

**ENGINEERING AND LAND SURVEYING EXAMINING
BOARD[193C]**

Adopted and Filed

Rulemaking related to land surveying licensure

The Engineering and Land Surveying Examining Board hereby rescinds Chapter 5, “Land Surveying Licensure,” Iowa Administrative Code, and adopts a new chapter with the same title.

Legal Authority for Rulemaking

This rulemaking is adopted under the authority provided in Iowa Code section 542B.6.

State or Federal Law Implemented

This rulemaking implements, in whole or in part, Iowa Code chapter 542B and Executive Order 10 (January 10, 2023).

Purpose and Summary

The revisions to Chapter 5 implement changes recommended by Executive Order 10. The rules of Chapter 5 provide information on compliance to become licensed as a professional land surveyor. Professional licensing ensures a baseline level of proven qualifications and expertise, which helps protect the public from unqualified practitioners. These revisions also support changes to Iowa Code section 542B.14 outlined in 2023 Iowa Acts, Senate File 197.

Public Comment and Changes to Rulemaking

Notice of Intended Action for this rulemaking was published in the Iowa Administrative Bulletin on January 10, 2024, as **ARC 7408C**. Public hearings were held on January 30, 2024, and January 31, 2024, at 12:50 p.m. at 6200 Park Avenue, Des Moines, Iowa, and virtually. No one attended the public hearings. No public comments were received. No changes from the Notice have been made.

Adoption of Rulemaking

This rulemaking was adopted by the Board on February 15, 2024.

Fiscal Impact

This rulemaking has no fiscal impact to the State of Iowa. No current fees are being changed, and no new fees are being imposed.

Jobs Impact

After analysis and review of this rulemaking, no impact on jobs has been found.

Waivers

Any person who believes that the application of the discretionary provisions of this rulemaking would result in hardship or injustice to that person may petition the Department of Inspections, Appeals, and Licensing for a waiver of the discretionary provisions, if any, pursuant to 481—Chapter 6.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rulemaking by executive branch agencies, may, on its own motion or on written request by any individual

or group, review this rulemaking at its [regular monthly meeting](#) or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

Effective Date

This rulemaking will become effective on April 10, 2024.

The following rulemaking action is adopted:

ITEM 1. Rescind 193C—Chapter 5 and adopt the following **new** chapter in lieu thereof:

CHAPTER 5
LAND SURVEYING LICENSURE

193C—5.1(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.

5.1(1) The applicant for initial licensure in Iowa must satisfy the education plus experience requirements stated in Iowa Code section 542B.14 "b"(1). The chart in subrule 5.1(8) details education-based experience requirements. If the applicant's degree is not in surveying, surveying technology, engineering, or engineering technology, the applicant must have taken a minimum of nine credit hours in mathematics, of which at least one course must include trigonometry in its coursework, and may include college algebra, trigonometry, analytic geometry, differential and integral calculus, linear algebra, numerical analysis, probability and statistics, and advanced calculus; and a minimum of nine credit hours in basic sciences, which must cover one or more of the following topics: general chemistry, advanced chemistry, biology, geology, ecology, meteorology, astronomy, forestry, general physics, advanced physics, or land surveying, for the applicant's degree to be a qualifying degree.

a. Internet or online degrees will only be considered as qualifying degrees if the institution issuing the degree is accredited by a recognized accreditation board or the degree is evaluated as substantially equivalent to that of an accredited program by the National Council of Examiners for Engineering and Surveying (NCEES). The board may accept evaluations from other recognized foreign credential evaluators satisfactory to the board. Initiating the evaluation and the expense of the evaluation are the responsibilities of the applicant. Each evaluation shall be sent directly to the board from the evaluation service and shall include a copy of the transcript in the form sent to the evaluation service directly from the educational institution.

b. Internet or online degrees will only be considered as qualifying degrees if the institution issuing the degree is accredited by a recognized accreditation board.

5.1(2) The applicant must successfully complete the Fundamentals of Land Surveying examination. The applicant may take the Fundamentals of Land Surveying examination any time after the education and experience requirements described above are completed.

5.1(3) The applicant must successfully complete the Principles and Practice of Land Surveying examination. An applicant may take the Principles and Practice of Land Surveying examination after passing the Fundamentals of Land Surveying examination.

5.1(4) The applicant satisfies the qualifying experience requirements set forth in this chapter.

5.1(5) The applicant must successfully complete the Iowa-specific land surveying examination administered by the board.

5.1(6) Work project description. A complete application includes a statement of approximately 200 words describing a significant project on which the applicant worked closely during the last 12 months. The statement describes the applicant's degree of responsibility for the project and identifies the project's owner and its location. The statement is signed and dated. The criteria the board uses in evaluating the acceptability of the project as qualifying experience for the applicant includes, but is not limited to, the following:

- a. The degree to which the project and the experience described has progressed from assignments typical of initial assignments to those more nearly expected of a licensed professional;
- b. The scope and quality of the professional tutelage experienced by the applicant;
- c. The technical decisions required of the applicant in the project; and
- d. The professional decisions required of the applicant.

The board reserves the right to contact the employer and the person providing tutelage on the project for information about the project experience presented to the applicant.

5.1(7) References.

a. An applicant for the Principles and Practice of Land Surveying examination will submit a minimum of three references, on forms provided by the board, in accordance with the following:

- (1) The references will be from licensed professional land surveyors.
- (2) If the applicant has had more than one supervisor, at least two of the references are from a supervisor of the applicant.
- (3) If an applicant has had professional experience under more than one employer, the applicant provides references from individuals with knowledge of the work performed under a minimum of two employers.

(4) The board reserves the right to contact employers for information about the applicant’s professional experience and competence or to request additional references.

b. An applicant for the Fundamentals of Land Surveying examination will provide three references on forms provided by the board.

5.1(8) Education and experience requirements. The board requires the minimum number of years set forth on the following chart before an applicant may take either the Fundamentals of Land Surveying or the Principles and Practice of Land Surveying examination. To determine the total years to become licensed as a land surveyor in Iowa, column 2 is added to column 1.

EXPERIENCE REQUIREMENTS		
If the applicant’s educational level was:	The applicant must have the following years of experience prior to taking the Fundamentals of Land Surveying examination and the Principles and Practice examination:	The applicant must have the following additional years of experience before the board will issue a license in land surveying:*
A college program with fewer than nine credit hours of surveying [subrule 5.1(1)]		
Two-year degree	4	4
Four-year degree	2	4
Graduate degree	1	4
A college program with nine or more credit hours of surveying		
Two-year degree	0	4
Four-year degree	0	4
Graduate degree	0	4

*This allows applicants to take the Principles and Practice of Land Surveying examination and Iowa State Specific Land Surveying examination during this time period.

5.1(9) Practical experience requirements. Practical land surveying experience, of which a minimum of one-half shall be field experience, is required prior to licensing. All practical experience must occur after high school graduation and be under the tutelage of a professional land surveyor.

a. *Quality.* Experience will demonstrate that the applicant has developed technical skill and initiative in the correct application of surveying principles. For the purposes of this chapter, one year of experience shall consist of 1,872 hours of full- or part-time employment, as attested to by the applicant’s references. An applicant may use a maximum of 1,872 hours in any one 12-month period to satisfy the experience requirements. Full-time students, as defined by the student’s school, may not, simultaneously, be considered full-time employees for the purposes of this chapter.

b. Scope. Experience will be of sufficient breadth and scope to ensure that the applicant has attained reasonably well-rounded professional competence in land surveying. For purposes of this rule, field experience is considered of sufficient breadth and scope if the applicant conducts research for boundary surveys, conducts boundary monument recovery field work, gathers field information necessary for boundary line recovery, analyzes all collected boundary recovery field data, establishes land surveying monuments in the field, prepares land surveying documents, as defined in this chapter, and writes property descriptions.

c. Progression. The record of experience will indicate successive and continued progress from initial work of simpler character to recent work of greater complexity and higher degree of responsibility.

d. Advanced education and military experience. An applicant's advanced education, military experience, or both will be reviewed to determine if they are applicable toward the statutory requirements for experience.

e. Joint applications. Applicants requesting licensure both as professional engineers and professional land surveyors 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.

5.1(10) Examinations. The board prepares and grades the Iowa State Specific Land Surveying examination administered to professional land surveyor candidates. All other examinations are uniform examinations prepared and graded by the 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 pay examination fees directly to the service.

An applicant who has failed two consecutive examinations of the state-specific portion of the professional land surveying examination is not allowed to retake the state-specific portion for one year.

a. Materials permitted in examination room. For security reasons, applicants shall comply with requirements regarding materials permitted in the examination room as issued by the NCEES and provided to candidates prior to the examination.

b. Release of examination results. Results of any examination are only 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.

193C—5.2(542B) Requirements for licensure by comity. A person holding a certificate of licensure to engage in the practice of land surveying 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 of a standard not lower than that specified in the applicable licensure Act, may, upon application and successful completion of the Iowa State Specific Land Surveying examination, be licensed without further examination. Comity applicants are governed by the same standards as are required of Iowa applicants.

5.2(1) References. An applicant for licensure by comity shall submit one or more professional land surveyor references on forms provided by the board to verify the number of years of satisfactory experience required with the applicant's level of education. The board reserves the right to contact employers for information about the applicant's professional experience and competence.

5.2(2) Comity application process.

a. The applicant will provide proof of active land surveying licensure in another jurisdiction and be in good standing with that jurisdiction's licensing authority.

b. The applicant for licensure by comity from a jurisdiction other than Iowa will satisfy the education and experience requirements as set forth in Iowa Code section 542B.14 and rule 193C—5.1(542B) for licensure by examination.

c. The applicant needs to successfully complete the Fundamentals of Land Surveying examination.

d. The applicant needs to successfully complete the Principles and Practice of Land Surveying examination.

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 land surveying. 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 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.

e. The applicant must successfully complete an Iowa State Specific Land Surveying examination administered by the board.

5.2(3) Substantial equivalency. Pursuant to Iowa Code section 546.10(8), the board may grant a comity application for licensure as a professional land surveyor if the board concludes that the applicant has met or exceeded all requirements for licensure applicable to initial applicants in Iowa, other than the sequence in which experience must be attained.

193C—5.3(542B,272C) Licensure by verification. In addition to the requirements of rule 193—14.4(272C), professional land surveying candidates applying for an Iowa license by verification must pass the Iowa State Specific Land Surveying examination prior to being issued a license. The board will issue a temporary license that is valid for a period of three months to professional land surveying candidates who have not yet passed the Iowa State Specific Land Surveying examination prior to their application. The professional land surveying candidate may request one renewal of the temporary license for an additional period of three months.

This rule is intended to implement Iowa Code section 272C.12.

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

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EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement 3/6/24.