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CHAPTER 4 ENGINEERING LICENSURE

[Prior to 11/14/01, see 193C—1.4(542B)]

193C—**4.1(542B) Requirements for licensure by examination.** The specific requirements for initial licensing in Iowa are established in Iowa Code section 542B.14, and it is the board's intention to issue initial licensure only when those requirements are satisfied chronologically as set forth in the statute.

4.1(1) First, the applicant for initial licensure in Iowa must satisfy the educational requirements as follows:

a. Graduation from an engineering program of four years or more.

(1) If an applicant did not graduate from an Accreditation Board of Engineering and Technology/ Engineering Accreditation Commission (ABET/EAC) or Canadian Engineering Accreditation Board (CEAB) approved curriculum, the applicant must also complete, in addition to the engineering degree, a year of practical experience satisfactory to the board after receiving the engineering degree and prior to taking the Fundamentals of Engineering examination.

(2) An engineering technology curriculum does not constitute an engineering program of four years or more.

b. If an applicant obtained an associate of science degree or a more advanced degree between July 1, 1983, and June 30, 1988, the board shall only require satisfactory completion of a minimum of two years of postsecondary study in mathematics, physical sciences, engineering technology, or engineering at an institution approved by the board and six years of practical experience which, in the opinion of the board, is of satisfactory character to properly prepare the applicant for the Fundamentals of Engineering examination. (Applicants qualifying under this subrule must successfully complete the Fundamentals of Engineering examination by June 30, 2001.)

4.1(2) Second, the applicant must successfully complete the Fundamentals of Engineering examination.

a. An applicant may take the Fundamentals of Engineering examination anytime after the educational requirements as specified above are completed, but the applicant must successfully complete the Fundamental of Engineering examination prior to taking the Principles and Practice of Engineering examination.

b. College seniors studying an ABET/EAC or CEAB approved curriculum may take the Fundamentals of Engineering examination during the final academic year. Applicants will be permitted to take the examination during the testing period which most closely precedes anticipated graduation. However, an official transcript from the applicant's college or university verifying that the applicant graduated must be sent by the registrar to the board office before an applicant's examination results will be released.

c. An applicant who graduated from a satisfactory engineering program and has 25 years or more of work experience satisfactory to the board shall not be required to take the Fundamentals of Engineering examination.

d. An applicant who has earned a Doctor of Philosophy degree from an institution in the United States of America with an accredited Bachelor of Science engineering degree program in the same discipline, or a similar doctoral degree in a discipline approved by the board, shall not be required to take the Fundamentals of Engineering examination.

4.1(3) Third, the applicant must satisfy the qualifying experience requirements. The purpose of this provision is to ensure that the applicant has acquired the professional judgment, capacity and competence to design engineering works, structures, and systems. The following criteria will be considered by the board in determining whether an applicant's experience satisfies the statutory requirements.

a. Oversight. All applicants must have direct supervision or professional tutelage (instruction, guidance, mentoring, review, and critique) from one or more licensed professional engineers. This experience must be verified by one or more licensed professional engineers who are familiar with the applicant's work and can attest that the experience was of the required quality and was accurately described. Verification of the qualifying experience is provided through the reference forms. It is the

responsibility of the applicant to provide reference forms to the licensed professional engineers to complete and return directly to the board.

(1) To be readily acceptable, all of the qualifying experience shall be under the direct supervision and tutelage of one or more licensed professional engineers.

(2) To be considered, a portion of the qualifying experience shall be under the direct supervision or tutelage of one or more licensed professional engineers. In this case, the rest of the qualifying experience shall be under the direct supervision or tutelage of an unlicensed graduate engineer.

b. Documentation of experience. All applicants must submit references and a work project description. Applicants who did not have all of their qualifying experience under the direct supervision and tutelage of one or more licensed professional engineers (see subparagraph 4.1(3) "a"(2)) must also submit the additional supporting documentation described in subparagraph 4.1(3) "b"(3). The board reserves the right to contact the employer and the person providing tutelage on the project for information about the project experience acquired by the applicant.

(1) References. An applicant for the Principles and Practice of Engineering examination shall submit five references on forms provided by the board.

1. At least three of the five references shall be from licensed professional engineers.

2. At least one of the licensed professional engineers who provide a reference for the applicant shall have provided direct supervision or professional tutelage in the course of a mentoring relationship on such matters as technical skills; professional development; the exercise of professional judgment, ethics, and standards in the application of engineering principles and in the review of such matters by others; and the professional obligations of assuming responsible charge of professional engineering works and services.

3. At least one reference shall be from a supervisor. If the applicant has had more than one supervisor, at least two of the references shall be from a supervisor of the applicant. An applicant shall submit supervisor references to verify at least four years of qualifying experience.

4. If an applicant has had professional experience under more than one employer, the applicant shall provide references from individuals with knowledge of the work performed under a minimum of two employers.

5. The board reserves the right to contact references, supervisors, or employers for information about the applicant's professional experience and competence or to request additional references.

6. All licensed professional engineers who submit references for an applicant shall be sufficiently familiar with the applicant's work product to formulate credible opinions on the applicant's capacity to assume responsible charge of professional engineering works and services.

7. Applicants who have not been supervised or provided tutelage by a licensed professional engineer for at least four years of qualifying experience shall submit one or more references to verify tutelage by one or more unlicensed graduate engineers, as provided in subparagraph 4.1(3) "a"(2).

8. The board uses references partially as a means of verifying an applicant's record of experience. The applicant must distribute a reference form to individuals who are asked to submit references for the applicant. To each reference form, the applicant shall attach a copy of the portion of the applicant's experience record that is being addressed by the referring individual.

9. An applicant for the Fundamentals of Engineering examination whose engineering degree is not from an ABET/EAC or CEAB accredited engineering program must provide a reference from a supervisor on a form provided by the board.

10. The board may require the applicant to submit additional letters of reference or other evidence of suitable tutelage and supervision.

11. The board may require an oral interview with the applicant or other evidence to verify the applicant's knowledge and experience in the principles and practice of engineering.

12. The board may conduct interviews with persons providing tutelage or supervision to the applicant.

(2) Work project description. An applicant for initial licensure as a professional engineer must include with the application a work project statement describing a significant project on which the applicant worked during the previous 12 months. The board will review all work project statements and

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will approve only those that include all of the components listed below in paragraphs 4.1(3) "b"(2)"1" to "4" and meet the criteria listed in paragraph 4.1(3) "b"(2)"5."

1. The statement shall describe the applicant's degree of responsibility for the project.

2. The statement shall identify the project's owner and location.

3. The statement shall include the name of the supervisor in charge of the project and, if the supervisor is a professional engineer, the license number of the supervisor.

4. The statement shall be signed and dated by the applicant.

5. Criteria the board shall use in evaluating the acceptability of the project as qualifying experience for the applicant shall include, but not be limited to, the following:

• The degree to which the project and the experience described have progressed from assignments typical of initial assignments to those more nearly expected of a licensed professional;

- The scope and quality of the professional tutelage experienced by the applicant;
- The technical decisions required of the applicant in the project; and
- The professional decisions required of the applicant.

(3) Additional supporting documentation. Applicants who did not have all of their qualifying experience under the direct supervision and tutelage of one or more licensed professional engineers (see subparagraph 4.1(3) "a"(2)) must also submit the following additional supporting documentation.

1. Cover letter to the board requesting consideration.

2. Reference from the unlicensed engineer who provided direct supervision or tutelage on forms provided by the board, to include:

• Assessment of the applicant's performance, development, integrity, and ability to assume responsible charge.

- Description of the engineer's background in education and experience.
- Nature of the tutelage provided to the applicant.

c. Quality. Qualifying experience shall be of such quality as to demonstrate that the applicant has developed technical skill and initiative in the correct application of engineering principles. Such experience should demonstrate the applicant's capacity to review the application of these principles by others and to assume responsibility for engineering work of professional character.

d. Scope. Experience shall be of sufficient breadth and scope to ensure that the applicant has attained reasonably well-rounded professional competence in a basic engineering field, rather than highly specialized skill in a narrow and limited field.

e. Progression. The record of experience shall indicate successive and continued progress from initial, subprofessional work of simpler character to recent, professional work of greater complexity and a higher degree of responsibility, as well as continued interest and effort on the part of the applicant toward further professional development and advancement. In evaluating this progression, the board will consider both subprofessional and professional activity as reported by the applicant. However, only work experience obtained after the applicant's receipt of the qualifying degree will be considered, except as described in paragraph 4.1(3) "f." Subprofessional work includes the time spent as an engineering technician, engineering assistant, inspector, or similar under the direct supervision of a licensed professional engineer. Professional work includes the time during which the applicant was occupied in engineering work of higher grade and responsibility than that defined above as subprofessional work. Time spent in teaching engineering subjects in a college or university at the level of assistant professor or higher may be listed as professional work.

f. Special work experience. Work experience prior to graduation from college may be accepted toward satisfaction of qualifying experience requirements only as follows: Cooperative work programs administered by engineering colleges and verified on the transcript and internships administered by engineering colleges with a verifying reference from the internship supervisor will be considered as half-time credit, with a maximum allowance of 6 months (12 months of cooperative work experience or internship) applicable toward the satisfaction of qualifying experience requirements. An applicant's advanced education, military experience, or both will be reviewed in order to determine if they are applicable toward the statutory requirements for experience.

g. Advanced education. An applicant who has earned a master of science degree that includes research experience, in addition to writing an associated thesis, from an institution in the United States of America with an accredited bachelor of science engineering degree program in the same discipline and who has fulfilled the requirements for a bachelor of science degree may be granted a maximum of one-half year's experience credit. An applicant who has earned a doctor of philosophy degree from an institution in the United States of America with an accredited bachelor of science engineering degree program in the same discipline may be granted a maximum of one year's experience credit in addition to the one-half year's credit for the master of science degree.

h. Teaching experience. Teaching of engineering subjects at the level of assistant professor or higher in an accredited engineering program may be considered as experience, provided the applicant's immediate supervisor is a licensed professional engineer in the jurisdiction in which the college or university is located. If the applicant's immediate supervisor is not a licensed professional engineer, a program of mentoring or peer review by a licensed professional engineer acceptable to the board must be demonstrated. Applicants using teaching or research as experience must have a minimum of four years of acceptable experience in research, industry, or consulting. The board shall consider the complexity of the project(s) presented, the degree of responsibility of the applicant within the project, and other factors the board deems relevant. Academic experience must demonstrate increasing levels of responsibility for the conduct and management of projects involving engineering research, development or application. The board reserves the right to contact employers for information about the applicant's professional experience.

i. Joint applications. Applicants requesting licensure both as a professional engineer and a land surveyor must submit a history of professional experience in both fields. Such histories will be considered separately on a case-by-case basis. The board does not grant full credit for concurrent experience in both professions.

j. Corporate exemption. The purpose of the provisions on qualifying experience which authorize the board to consider some experience that was not acquired under the direct supervision and tutelage of a licensed professional engineer is to provide a path toward licensure for those applicants who gain experience in settings where licensure is not required under the corporate exemption set forth in Iowa Code section 542B.26 or under similar statutory provisions in other jurisdictions. Such applicants may lawfully gain professional engineering experience under the supervision or tutelage of graduate engineers who are not licensed. To aid such applicants, the following guidelines are provided:

(1) The board shall not consider any experience gained under circumstances where the applicant could not lawfully have practiced professional engineering.

(2) The board shall not consider any experience the applicant may have attained in compliance with the law but that was not under the supervision or tutelage of a graduate engineer. The fundamental purpose of qualifying experience is professionally guided training to expand and complement engineering education. Self-guided experience does not qualify.

(3) Persons who desire licensure as professional engineers who are not directly supervised by licensed professional engineers should form tutelage relationships with licensed professional engineers as early in the process of gaining experience as is feasible. Unlicensed graduate engineers are not authorized to offer professional engineering services to the public or to be in responsible charge of such services; nor are they subject to the examinations required for licensure, the professional and ethical standards applicable to licensees, or the regulatory oversight of a licensing authority. Qualifying experience is intended to address both technical competence and the obligations to the public of a licensed professional engineer.

(4) Because the circumstances of individual applicants in corporate exemption settings are diverse, it is not possible to identify the minimum period of time during which the applicant must receive supervision or tutelage from one or more licensed professional engineers to be eligible for licensure. The board shall take into consideration both the quantity and quality of such experience. In general, an applicant's exposure to supervision or tutelage by one or more licensed professional engineers should reflect a sustained period of in-depth interaction from which the licensed engineers are in a position to form credible opinions on the applicant's qualifications to be in responsible charge of engineering services offered to the public as a licensed professional engineer.

(5) The burden is on the applicant to demonstrate to the board's satisfaction that the combination of unlicensed and licensed supervision and tutelage satisfies the requirements of qualifying experience described in this rule.

4.1(4) Fourth, the applicant must successfully complete the Principles and Practice of Engineering examination.

a. To qualify to take this examination, the applicant must present a record of four years or more of practical experience in engineering work which is of a character satisfactory to the board. This experience must have been obtained after the receipt of the qualifying education and prior to the application due date for the examination.

b. An applicant for the Principles and Practice of Engineering examination shall have a minimum of one year of practical experience in the United States of America or a territory under its jurisdiction.

4.1(5) Education and experience requirements. The board will require the minimum number of years set forth on the following chart before an applicant will be permitted to take either the Fundamentals of Engineering or the Principles and Practice of Engineering examination. Column 1 indicates the years of practical experience required prior to the Fundamentals of Engineering examination in addition to the completion of the required educational level. To determine the total years of practical experience required prior to taking the Principles and Practice of Engineering examination, column 2 is added to column 1.

EXPERIENCE REQUIREMENTS FOR EXAMINATION APPLICANTS		
If the applicant's educational level is:	1 The applicant must have the following additional years of experience prior to taking the Fundamentals of Engineering examination:	2* The applicant must have the following years of experience after receipt of the qualifying degree and prior to taking the Principles and Practice of Engineering examination:
A 4-year bachelor's degree in an accredited engineering program	0	4
A 4-year bachelor's degree in mathematics or physical sciences plus a master's degree* in engineering	0	4
A 4-year bachelor's degree in technology or architecture plus a master's degree* in engineering	0	4
A 4-year bachelor's degree in engineering from a nonaccredited engineering program	1	4
A 4-year bachelor's degree in engineering from a nonaccredited engineering program plus a master's degree* in engineering	0	4

*For purposes of this subrule, an applicant's master's degree in engineering must be from an institution in the United States of America with an accredited bachelor's degree in the same curriculum, and the master's degree candidate must be required to fulfill the requirements for the bachelor's degree in the same area of specialization.

4.1(6) Required examinations. All examinations are uniform examinations prepared and graded by the National Council of Examiners for Engineering and Surveying (NCEES). The board may negotiate an agreement with an examination service to administer the examinations to applicants approved by the board, in which case applicants shall pay examination fees directly to the service.

a. Fundamentals of Engineering examination (fundamentals examination). The Fundamentals of Engineering examination is a written examination covering general engineering principles and other subjects commonly taught in accredited engineering programs.

b. Principles and Practice of Engineering examination (professional examination). The Principles and Practice of Engineering examination is a written examination designed to determine

proficiency and qualification to engage in the practice of professional engineering only in a specific branch. The Principles and Practice of Engineering two-module Structural examination is a written examination designed to determine proficiency and qualification to engage in the practice of structural engineering. A separate examination shall be required for each branch in which licensure is granted. An applicant may obtain a Structural branch license by passing either the Principles and Practice of Engineering Civil (Structural) examination or the Principles and Practice of Engineering two-module Structural examination.

c. Passing scores. The board reviews test results for each examination and determines what level shall constitute a minimum passing score for that examination. In making its determination, the board generally is guided by the passing score recommended by the NCEES. The board fixes the passing score for each examination at a level which it concludes is a reasonable indication of minimally acceptable professional competence.

d. Reexamination. An applicant who fails an examination may request reexamination at the next examination period without reapplication to the board. If the applicant intends to retake the examination, the applicant must notify the examination service selected by the board to administer the examinations prior to the application due date for the examination.

e. Failure to appear. An applicant who fails to appear for an examination may sit for the examination the next time it is offered without reapplication provided the application will not be more than one year old at the time of the application due date for the examination and the applicant notifies the examination service selected by the board to administer the examinations prior to the application due date for the examinations.

f. Materials permitted in examination room. For security reasons, applicants shall comply with requirements regarding materials permitted in the examination room as issued by the National Council of Examiners for Engineering and Surveying and provided to candidates prior to the examination.

g. Release of examination results. Results of any examination shall only be reported as pass or fail except that the candidate who fails an examination may be provided with the candidate's converted score and a diagnostic report indicating areas of weakness, as available.

4.1(7) Examination subversion. Any individual who subverts or attempts to subvert the examination process may, at the discretion of the board, have the individual's examination scores declared invalid for the purpose of licensure in Iowa, be barred from engineering licensure and examinations in Iowa, or be subject to the imposition of other sanctions the board deems appropriate.

a. Conduct that subverts or attempts to subvert the examination process includes, but is not limited to:

(1) Conduct that violates the security of the examination materials, such as removing from the examination room any of the examination materials; reproducing or reconstructing any portion of the licensing examination; aiding by any means in the reproduction or reconstruction of any portion of the licensing examination; or selling, distributing, buying, receiving, or having unauthorized possession of any portion of a future, current, or previously administered licensing examination.

(2) Conduct that violates the standards of test administration, such as communicating with any other examination candidate during the administration of the licensing examination; communicating with others outside of the examination site during the administration of the examination; copying answers from another candidate or permitting one's answers to be copied by another candidate during the administration of the examination; or having in one's possession during the administration of the licensing examination any device or materials that might compromise the security of the examination or examination process, such as calculating and computing devices not on the list of devices approved by the examination provider or provided by the examination provider.

(3) Conduct that violates the examination process, such as falsifying or misrepresenting educational credentials or other information required for admission to the licensing examination or impersonating an examination candidate or having an impersonator take the licensing examination on one's behalf.

b. Any examination candidate who wishes to appeal a decision of the board under this subrule may request a contested case hearing. The request for hearing shall be in writing, shall briefly describe the basis for the appeal, and shall be filed in the board's office within 30 days of the date of the board

decision that is being appealed. Any hearing requested under this subrule shall be governed by the rules applicable to contested case hearings under 193—Chapter 7.

[ÅRC 7753B, IAB 5/6/09, effective 6/10/09, ÄRC 9285B, IAB 12/15/10, effective 1/19/11; ARC 9286B, IAB 12/15/10, effective 1/19/11; ARC 9288B, IAB 12/15/10, effective 1/19/11; ARC 9362C, IAB 10/3/12, effective 11/7/12; ARC 0684C, IAB 4/17/13, effective 5/22/13; ARC 0779C, IAB 6/12/13, effective 7/17/13]

193C—**4.2(542B) Requirements for licensure by comity.** A person holding a certificate of licensure to engage in the practice of engineering issued by a proper authority of a jurisdiction or possession of the United States, the District of Columbia, or any foreign country, based on requirements that do not conflict with the provisions of Iowa Code section 542B.14 and who has met standards determined by the board to be substantially equivalent to those required of applicants for initial licensure in this state may, upon application, be licensed without further examination. When determining whether the licensing standards satisfied by a comity applicant are substantially equivalent to those required in Iowa, the board considers each of the four licensing prerequisites in Iowa Code section 542B.14(1) individually. The licensing standards satisfied by the comity applicant must accordingly be equal or superior to those required in Iowa for education, fundamentals examination, experience, and professional examination. Unless expressly stated in this chapter, the board will not consider an applicant's superior satisfaction of one licensing prerequisite, such as a higher level of education than is required in Iowa, as resolving an applicant's lack of compliance with another prerequisite, such as professional examination. Comity applicants are governed by the same standards as are required of applicants for initial licensure in Iowa.

4.2(1) *References.* An applicant for licensure by comity shall submit references on forms provided by the board to verify at least four years of satisfactory experience after the receipt of the qualifying degree. This experience must be under the supervision of a licensed professional engineer, or the applicant must provide unlicensed tutelage references verifying at least four years of satisfactory engineering experience, as provided in paragraph 4.1(3) "*a.*" The board reserves the right to contact employers for information about the applicant's professional experience and competence.

4.2(2) *Basis for evaluation of applications.* Applications for licensure by comity will be evaluated on the following basis:

a. The applicant's record of education, references, practical experience, and successful completion of approved examinations will be reviewed to determine if it currently satisfies the substantive requirements of Iowa Code section 542B.14. In reviewing the education, references, and practical experience of comity applicants, the board will use the same criteria used by the board to determine the eligibility of a candidate for the Principles and Practice of Engineering examination; or

b. The applicant's licensure in a jurisdiction other than Iowa will be reviewed to determine if it was granted only after satisfaction of requirements substantially equivalent to those that are required of applicants for initial licensure in Iowa by Iowa Code section 542B.14.

4.2(3) Evaluation of comity application process.

a. First, the applicant for licensure by comity from a jurisdiction other than Iowa must meet or exceed the education requirements set forth in Iowa Code section 542B.14. In addition, if the applicant did not graduate from an Accreditation Board of Engineering and Technology (ABET)/Engineering Accreditation Commission (EAC) or Canadian Engineering Accreditation Board (CEAB) approved curriculum, the applicant must have completed a year of practical experience satisfactory to the board. This year of experience must be in addition to the four years of practical experience in engineering work as required in paragraph 4.2(3)"d."

b. Second, the applicant must have successfully completed the Fundamentals of Engineering examination.

(1) An applicant who graduated from a satisfactory engineering program and who has 25 years or more of work experience satisfactory to the board shall not be required to take the Fundamentals of Engineering examination.

(2) An applicant who has earned a Doctor of Philosophy degree from an institution in the United States of America with an accredited Bachelor of Science engineering degree program in the same discipline, or a similar doctoral degree in a discipline approved by the board, shall not be required to take the Fundamentals of Engineering examination.

c. Third, the applicant must have successfully completed the Principles and Practice of Engineering examination.

d. Fourth, the applicant must have a record of four years or more of practical experience in engineering work which is of a character satisfactory to the board. This experience must have been obtained after the receipt of the appropriate education and must meet the requirements for practical experience found at paragraph 4.1(3) "a."

e. While the board will consider evidence presented by a comity applicant on non-NCEES examinations successfully completed in a foreign country, the non-NCEES examination will be compared with the appropriate NCEES examination. A non-NCEES professional examination, for instance, must be designed to determine whether a candidate is minimally competent to practice professional engineering in a specific branch of engineering, such as civil, structural, electrical, or mechanical engineering. The examination must be written, objectively graded, verifiable, and developed and validated in accordance with the testing standards of the American Psychological Association or equivalent testing standards. Free-form essays and oral interviews, while valuable for certain purposes, are not equal or superior to NCEES examinations for reasons including the subjective nature of such procedures, lack of verifiable grading standards, and heightened risk of inconsistent treatment.

4.2(4) Education and experience requirements.

a. For applicants who were originally licensed in a jurisdiction other than Iowa prior to July 1, 1988, the board will employ the following chart to determine if the applicant's licensure was granted after satisfaction of requirements substantially equivalent to those which were required by Iowa Code section 542B.14 at the time of the applicant's original licensure. Column 1 indicates the years of practical experience that were required prior to the Fundamentals of Engineering examination in addition to the completion of the required educational level. To determine the total years of practical experience that were required prior to taking the Principles and Practice of Engineering examination, column 2 is added to column 1.

EXPERIENCE REQUIREMENTS FOR COMITY APPLICANTS Who were licensed prior to July 1, 1988		
If the applicant's educational level was:	The applicant must have had the following additional years of experience prior to taking the Fundamentals of Engineering examination:	The applicant must have had the following years of experience after receipt of the qualifying degree and prior to taking the Principles and Practice of Engineering examination:
No post-high school education	8	4
Postsecondary study in mathematics or physical sciences		
One year	7	4
Two years	6	4
Three years	5	4
Four years	3	4
Four-year BS degree in mathematics or physical sciences plus master's degree in engineering	0	4
Postsecondary study in engineering technology programs and architecture		
One year	7	4
Two years	5.5	4
Three years	4	4
Four-year degree in a nonaccredited engineering technology program or BA in architecture	2.5	4
Four-year degree in an accredited engineering technology program	2	4
Bachelor of architecture, four years or more	2	4

EXPERIENCE REQUIREMENTS FOR COMITY APPLICANTS Who were licensed prior to July 1, 1988		
If the applicant's educational level was:	The applicant must have had the following additional years of experience prior to taking the Fundamentals of Engineering examination:	The applicant must have had the following years of experience after receipt of the qualifying degree and prior to taking the Principles and Practice of Engineering examination:
Four-year degree in engineering technology or architecture plus master's degree in engineering	0	4
Postsecondary study in a nonaccredited engineering program		
One year	7	4
Two years	5	4
Three years	3	4
Four-year BS degree	1	4
Four-year degree in a nonaccredited engineering program plus master's degree in engineering	0	4
Postsecondary study in an accredited engineering program		
Two years	6	4
Three years	3	4
Four-year degree in an accredited engineering program	0	4

b. For applicants who were originally licensed in another jurisdiction and who meet the requirements of Iowa Code section 542B.14(1)(a)(3), the board will employ the following chart to determine if the applicant's licensure was granted after satisfaction of requirements substantially equivalent to those which were required by Iowa Code section 542B.14 at the time of the applicant's original licensure. Column 1 indicates the years of practical experience that were required prior to the Fundamentals of Engineering examination in addition to the completion of the required educational level. To determine the total years of practical experience that were required prior to taking the Principles and Practice of Engineering examination, column 2 is added to column 1.

EXPERIENCE REQUIREMENTS FOR COMITY APPLICANTS Who meet the requirements of Iowa Code section $542B.14(1)(a)(3)$			
If the applicant's educational level was:	The applicant must have had the following additional years of experience prior to taking the Fundamentals of Engineering examination:	The applicant must have had the following years of experience after receipt of the qualifying degree and prior to taking the Principles and Practice of Engineering examination:	
College or junior college (mathematics or physical sciences)			
Two years	6	4	
Three years	5	4	
Four-year BS degree	3	4	
Four-year BS degree plus master's degree in engineering	0	4	
All engineering technology programs and architecture			
Two years	6	4	
Three years	5	4	
Four-year degree, nonaccredited technology or BA in architecture	3	4	
Four-year degree, accredited technology	2	4	

EXPERIENCE REQUIREMENTS FOR COMITY APPLICANTS Who meet the requirements of Iowa Code section $542B.14(1)(a)(3)$			
If the applicant's educational level was:	The applicant must have had the following additional years of experience prior to taking the Fundamentals of Engineering examination:	The applicant must have had the following years of experience after receipt of the qualifying degree and prior to taking the Principles and Practice of Engineering examination:	
Four-year degree or more, bachelor of architecture	2	4	
Four-year BS degree, technology or architecture plus master's degree in engineering	0	4	
Engineering program, nonaccredited			
Two years	6	4	
Three years	3	4	
Four-year BS degree	1	4	
Four-year BS degree plus master's degree in engineering	0	4	
Engineering program, accredited			
Two years	6	4	
Three years	3	4	
Four-year BS degree	0	4	

c. For all other applicants who were originally licensed in a jurisdiction other than Iowa on or after July 1, 1988, the board will employ the chart found at subrule 4.1(5) to determine if the applicant's licensure was granted after satisfaction of requirements substantially equivalent to those which are required by Iowa Code section 542B.14.

d. For purposes of this subrule, an applicant's master's degree in engineering must be from an institution in the United States of America with an accredited bachelor's degree in the same curriculum, and the master's degree candidate must be required to fulfill the requirements for the bachelor's degree in the same area of specialization.

[ARC 7753B, IAB 5/6/09, effective 6/10/09; ARC 9287B, IAB 12/15/10, effective 1/19/11; ARC 0779C, IAB 6/12/13, effective 7/17/13]

193C—**4.3(542B) Requirements for a licensee requesting additional examination.** A person holding an active certificate of licensure to engage in the practice of engineering issued by the state of Iowa may, upon written request and payment of the application and examination fees, take additional examinations in other branches of engineering without submitting a formal application to the board as described for initial or comity licensure.

These rules are intended to implement Iowa Code sections 542B.2, 542B.13, 542B.14, 542B.15, 542B.17 and 542B.20.

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