



TO: Professional Practice Committee

FROM: Sarah S. Benson *Sarah S. Benson*

SUBJECT: Proposed Repeal of Section 68.1 and Addition of a New Section 68.1 and Amendment of Section 68.3 of the Regulations of the Commissioner of Education Relating to the Licensure Requirements for Professional Engineers

DATE: March 31, 2022

AUTHORIZATION(S): *Don M. P. Belmont*

SUMMARY

Issue for Decision

Should the Board of Regents repeal section 68.1 and add a new section 68.1 and amend 68.3 of the Regulations of the Commissioner of Education relating to the licensure requirements for professional engineers?

Reason for Consideration

Required by State statute (Chapter 465 of the Laws of 2021).

Proposed Handling

The proposed amendment will be presented to the Professional Practice Committee for recommendation and to the Full Board for adoption as an emergency action at the April 2022 meeting of the Board of Regents. A copy of the proposed rule (Attachment A) and a statement of facts and circumstances justifying emergency action (Attachment B) are attached.

Procedural History

A Notice of Emergency Adoption and Proposed Rule Making will be published in the State Register on April 27, 2022 for a 60-day public comment period. Supporting materials are available upon request from the Secretary to the Board of Regents.

Background Information

Chapter 465 of the Laws of 2021 (Chapter 465), effective April 6, 2022, amended provisions of the Education Law regarding engineering. Generally, it updates engineering licensure requirements to reflect modern practice requirements and promote uniformity for the profession.

Chapter 465 phases out the existing “all-experience” pathway, which permitted candidates with 12 years of working experience to obtain licensure without any formal education. To ensure a smooth transition for pipeline candidates, Chapter 465 permits persons currently seeking licensure under this pathway to submit a licensure application with the appropriate fee to the Department by April 6, 2024 (two years after the effective date) to preserve their potential ability to qualify for licensure based on such experience.

Chapter 465 also removes the requirement that students wait until they are within 20 credit hours of graduation to take the fundamentals of engineering examination. At a national level, most students are now permitted to sit for this examination at any point in their college careers. Chapter 465 conforms to this practice and affords the Commissioner the authority to establish an alternative timeframe.

Chapter 465 additionally:

- permits persons with substantially equivalent educational credentials to sit for the professional engineering examination, provided that all other requirements for licensure are satisfied;
- changes “intern engineer” to “engineer in training”;
- authorizes the Department to waive the education requirement for applicants who have 15 years of lawful practice, typically in another state and possess established and recognized standing in the profession; and
- makes technical changes regarding examination fees.

Proposed Amendments

The proposed amendment repeals the current section 68.1 of the Commissioner’s regulations and adds a new section 68.1 that:

- eliminates the all-experience pathway to licensure after a two-year legacy period;
- requires completion of a bachelor’s degree in engineering from an Engineering Accreditation Commission/Accreditation Board for Engineering and Technology (EAC/ABET) accredited program or the substantial equivalent and four years of engineering experience acceptable to the State Board for Engineering, Land Surveying and Geology (State Board);
- requires completion of a bachelor’s degree in engineering technology from an Engineering Technology Accreditation Commission/Accreditation Board for

Engineering and Technology (ETAC/ABET) accredited program and six years of engineering experience acceptable to the State Board;

- requires completion of a bachelor's degree in engineering or engineering technology that meets the education standard of an accrediting agency acceptable to the Department and six years of experience acceptable to the State Board; or a bachelor's degree in science related to engineering, engineering technology, or architecture and a masters or doctoral degree in engineering that contains a minimum of 24 semester hours of engineering acceptable to the Department in consultation with the State Board and six years of experience acceptable to the State Board.

Additionally, the proposed amendment to subdivision (b) of section 68.3 of the Commissioner's regulations amends a licensure candidate's entry point to the fundamentals of engineering examination by requiring:

- enrollment in an EAC/ABET accredited program in engineering or the substantial equivalent;
- enrollment in an ETAC/ABET accredited engineering technology program;
- completion of a bachelor's degree in engineering from a professional program in engineering determined by the Department to be the substantial equivalent of a registered or accredited engineering program; or
- completion of a bachelor's degree in science related to engineering, engineering technology, or architecture and completion of a masters or doctoral degree in engineering that contains a minimum of 24 semester hours of engineering acceptable to the Department in consultation with the State Board.

Finally, the proposed amendment to subdivision (b) of section 68.3 of the Commissioner's regulations requires an applicant for admission to the principles and practice of engineering examination to have completed the education and experience requirements as set forth in sections 68.1 and 68.2 of the Commissioner's regulations.

Related Regents Item

Not applicable.

Recommendation

It is recommended that the Board of Regents take the following action:

VOTED: That Section 68.1 of the Regulations of the Commissioner of Education be repealed and a new Section 68.1 of the Regulations of the Commissioner of Education be added and Section 68.3 of the Regulations of the Commissioner of Education be amended, as submitted, effective April 12, 2022, as an emergency action, upon a finding by the Board of Regents that such an action is necessary for the preservation of the public health and general welfare in order to timely implement the requirements of Chapter 465 of the Laws 2021, which became effective April 6, 2022.

Timetable for Implementation

If adopted as an emergency rule at the April 2022 Regents meeting, the emergency rule will become effective April 12, 2022. It is anticipated that the proposed amendment will be presented to the Board of Regents for permanent adoption at the September 2022 Regents meeting, after the publication in the State Register and expiration of the 60-day public comment period required under the State Administrative Procedure Act. Because the emergency action will expire before the September 2022 Regents meeting, it is anticipated that two additional emergency actions will be presented at the June and July 2022 meetings. If adopted at the September meeting, the proposed rule will become effective as a permanent rule on September 28, 2022.

Attachment A

AMENDMENT TO THE REGULATIONS OF THE COMMISSIONER OF EDUCATION

Pursuant to sections 207, 6504, 6506, 6507, 7201, 7206 of the Education Law and Chapter 465 of the Laws of 2021

1. Section 68.1 of the Regulations of the Commissioner of Education is REPEALED and a new section 68.1 is added, to read as follows:

68.1 Professional study and experience requirements for professional engineering.

(a) Definition. As used in this section, an acceptable accrediting agency shall mean an organization accepted by the department as a reliable authority for the purpose of accrediting at the postsecondary level and which applies its criteria for granting accreditation in a fair, consistent, and nondiscriminatory manner.

(b) Licensure requirement. To meet the professional education and experience requirements for licensure as a professional engineer in this State, the applicant shall submit evidence of:

(1) graduation, including receipt of the bachelor's degree in engineering, from a professional program in engineering registered by the department, accredited by an acceptable accrediting agency, or determined by the department to be the substantial equivalent of a registered or accredited program; and

(2) completion of a minimum of four years of professional engineering work experience that meets the requirements of section 68.2 of this Part; or

(3) graduation, including receipt of the bachelor's degree in engineering technology, from an engineering technology program registered by the department or accredited by an acceptable accrediting agency; or

(4) graduation, including receipt of the bachelor's degree in engineering, from a professional program in engineering determined by the department to be the substantial equivalent of a registered or accredited engineering program; or

(5) graduation, including receipt of the bachelor of science degree, in a field related to engineering, engineering technology, or architecture as determined to be acceptable by the department, and graduation, including receipt of a master's or doctoral degree from a professional program in engineering determined by the department to be the substantial equivalent of a registered or accredited engineering program and that contains 24 graduate-level semester hours of engineering; and

(6) completion of a minimum of six years of professional engineering work experience that meets the requirements of section 68.2.

(7) For applicants that meet the requirements of paragraphs (1), (3), or (4) of this subdivision, the department shall accept graduation, including receipt of a master's or doctoral degree from a professional program in engineering determined by the department to be the substantial equivalent of a registered or accredited engineering program and that contains 24 graduate-level semester hours of engineering in lieu of not more than one year of work experience set forth in (b)(2) or (b)(6) of this section.

(c) Special provisions. As an alternative to the education/experience credit requirements in subdivision (b) of this section, for applicants who seek licensure and

submit an application, with the required fee, to the department prior to April 6, 2024, the following education/experience credit requirements shall apply:

(1) Prior to licensure the applicant must accrue 12 years of acceptable education/experience credit. One year of education/experience credit may be earned for each year of work experience acceptable to the State Board for Engineering, Land Surveying and Geology pursuant to section 68.2 of this Part. Two years of education/experience credit may be earned for each year of professional engineering education obtained in a program leading to a bachelor's degree in engineering and accredited by an acceptable accrediting agency, as defined in subdivision (a) of this section, which specializes in the fields of engineering or in a program equivalent to such an accredited professional engineering program.

(2) Education/experience credits may also be proportionally earned for various levels and types of postsecondary education which, while not entirely the study of professional engineering, contain important elements/content of such study. Such postsecondary education should demonstrate the following:

(i) that it contains important elements/content of the study of professional engineering, such as mathematics, physics, chemistry, physical and applied sciences, design, and properties of materials;

(ii) that it is in an appropriate subject relevant to the field of professional engineering, such as mathematics, physics, chemistry, physical and applied sciences, design, and properties of materials;

(iii) that it is at an appropriate level of study that would, at a minimum, be the material equivalent of study at an undergraduate level; and

(iv) that it is part of a program accredited by an acceptable accrediting agency pursuant to subdivision (a) of this section or part of a program equivalent to such an accredited program.

(3) In accordance with the provisions of subdivision (c) of this section, the department shall accept evidence of completion of a master's or doctoral degree in engineering in lieu of not more than one year of acceptable education/experience credit.

2. Section 68.3 of the Regulations of the Commissioner of Education is amended, as follows:

68.3 Licensing examinations for engineering.

(a) ...

(1) ...

(2) ...

(b) [Applications for admission to licensing examination, including all required fees, shall be completed and filed not less than 90 days prior to the examination date. An applicant for admission to the fundamentals of engineering examination shall have earned six education/experience credits as defined in section 68.1 of this Part. An applicant for admission to the principles and practice of engineering examination shall have earned 12 education/experience units.] Admission to examinations.

(1) To meet the requirements for admission to the fundamentals of engineering examination, an applicant shall either:

(i) be enrolled in a professional program in engineering registered by the department, or accredited by an acceptable accrediting agency as defined in subdivision (a) of section 68.1 of this Part, or determined by the department to be the

substantial equivalent of a registered or accredited program that leads to a bachelor's degree in engineering; or

(ii) be enrolled in a professional program in engineering technology registered by the department or accredited by an acceptable accrediting agency that leads to a bachelor's degree in engineering technology; or

(iii) have met the education requirements of section 68.1(b)(4) or (5).

(2) To meet the professional education and experience requirements for admission to the principles and practice of engineering examination, an applicant shall have met the requirements in sections 68.1 and 68.2 of this Part.

8 NYCRR §§ 68.1 and 68.3

STATEMENT OF FACTS AND CIRCUMSTANCES
WHICH NECESSITATE EMERGENCY ACTION

The proposed rule is necessary to implement Chapter 465 of the Laws of 2021 (Chapter 465), which became effective April 6, 2022. This proposed rule conforms the Commissioner's regulations to Chapter 465, which amends the Education Law, among other things, by updating the professional engineer licensure requirements to reflect modern practice requirements and promote uniformity for the profession. Chapter 465 updates the engineering licensure requirements by removing the provision allowing for a substitution of 12 years working experience for a bachelor's degree or higher in engineering. Instead, Chapter 465 permits persons seeking licensure as a professional engineer pursuant to the current 12-year experience pathway to submit a licensure application with the appropriate fee to the Department within two years of the effective date of the statute in order to preserve their potential ability to qualify for licensure based on such experience. Chapter 465 further permits persons with substantially equivalent educational credentials, in accordance with the Commissioner's regulations, to sit for the professional engineering examination, provided that all other requirements for licensure are satisfied.

Chapter 465 also changes references from an "intern engineer" to "engineer in training" and permits students in engineering and engineering technology programs approved by the Commissioner to sit for the fundamentals of engineering examination in accordance with the Commissioner's regulations. Currently, students must wait until

they are within 20 credit hours of graduation to take this examination. However, nationally, most students are now permitted sit for this examination much earlier in their college careers. Chapter 465 eliminates the current examination timeframe and vests the Commissioner with the discretion to establish an alternative timeframe to assist students as they approach completion of their undergraduate degree programs.

Additionally, Chapter 465 makes some technical amendments relating to examination fees.

Finally, Chapter 465 authorizes the Department to waive the education requirement for applicants who have 15 years of lawful practice, typically in another state, and possess established and recognized standing in the profession.

Since the Board of Regents meets at fixed intervals, the earliest the proposed rule can be presented for adoption, after expiration of the required 60-day public comment period provided for in the State Administrative Procedure Act (SAPA) sections 201(1) and (5), would be the September 12-13, 2022 Regents meeting. Furthermore, pursuant to SAPA section 203(1), the earliest effective date for the proposed rule, if adopted at the September meeting, would be September 28, 2022, the date the Notice of Adoption would be published in the State Register. However, Chapter 465 became effective April 6, 2022.

Therefore, emergency action is necessary at the April 2022 meeting for the preservation of the public health and general welfare in order to enable the State Education Department to timely implement the requirements of Chapter 465, which, among other things, updates the licensure requirements for professional engineers to help ensure the health, safety and welfare of the public, as professional engineers are

responsible for the design and implementation of critical infrastructure throughout New York.

It is anticipated that the proposed rule will be presented for adoption as a permanent rule at the September 12-13, 2022 Regents meeting, which is the first scheduled meeting after the expiration of the 60-day public comment period prescribed in SAPA for State agency rule makings.