Engineering (PE) examination—The examination consists of subject matters in applied engineering. Passing this examination qualifies the examinee for licensure as a professional engineer, provided the examinee has met the other requirements for licensure required by these Rules.

B. Eligibility of Applicant for Engineering Examinations

1. NCEES Fundamentals of Engineering (FE) Examination
 - a. Individuals who are in the final year of a program leading to a bachelor's degree in engineering may register with NCEES directly to take the FE examination or, if required, apply to the board for admission to the FE examination.
 - b. To be certified as an engineer intern, an application for certification may be submitted to the board upon passing the FE examination and meeting the education requirements.
2. NCEES Principles and Practice of Engineering (PE) Examination
 - a. Applicants for licensure as a professional engineer will be permitted to sit for the PE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
 - b. No applicant may sit for the PE examination until the board has established that the applicant is eligible for the examination.
 - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited undergraduate programs in the doctorate degree field of engineering and with experience that meets the qualifications defined by the board may sit for the PE examination without having taken or passed the FE examination.

C. Classification of Surveying Examinations

This jurisdiction will provide the following examinations, prepared and furnished by NCEES, meeting the requirements of this jurisdiction for licensure:

1. NCEES Fundamentals of Surveying (FS) examination—The examination consists of subject matters in the fundamentals of surveying. Passing this examination qualifies the examinee for certification as a surveyor intern, provided the examinee has met all other requirements for certification required by this Act.
2. NCEES Principles and Practice of Surveying (PS) examination—The examination consists of subject matters in applied surveying, divided in separate parts as determined by the board. Passing these parts qualifies the examinee for licensure as a professional surveyor, provided the examinee has met the other requirements for licensure required by this Act.

Jurisdictions have the right to administer separate modules on jurisdiction laws and procedures for the practice of surveying.

- D. Eligibility of Applicant for Surveying Examinations
1. NCEES Fundamentals of Surveying (FS) Examination
 - a. Individuals who are in the final year of a program leading to a bachelor's degree in a surveying or surveying-related program may register with NCEES directly to take the FS examination or, if required, apply to the board for admission to the FS examination.
 - b. To be certified as a surveyor intern, an application for certification may be submitted to the board upon passing the FS examination and meeting the education and experience requirement.
 2. NCEES Principles and Practice of Surveying (PS) Examination
 - a. An applicant for licensure as a professional surveyor will not be permitted to sit for the PS examination until the FS examination has been passed.
 - b. No applicant may sit for the PS examination until the board has established that the applicant is eligible for the examination.
- E. Examination Dates and Locations
1. Examinations are offered on dates set by NCEES.
 2. Locations at which the examinations are given are designated by the board or by NCEES.
- F. Language of the Examination
- The language of the examination shall be English.
- G. Exam Preparation Materials
- The board may publish and make available exam preparation materials for all examinations that are specific to the jurisdiction. Exam preparation materials for NCEES examinations are available through NCEES.
- H. Instructions for Examinees
1. Instructions provided prior to each examination will declare an examination to be open- or closed-book. Instructions will communicate what materials are allowed in the examination room in accordance with established NCEES policy.
 2. Failure to Attend an Examination
 - a. An applicant who fails to attend an examination for which he or she has been scheduled will forfeit the fee paid for the exam, except in the case of illness, death in the family, or military deployment. Refunds, if any, will be determined based upon NCEES or jurisdictional policies.
 - b. Failure of an applicant to attend an examination for which he or she has been scheduled to attend does not count as a failure of the examination.
- I. Pencil-and-Paper Examination Offerings
1. All applicants for an NCEES pencil-and-paper examination must register with NCEES after being approved by the licensing board of their jurisdiction.
 2. A candidate failing an NCEES pencil-and-paper examination may apply to retake the examination in accordance with *[insert the rules/regulations of the licensing board]*.
 3. An applicant for an NCEES pencil-and-paper examination will be notified by the board at least *[insert number]* days before the examination date of approval to take the examination. The applicant must notify the board whether he or she plans to sit for the examination at least *[insert number]* days before the examination date.
- J. Computer-Based Examination Offerings
1. An applicant must register with NCEES to take an NCEES computer-based examination.
 2. An applicant failing an NCEES computer-based examination may be allowed to retake the examination in accordance with NCEES policy and *[insert rules/regulations of licensing board]*.

K. Examination Results

Examination results will be released in accordance with established NCEES policy.

L. Review of Examinations

There shall be no post-administration access to, or review of, NCEES examination questions. Member boards may request that NCEES manually verify an examinee's results from a pencil-and-paper examination. Such verification shall be conducted in accordance with NCEES policy.

M. Examination for Record Purposes

1. Any professional engineer licensed by this board may take for Record purposes the FE examination and/or a PE examination in a chosen discipline offered by NCEES upon payment of *[insert fee set by board regulation and/or NCEES]*.
2. Failure to pass either or both examinations will in no way affect current licensure.

230.50 Classifications and Disciplines of Engineers and Surveyors

A. Classification of Engineers

Engineering applicants shall be licensed or certified under one of the classifications as prescribed by the laws of this jurisdiction:

1. Engineer intern—by education and examination
2. Professional engineer—by education, examination, and experience, or by comity
3. Discipline professional engineer—by verification of discipline competence

B. Classification of Surveyors

Surveying applicants shall be licensed or certified under one of the classifications as prescribed by the laws of this jurisdiction.

1. Surveyor intern—by education and/or experience, and examination
2. Professional surveyor—by education, examination, and experience, or by comity (and appropriate jurisdiction-specific examination)

230.60 Applications

A. Applications Process

1. All applications made to this board must be completed on the forms prescribed and furnished by the board. Applications for licensure properly executed and issued with verification by NCEES may be accepted in lieu of the same information that is required on the form prescribed and furnished by this board.
2. To allow sufficient time for processing and for securing pencil-and-paper examinations, all applications that may require pencil-and-paper examinations must be filed with this board at least *[insert number]* days before the date set for the appropriate pencil-and-paper examinations.
3. Withholding information or providing statements that are untrue or misrepresent the facts may be cause for denial of an application or revocation of license or certification.
4. It is the responsibility of the applicant to supply correct contact information for all references and to be sure that the references are supplied as requested. If a reference fails to respond, this could delay the processing of an application either until a reply is obtained or another reference is given.
5. In relating experience, the applicant must account for all employment or work experience that has elapsed since the beginning of the employment record. If not employed or employed in other kinds of work, this should be indicated in the experience record.

B. Applicants with Degrees from Foreign Schools

1. All foreign language documentation submitted with the completed application must be accompanied by certified translations. The translation report shall be sent directly from the translation service to the board for review.
2. All applicants must be able to communicate in the language of commerce.
3. Applicants who, for political or other valid reasons, are unable to obtain their college transcript shall be processed on a case-by-case basis by the board.
4. The board may require an independent evaluation of the foreign undergraduate education of an applicant who was educated outside the United States.

C. Reconsideration of Applications

Reconsideration may be requested of an application that has been denied when the request is based on additional information and/or evidence that could affect the original decision. A reconsideration request or request for a hearing must be made within *[insert number]* days after the applicant has been notified that the decision was made to reject the original application.

D. Disposition of Applications

Applications may be approved, deferred for further information (more experience, questionable references, or other reasons), or denied.

1. Approved applications—When an application is approved by the board showing that the applicant has met all the requirements for licensure or certification required by the licensure act, the applicant shall be granted licensure or certification with notification by the board.
2. Deferred applications—Applications deferred for any reason are retained until such date as a proper remedy is presented or until *[insert deadline for responding to board's inquiry]*.
3. Denied applications—When an application is denied by the board, it is kept on file for at least one year before being destroyed.

E. Licensure by Comity

1. The board is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria to be licensed as a professional engineer or professional surveyor as defined in Section 130.10 of the *Model Law*.
2. The board administrator is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria of a Model Law Engineer or Model Law Surveyor as set forth in the *NCEES Manual of Policy and Position Statements*. If the applicant meets or exceeds these requirements, the board administrator may issue a contingent license authorizing that individual to offer or provide engineering or surveying services in this jurisdiction. A list of all engineers issued contingent licenses will be placed on the agenda of the next meeting of the board for formal approval by the board. A list of all surveyors who have been issued contingent licenses and who have passed the appropriate jurisdiction-specific examination will be placed on the agenda of the next meeting for formal approval by the board.

240 LICENSEES

240.10 Licensure

A. License Number as a Professional Engineer or Professional Surveyor

Each licensee is assigned a license number at the time licensure is granted by the board. Numbers are issued consecutively in the order in which applicants are granted licensure. The licensee will be advised of the number by the board.

B. Certificates of Licensure

The board shall issue a certificate of licensure to an applicant who has met the requirements of this jurisdiction and who has paid the application fee. The information shown on the certificate shall be in accordance with *Model Law 140.10 Certificates of Licensure, Seals*.

C. Retirement of Licensure Option

When a licensee in good standing desires to retire his or her license, he or she may do so upon application to the board. Upon meeting the requirements established by the board, a permanent identification card may be issued and the retired licensee shall receive all rights and benefits as established by the board. Upon retirement of said license, the retiree shall not practice the profession.

D. Reissuance of Certificate

When a certificate of licensure, certificate of authorization, or enrollment card is lost, destroyed, or mutilated, it will be replaced upon request by a licensee, firm, or intern in good standing who has paid a fee established by the jurisdiction.

240.15 Rules of Professional Conduct

To safeguard the health, safety, and welfare of the public and to maintain integrity and high standards of skill and practice in the engineering and surveying professions, the rules of professional conduct provided in this section shall be binding upon every licensee and on all firms authorized to offer or perform engineering or surveying services in this jurisdiction.

A. Licensee's Obligation to the Public

1. Licensees shall be cognizant that their first and foremost responsibility is to safeguard the health, safety, and welfare of the public when performing services for clients and employers.
2. Licensees shall sign and seal only those plans, surveys, and other documents that conform to accepted engineering and surveying standards and that safeguard the health, safety, and welfare of the public.
3. Licensees shall notify their employer or client and such other authority as may be appropriate when their professional judgment is overruled when the health, safety, or welfare of the public is endangered.
4. Licensees shall, to the best of their knowledge, include all relevant and pertinent information in an objective and truthful manner within all professional documents, statements, and testimony.
5. Licensees shall express a professional opinion publicly only when it is founded upon an adequate knowledge of the facts and a competent evaluation of the subject matter.
6. Licensees shall issue no statements, criticisms, or arguments on engineering and surveying matters that are inspired or paid for by interested parties, unless they explicitly identify the interested parties on whose behalf they are speaking and reveal any interest they have in the matters.
7. Licensees shall not partner, practice, or offer to practice with any person or firm that they know is engaged in fraudulent or dishonest business or professional practices.
8. Licensees who have knowledge or reason to believe that any person or firm has violated any rules or laws applying to the practice of engineering or surveying shall report it to the board, may report it to appropriate legal authorities, and shall cooperate with the board and those authorities as requested.
9. Licensees shall not knowingly provide false or incomplete information regarding an applicant in obtaining licensure.
10. Licensees shall comply with the licensing laws and rules governing their professional practice in each of the jurisdictions in which they practice.

B. Licensee's Obligation to Employer and Clients

1. Licensees shall undertake assignments only when qualified by education or experience in the specific technical fields of engineering or surveying involved.
2. Licensees shall not affix their signatures or seals to any plans or documents dealing with subject matter in which they lack competence, nor to any such plan or document not prepared under their responsible charge.
3. Licensees may accept assignments and assume responsibility for coordination of an entire project if each technical segment is signed and sealed by the licensee responsible for preparation of that technical segment.
4. Licensees shall not reveal facts, data, or information obtained in a professional capacity without the prior consent of the client, employer, or public body on which they serve except as authorized or required by law or rules.
5. Licensees shall not solicit or accept gratuities, directly or indirectly, from contractors, their agents, or other parties in connection with work for employers or clients.
6. Licensees shall disclose to their employers or clients all known or potential conflicts of interest or other circumstances that could influence or appear to influence their judgment or the quality of their professional service or engagement.
7. Licensees shall not accept compensation, financial or otherwise, from more than one party for services pertaining to the same project, unless the circumstances are fully disclosed and agreed to in writing by all interested parties.
8. Licensees shall not solicit or accept a professional contract from a governmental body on which a principal or officer of their organization serves as a member. Conversely, licensees serving as members, advisors, or employees of a government body or department, who are the principals or employees of a private concern, shall not participate in decisions with respect to professional services offered or provided by said concern to the governmental body that they serve.
9. Licensees shall not use confidential information received in the course of their assignments as a means of making personal profit without the consent of the party from whom the information was obtained.

C. Licensee's Obligation to Other Licensees

1. Licensees shall not falsify or permit misrepresentation of their, or their associates', academic or professional qualifications. They shall not misrepresent or exaggerate their degree of responsibility in prior assignments nor the complexity of said assignments. Presentations incidental to the solicitation of employment or business shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures, or past accomplishments.
2. Licensees shall not offer, give, solicit, or receive, either directly or indirectly, any commission, or gift, or other valuable consideration in order to secure work, and shall not make any political contribution with the intent to influence the award of a contract by public authority.
3. Licensees shall not injure or attempt to injure, maliciously or falsely, directly or indirectly, the professional reputation, prospects, practice, or employment of other licensees, nor indiscriminately criticize other licensees' work.
4. Licensees shall make a reasonable effort to inform another licensee whose work is believed to contain a material discrepancy, error, or omission that may impact the health, safety, or welfare of the public, unless such reporting is legally prohibited.

240.20 Seal on Documents

- A. The seal and signature of the licensee and the date of signing shall be placed on all final engineering specifications, reports, drawings, plans, design information, and calculations or surveys, reports, plats, drawings, plans, and calculations whenever presented to a client or any public agency to certify that the work thereon was done by the licensee or under the responsible charge of the licensee. Working drawings or preliminary documents are not required to have a seal and signature if the working drawing or preliminary document contains a statement in large bold letters to the effect “PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES, OR IMPLEMENTATION.”
- B. The seal and signature shall be placed on all original copy, tracings, or other reproducible documents so that the seal and signature will be reproduced when copies are made.
- C. When the document contains more than one sheet, the first or title page shall be sealed and signed by the licensee who was in responsible charge. Two or more licensees may affix their signatures and seals provided that a note under the seal designates the specific subject matter for which each is responsible. In addition, each sheet shall be sealed and signed by the licensee or licensees responsible for that sheet. When a firm performs the work, each sheet shall be sealed and signed by the licensee or licensees who were in responsible charge of that sheet.
- D. The seal and signature shall be placed on work only when it was under the licensee’s responsible charge. The licensee shall sign and seal only work within the licensee’s areas of competence.
- E. Plans, plats, specifications, drawings, reports, and other documents will be deemed to have been prepared under the responsible charge of a licensee only when all the following conditions have been met and documented:
1. The client requesting preparation of such plans, plats, specifications, drawings, reports, or other documents makes the request directly to the licensee, or a member or employee of the licensee’s firm;
 2. The licensee supervises the preparation of the plans, plats, specifications, drawings, reports, or other documents and has input into their preparation prior to their completion;
 3. The licensee reviews the final plans, plats, specifications, drawings, reports, or other documents; and
 4. The licensee has the authority to, and does, make any necessary and appropriate changes to the final plans, plats, specifications, drawings, reports, or other documents.
- The licensee is responsible for meeting all of the preceding requirements whether the work is being performed remotely or locally.
- F. Any revision to a document containing the seal and signature of a licensee shall be described and dated. If the revisions are not done by the original licensee, the revisions must also be signed and sealed by the licensee in responsible charge of those revisions.
- G. In circumstances where a licensee in responsible charge of the work is unavailable to complete the work, or the work is a site adaptation of a standard design plan, or the work is a design plan signed and sealed by an out-of-jurisdiction licensee, a successor licensee may take responsible charge by performing all professional services to include developing a complete design file with work or design criteria, calculations, code research, and any necessary and appropriate changes to the work. The non-professional services, such as drafting, need not be redone by the successor licensee but must clearly and accurately reflect the successor licensee’s work. The burden is on the successor licensee to show such compliance. The successor licensee shall have control of and responsibility for the work product and the signed and sealed originals of all documents.

H. When a licensee is required to seal and sign engineering/surveying documents, one of the following methods must be used:

1. Physical placement of a seal and a handwritten signature in permanent ink containing the name of the licensee
2. Digital placement of a seal and a handwritten signature in permanent ink containing the name of the licensee
3. Digital placement of a seal and a digital signature containing the name of the licensee

Drawings, reports, and documents that are signed using a digital signature must have an electronic authentication process attached to or logically associated with the electronic document. The digital signature must be

1. Unique to the individual using it
2. Capable of verification
3. Under the sole control of the individual using it
4. Linked to a document in such a manner that the digital signature is invalidated if any data in the document is changed.

A digital signature that uses a process approved by the board will be presumed to meet the criteria set forth in Section H above. Any hard copy printed from the transmitted electronic file shall bear the facsimile of the signature and seal and be a confirmation that the electronic file was not altered after the initial digital signing of the file. Any alterations to the file shall cause the facsimile of the signature to be voided.

240.30 Continuing Professional Competency

The purpose of the continuing professional competency requirement is to demonstrate a continuing level of competency of licensees.

A. Introduction

Every licensee shall meet the continuing professional competency requirements of these regulations for professional development as a condition for licensure renewal.

B. Definitions

Terms used in this section are defined as follows:

1. Professional Development Hour (PDH)—One contact hour (nominal) of instruction or presentation. The PDH is the common denominator for other units of credit.
 - a. The term “contact hour” is defined as a minimum of 50 minutes of course/activity.
 - b. The total number of hours allowed for a course/activity cannot exceed the actual number of clock hours.
2. Ethics/Business-Related Course or Activity—A qualifying course or activity with content areas related to (1) the awareness of ethical concerns and conflicts; (2) an enhanced familiarity with the codes of conduct; (3) an understanding of standards of practice or care; (4) project management and risk-assessment management; or (5) other similar topics aimed at maintaining, improving, or expanding the skills set and knowledge relevant to the licensee’s field and methods of practice.
3. Continuing Education Unit (CEU)—Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 contact hours in an approved continuing education course.
4. College Semester/Quarter Hour—Credit for course in ABET-accredited programs or other related college course approved in accordance with subsection E of this section.

5. Course/Activity—Any qualifying course or activity with a clear purpose and objective that will maintain, improve, or expand the skills and knowledge relevant to the licensee’s field of practice. Regular duties are not considered qualified activities.
6. Dual Licensee—An individual who is licensed as both a professional engineer and a professional surveyor

C. Qualifying Activities

PDHs may be earned as follows:

1. Successful completion of college courses
2. Successful completion of short courses, tutorials, webinars, and distance-education courses offered for documented individual or group study. The method of delivery can be through the following:
 - a. Face-to-face programs or live internet-based programs
 - b. Archived prerecorded programs or archived correspondence programs
3. Presenting or attending qualifying seminars, in-house courses, workshops, or professional or technical presentations made at meetings, conventions, conferences, or educational institutions
4. Teaching or instructing in 1 through 3 above
5. Authoring published papers, articles, books, or accepted licensing examination items
6. Active participation in professional or technical societies or in accrediting organizations
7. Patents
8. Active participation in educational outreach activities pertaining to professional licensure or the surveying/engineering professions that involve K–12 or higher education students

D. Units

The conversion of other units of credit to PDHs is as follows:

1. 1 semester hour 45 PDHs
2. 1 quarter hour 30 PDHs
3. 1 continuing education unit10 PDHs
4. 1 hour of professional development in coursework, seminars, or professional or technical presentations made at meetings, conventions, or conferences1 PDH
5. For teaching in 1 through 4 above, apply multiple of 2*
6. Publications
 - a. Each published peer-reviewed paper or book in the licensee’s area of professional practice10 PDHs
 - b. Each published paper or article (other than 6.a above) in the licensee’s area of professional practice5 PDHs
7. Active participation in professional and technical society (each organization) 2 PDHs
8. Each patent10 PDHs
9. 1 hour of outreach activities.....1 PDH (not to exceed 3 PDHs)

* Teaching credit is valid only for the first offering or presentation. Full-time faculty may not claim teaching credit associated with their regular duties.

E. Determination of Credit

The board has final authority with respect to approval of courses, credit, PDH value for courses, and other methods of earning credit.

1. Credit for college or community college approved courses will be based upon course credit established by the college.

2. Credit for qualifying seminars and workshops will be based on 1 PDH for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn PDHs for the actual time of each program.
3. Credit determination for activities in subsections D.6 and D.8 is the responsibility of the licensee (subject to review as required by the board).
4. Credit for activity in subsection D.7, active participation in professional and technical societies (limited to 2 PDHs per organization), requires that a licensee serve as an officer and/or actively participate in a committee of the organization. PDHs are not earned until the end of each year of service is completed.

F. Recordkeeping

The licensee is responsible for maintaining records to be used to support credits claimed. Records required include, but are not limited to (1) a log showing the type of activity claimed, sponsoring organization, location, duration, instructor's or speaker's name, and PDHs earned; and (2) attendance verification records in the form of completion certificates or other documents supporting evidence of attendance.

G. Exemptions

A licensee may be exempt from the continuing professional competency requirements for one of the following reasons:

1. New licensees by way of examination or comity shall be exempt for their first renewal period.
2. A licensee serving on temporary active duty in the armed forces of the United States for a period of time exceeding 120 consecutive days in a year shall be exempt from obtaining the PDHs required during that renewal period.
3. Licensees experiencing physical disability, illness, or other extenuating circumstances may apply for an exemption or an extension of time to obtain the credits, subject to the review and approval of the board. Supporting documentation must be furnished to the board.
4. Licensees who list their occupation as "Retired" or "Inactive" on the board-approved renewal form and who further certify that they are no longer receiving any remuneration from providing professional engineering or surveying services shall be exempt from the PDHs required.

H. Reinstatement

A licensee may bring a retired or inactive license to active status by obtaining all delinquent PDHs. However, if the total number required to become current exceeds 30, then 30 shall be the maximum number required.

I. Requirements for Renewal

To renew a license, an applicant must meet either of the following:

1. The requirements of the NCEES *CPC Standard*
2. The requirements of *[insert jurisdiction name]*

J. Dual Licensees

The number of PDHs required per year shall be as stated in the NCEES *CPC Standard*. At least one-third of the PDHs shall be obtained in each profession.

K. Certification

All renewal applications will require the certification of CPC credits as specified by the board. The licensee must supply sufficient detail and backup documentation with the renewal application, if required, or upon notification of audit.

240.40 Expirations, Renewals, and Reinstatement to Active Practice

- A. A renewal notice will be sent annually or as required by this jurisdiction by the board [*insert number of days*] prior to the license expiration date to every individual licensed under the licensure act and to every firm holding a certificate of authorization showing the expiration date of their license or certificate and the amount of the fee for renewal.
- B. The annual [*or insert other amount of time*] renewal fee is established by the board.
- C. Renewal fees must be received by the board prior to the expiration date. Fees received within one month or more after the renewal date will be assessed an additional fee established by the board.
- D. Renewal fees not paid within a period established by the board after the expiration date voids the license or certificate and will require a new application for licensure or certification in order to continue to practice engineering or surveying.
- E. A licensee or firm who supplies the board before the expiration date of his/her/its license/certificate with an affidavit that he/she/it is no longer practicing and will not practice engineering or surveying in this jurisdiction may retain his/her/its license/certificate for later use upon payment of delinquent fees.
- F. The responsibility for the timely renewal of a licensee's license rests solely with the individual licensee. The responsibility for the timely renewal of a firm's certificate rests solely with the firm's managing agent.
- G. The applicant for renewal or reinstatement may be required to demonstrate to the board that he or she has maintained the required minimum level of professional competence in a manner acceptable to the board.

250 DISCIPLINARY ACTIONS

250.10 Knowledge of Rules

All licensees and interns and all firms authorized under the provisions of the licensure act, as well as applicants, are charged with having knowledge of these Rules as well as amendments that are made known in writing to every licensee, intern, firm, and applicant.

250.20 Compliance

Professional surveyors and surveying firms shall comply with the minimum standards codified for surveys in this jurisdiction.

250.30 Disciplinary Action Procedures

- A. Summons and Notice of Charges
 1. In the event the investigative committee determines that a probable cause exists, the legal counsel of the board is requested to prepare a summons and notice of charges.
 2. The summons and notice of charges shall be personally served or mailed to the last known address of the respondent at least 30 days before the date fixed for hearing.
 3. The summons and notice of charges shall show the time, place, and nature of the hearing, a statement of legal authority and jurisdiction under which the hearing is to be held, a reference to the particular section of the licensure act and rules involved, and a short and plain statement of the matters asserted. The notice of the summons and notice of charges shall indicate that at any hearing the respondent shall have the right to appear in person or by counsel or both to cross-examine witnesses in his or her or its defense and to produce evidence and witnesses of his or her or its own defense. If the respondent fails or refuses to appear, the board may proceed to hear and

determine the validity of the charges. The notice shall be in substantial compliance with the requirements of the laws of this jurisdiction.

B. Evidentiary Matters

In contested cases, irrelevant, immaterial, or unduly repetitious evidence shall be excluded. The rules of evidence as applied in civil cases in the court of common pleas shall be followed. The board shall give effect to the rules of privilege recognized by law. Objection to evidentiary offers may be made and shall be noted in the record. Subject to these requirements, any part of the evidence may be received in written form when a hearing will be expedited and the interest of the parties involved will not be prejudiced substantially. Documentary evidence may be received in the form of copies or excerpts if the original is not readily available. Any party may conduct cross-examination. Notice may be taken of judicially cognizable facts. In addition, notice may be taken of generally recognized technical or scientific facts within the board's specialized knowledge. Parties shall be notified either before or during the hearing or by reference in preliminary reports or otherwise of the material noticed, including any staff memoranda or data, and they shall be afforded an opportunity to contest the material so noticed. The board's experience, technical competence, and specialized knowledge may be utilized in the evaluation of evidence.

C. Conduct of Hearing

The conduct of the hearing and evidence submitted shall be as required by the laws of this jurisdiction.

1. At its discretion, the board may appoint an individual [*preferably an attorney or someone familiar with the laws and procedures*] to act as a hearing examiner. The hearing examiner shall preside at the hearing and shall rule on all questions of evidence and procedure.
2. In the event a hearing examiner is not appointed, the chair of the board shall preside over the hearing and shall rule on all questions of evidence and procedure with the advice of the attorney for the board.
3. The proceeding shall follow those used by a civil court in which an opening statement is made by the prosecutor and the respondent. Then evidence is presented by both sides with rebuttals. Witnesses may be examined by the prosecutor and respondent or their attorneys and by members of the board. Redirect, recross, and reexaminations are permitted. Closing statements by both the prosecutor and respondent or their attorneys are permitted.

D. Record of Hearing

The record of the hearing of the case shall include

1. All motions, intermediate ruling, and depositions
 2. Evidence received or considered
 3. Statement of matters officially noted
 4. Questions and offers of proof, objections, and rulings thereon
 5. Proposed findings and exceptions
 6. Any decision, opinion, or report by the officer presiding at the hearing
- Oral proceedings or any part thereof shall be transcribed on request of any party.

250.40 Bias

No board member shall be entitled to participate in discussion or to vote in any disciplinary action if the board member is personally biased in favor of or against the respondent.

260 MISCELLANEOUS**260.10 Severability**

If any of the rules and regulations, or any part thereof, of this board promulgated under the provisions of the rule-making authority for jurisdiction agencies, are found by the courts to be invalid for any reason, it is the intention of the board that the remainder shall continue in full force and effect or it is the intention of the board that each rule and/or any portions thereof are severable.

APPENDIX A

Suggested Guidelines for Evaluating Progressive Engineering Experience

The following is a partial list of work experiences that may be useful in guiding, mentoring, and verifying acceptable experience of engineer interns and/or intern applicants. There are no correct answers to the following questions. The profile of each applicant will provide the board a basis for more specific questions.

Practical Application of Theory

1. Analysis: Of operating conditions; performance assessment; feasibility studies; constructability; value engineering; safety; environmental issues; economic issues; risk assessment; reliability; other *[list]*:

2. Design: Construction plan or specification preparation; product specifications; component selection; maintenance and social implications of final product; other *[list]*:

3. Testing: Developing or specifying testing procedures; verifying functional specifications; implementing quality control and assurance; maintenance and replacement evaluation; other *[list]*:

4. Implementation: Of engineering principles in design, construction, or research; performance of engineering cost studies; process flow and time studies; implementation of quality control and assurance; safety issues; and environmental issues; other *[list]*:

5. Systems Application: Evaluation of components of a larger system; evaluation of the reliability of system parts; design and evaluation of equipment control systems while considering ergonomics, utility, manufacturing tolerances, and operating and maintenance concerns; the engineering required to establish programs and procedures for the maintenance and management of buildings, bridges, and other types of structures where failure or improper operation would endanger the health, safety, or welfare of the public; other *[list]*:

6. Time in the Engineering Process: Difficulties of workflow; scheduling; equipment life; corrosion rates and replacement scheduling; other *[list]*:

7. Knowledge and Understanding: Codes, standards, regulations and laws that govern applicable activities; other *[list]*:

Management

Management in engineering works includes supervising staff, managing engineering projects, and managing and administering technology as it is applied in the field or in construction. It may involve:

- 1. Planning: Developing concepts, evaluating alternative methods _____
- 2. Scheduling: Preparing task breakdowns and schedules _____
- 3. Budgeting and Contracting: Cost estimating and control, contract development _____
- 4. Supervising: Organizing human resources, motivating teams, directing and coordinating project resources _____
- 5. Project Control: Complete or partial project control _____
- 6. Risk Assessment: Assessment of risk associated with the progression of the project _____

Communication Skills

- 1. Accumulates project knowledge through interpersonal communication with supervisors, clients, subordinates, or team interaction _____
- 2. Transmits project knowledge in verbal or written methods to clients, supervisors, subordinates, general public, or team members. Examples would be via meetings, written reports, public hearings and reporting of findings and suggestions, other written correspondence and/or verbal briefings. _____

Social Implications

- 1. Promotes and safeguards the health, safety, and welfare of the public as demonstrated in daily work activities _____
- 2. Demonstrates an awareness of the consequences the work performed may incur and a desire to mitigate or eliminate any potential negative impact _____
- 3. Follows a code of ethics that promotes a high degree of integrity in the practice of professional engineering _____

APPENDIX B
Suggested Guidelines for Evaluating Progressive Surveying Experience

The following is a partial list of work experiences that may be useful in guiding, mentoring, and verifying acceptable experience of surveyor interns and intern applicants. There are no correct answers to the following questions. The profile of each applicant will provide the board a basis for more specific questions.

Practical Application of Theory

1. Research: Easements; rights-of-way; plats; instruments of conveyance; corner information; government survey information; other pertinent surveys; other *[list]*:

2. Measurement/Location: Field measurements of topography and features; measurements to locate particular boundaries, parcels or points; level loops; GPS measurements; construction staking; other *[list]*:

3. Computation/Analysis: Traverse closure and adjustment; boundary interpretations; section computations; coordinate translations; coordinate calculations; survey accuracy; vertical curves; horizontal curves; other *[list]*:

4. Legal Principles: Legal description preparation and interpretation; corner filings; boundary determination; section corner opinions; adverse possession; easement and right-of-way preparation; other *[list]*:

5. Land Planning: Platting; zoning issues; subdivision regulations and layout; utility coordination; on-site wastewater systems and regulations; permits; other *[list]*:

6. Time in the Surveying Process: Difficulties of workflow; scheduling; equipment adjustments; construction staking coordination; other *[list]*:

7. Knowledge and Understanding: Codes, standards, regulations, and laws that govern applicable activities; other *[list]*:

Management

Management in surveying includes supervising staff, managing surveying projects, and managing and administering technology as it is applied in surveying. It may involve:

- 1. Planning: Developing concepts, planning surveying projects, evaluating alternative methods _____
- 2. Scheduling: Preparing task breakdowns and schedules _____
- 3. Budgeting and Contracting: Cost estimating and control, contract development _____
- 4. Supervising: Organizing human resources, motivating teams, directing and coordinating equipment _____
- 5. Project Control: Complete or partial project control by using and developing control tools such as network plans and Gantt charts _____
- 6. Risk Assessment: Assessment of risk associated with the progression of the project using surveying analysis and quantification methods to determine degree of risk of known hazards in proposed designs _____

Communication Skills

- 1. Accumulates project knowledge through interpersonal communication with supervisors, subordinates, clients, regulators, other surveyors or team interaction _____
- 2. Transmits project knowledge in verbal or written methods to clients, regulators, supervisors, subordinates, general public, or team members. Examples would be via meetings, written reports, other written correspondence and/or verbal briefings. _____

Social Implications

- 1. Promotes and safeguards the health, safety, and welfare of the public as demonstrated in daily work activities _____
- 2. Demonstrates an awareness of the consequences the work performed may incur and a desire to mitigate or eliminate any potential negative impact _____
- 3. Follows a code of ethics that promotes a high degree of integrity in the practice of professional surveying _____

APPENDIX C

Index for *Model Rules* with General Cross-Reference to *Model Law*

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| 240.10 C | Retirement of Licensure Option | 110.20 A.3, B.2 |
| 240.10 D | Reissuance of Certificate | 140.30, 160.60 |
| Section 240.15 | Rules of Professional Conduct | |
| 240.15 A | Licensee's Obligation to the Public | 150 |
| 240.15 B | Licensee's Obligation to Employer and Clients | 150 |
| 240.15 C | Licensee's Obligation to Other Licensees | 150 |
| Section 240.20 | Seal on Documents | |
| Section 240.30 | Continuing Professional Competency | 120.60 E, 140.20 B |
| 240.30 A | Introduction | |
| 240.30 B | Definitions | |
| 240.30 C | Qualifying Activities | |
| 240.30 D | Units | |
| 240.30 E | Determination of Credit | |
| 240.30 F | Recordkeeping | |
| 240.30 G | Exemptions | |
| 240.30 H | Reinstatement | |
| 240.30 I | Requirements for Renewal | |
| 240.30 J | Dual Licensees | |
| 240.30 K | Certification | |

| <i>Model Rules Section</i> | <i>Descriptor</i> | <i>Corresponding Model Law Section</i> |
|----------------------------|---|--|
| Section 240.40 | Expirations, Renewals, and Reinstatement to Active Practice | |
| 240.40 A | <i>Renewal notice sent annually or as required by the board</i> | 140.20, 160.50 |
| 240.40 B | <i>Renewal fee established by the board</i> | 140.20, 160.50 |
| 240.40 C | <i>Board must receive renewal fees before expiration date; late fees assessed an additional fee</i> | |
| 240.40 D | <i>Unpaid renewal fees void license or certificate and require new application for licensure or certification to continue practicing</i> | |
| 240.40 E | <i>Licensee or firm who notifies board before expiration that they are no longer practicing may retain license/certificate for later use upon payment of fees</i> | |
| 240.40 F | <i>Licensees solely responsible for timely renewal of their license and firm's managing agent solely responsible for timely renewal of firm's certificate</i> | |
| 240.40 G | <i>Applicants for renewal or reinstatement may be asked to demonstrate they have maintained the required minimum level of professional competence</i> | |
| 240.40 H | <i>Licensees who do not maintain active status in any jurisdiction for three years preceding requested date of reinstatement must take the PE and PS and jurisdiction-specific exams before reinstatement</i> | |
| SECTION 250 | DISCIPLINARY ACTIONS | |
| Section 250.10 | Knowledge of Rules | |
| Section 250.20 | Compliance | |
| Section 250.30 | Disciplinary Action Procedures | |
| 250.30 A | Summons and Notice of Charges | 120.60 B, 150.20 D, 160.80 D |
| 250.30 B | Evidentiary Matters | |
| 250.30 C | Conduct of Hearing | |
| 250.30 D | Record of Hearing | |
| Section 250.40 | Bias | |
| SECTION 260 | MISCELLANEOUS | |
| Section 260.10 | Severability | |

APPENDIX D
References to Internal Sections in *Model Law*

The following table is to be used for general representative, informational purposes only.

| <i>Model Rule Citation</i> | <i>Model Law Citation Referenced within Citations in Column 1</i> |
|-----------------------------------|--|
| 210.20 | 110.20 |
| 220.30 A.1 | 130.20 B |
| 220.30 A.2 | 130.20 B |
| 220.30 A.3 | 160.40 B |
| 220.30 A.4 | 130.20 C, 160.40 C |
| 230.10 A | 130.10 B.1.a |
| 230.10 B.1 | 130.10 C.1.a |
| 230.10 B.2 | 130.10 C.1.b |
| 230.10 B.3 | 130.10 C.1.c |
| 230.20 A.2 | 130.10 B.2.a(1) |
| 240.10 B | 140.10 |

APPENDIX E NCEES Publications

Publications available on ncees.org in the About NCEES section

- The NCEES **annual report** highlights the Council’s leadership, mission, initiatives, and financial activities. An interactive version of the annual report is available at ncees.org/annualreport.
- The NCEES **Bylaws** outlines the structure of the Council.
- The **Continuing Professional Competency Guidelines** provides best practices for state licensing boards that have CPC requirements for licensees.
- NCEES uses its “**Criteria for Evaluating the Administration of NCEES Examinations at Non-U.S. Sites**” when assessing whether or not to administer its exams in other countries.
- The **History of the National Council of Examiners for Engineering and Surveying, 1920–2020** provides an in-depth history of U.S. licensure and NCEES.
- **Licensure Exchange** is the NCEES bimonthly newsletter for the exchange of information, opinions, and ideas regarding the licensure of engineers and surveyors.
- The **Manual of Policy and Position Statements** describes Council administrative, examination, financial, and professional policies as well as the official NCEES position on licensure issues.
- The **Model Law** reflects best practices as determined by the NCEES member boards. It is a model for state practice legislation.
- The **Model Rules** provides licensure boards with guidelines for engineering and surveying licensing laws and ethics.
- When it conducts a credentials evaluation, NCEES compares the candidate’s college-level education against the NCEES **Engineering Education Standard** or the NCEES **Surveying Education Standard**. These standards reflect generally agreed-upon educational qualifications for entering the profession.
- NCEES **Squared** is the official NCEES source for engineering and surveying licensure statistics.
- The NCEES white paper “**Using the FE Exam as an Outcomes Assessment Tool**” describes in detail how engineering departments can use the FE exam to assess program outcomes.

Additional publications available on MyNCEES (Member Resources portion of the NCEES website)

- Annual meeting *Action Items and Conference Reports*
- NCEES board of directors minutes
- *Investigation and Enforcement Guidelines*
- *Investigative Training Manual*
- Zone minutes
- *Zone Meeting and Continuity Guidelines*

APPENDIX F

Model Language for Member Boards that License Structural Engineers

Model Rules 230.40 provides model language for classification of engineering exams and eligibility of applicants for engineering exams, and *Model Rules* 230.60 A provides language for types of applications. The language highlighted in gray below is being provided in this appendix to the *Model Rules* so that boards that also license structural engineers will have model language for structural engineering. Adopting similar language can help with licensure mobility among the boards that license structural engineers. The language highlighted in gray below is provided for those boards. The language that is not highlighted in gray is currently in *Model Rules* 230.40 and 230.60 A for professional engineers and is provided as a reference for where to insert the structural engineering-related language in the *Model Rules*.

Model Language to Use for Structural Engineering Licensure

230.40 Examinations

A. Classification of Engineering Examinations

This jurisdiction or its designee will provide the following examinations, prepared and furnished by NCEES, meeting the requirements of this jurisdiction for licensure.

1. NCEES Fundamentals of Engineering (FE) examination—The examination consists of subject matters in the fundamentals of engineering. Passing this examination qualifies the examinee for certification as an engineer intern, provided the examinee has met all other requirements for certification required by these Rules.
2. NCEES Principles and Practice of Engineering (PE) examination—The examination consists of subject matters in applied engineering. Passing this examination qualifies the examinee for licensure as a professional engineer, provided the examinee has met the other requirements for licensure required by these Rules.
3. NCEES Structural Engineering (SE) examination—The examination shall be considered and referred to as one 16-hour examination. The SE examination consists of two 8-hour components: the Vertical Forces (gravity/other) and Incidental Lateral component and the Lateral Forces (wind/earthquake) component. A candidate must receive acceptable results on both 8-hour components to pass the SE examination. A candidate may sit for each component in separate exam administrations but must receive acceptable results on both components within a 5-year period. Receiving acceptable results on only one 8-hour component shall not be sufficient for licensure purposes. Passing this examination qualifies the examinee for licensure as a professional structural engineer, provided the examinee has met the other requirements for licensure required by these Rules.

B. Eligibility of Applicant for Engineering Examinations

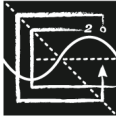
1. NCEES Fundamentals of Engineering (FE) Examination
 - a. Individuals who are in the final year of a program leading to a bachelor's degree in engineering may register with NCEES directly to take the FE examination or, if required, apply to the board for admission to the FE examination.
 - b. To be certified as an engineer intern, an application for certification may be submitted to the board upon passing the FE examination and meeting the education requirements.
2. NCEES Principles and Practice of Engineering (PE) Examination
 - a. Applicants for licensure as a professional engineer will be permitted to sit for the PE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
 - b. No applicant may sit for the PE examination until the board has established that the applicant is eligible for the examination.
 - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited undergraduate programs in the doctorate degree field of engineering and with experience that meets the qualifications defined by the board may sit for the PE examination without having taken or passed the FE examination.

3. NCEES Structural Engineering (SE) Examination
 - a. Applicants for licensure as a professional structural engineer will be permitted to sit for the SE examination upon satisfactorily fulfilling all application requirements of the jurisdiction.
 - b. No applicant may sit for the SE examination until the board has established that the applicant is eligible for the examination.
 - c. Engineering doctorate degree applicants with an undergraduate degree from a program accredited by the Engineering Accreditation Commission of ABET (EAC/ABET) and with a doctorate degree in engineering from an institution that offers EAC/ABET-accredited undergraduate programs in the doctorate degree field of engineering and with experience that meets the qualifications defined by the board may sit for the SE examination without having taken or passed the FE examination.

230.60 Applications

E. Licensure by Comity

1. The board is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria to be licensed as a professional engineer, professional structural engineer, or professional surveyor as defined in Section 130.10 of the *Model Law*.
2. The board administrator is authorized to review and evaluate the applications of all comity applicants to determine if they meet or exceed the criteria of a Model Law Engineer, Model Law Structural Engineer, or Model Law Surveyor as set forth in the *NCEES Manual of Policy and Position Statements*. If the applicant meets or exceeds these requirements, the board administrator may issue a contingent license authorizing that individual to offer or provide engineering or surveying services in this jurisdiction. A list of all engineers issued contingent licenses will be placed on the agenda of the next meeting of the board for formal approval by the board. A list of all surveyors who have been issued contingent licenses and who have passed the appropriate jurisdiction-specific examination will be placed on the agenda of the next meeting for formal approval by the board.



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