

CHAPTER 1800
BOARD OF ARCHITECTURE, ENGINEERING,
LAND SURVEYING, AND LANDSCAPE
ARCHITECTURE
LICENSURE

1800 0500 FEES
 1800 1000 EDUCATION AND EXPERIENCE
 1800 1100 PROCEDURES
 1800 1200 WRITTEN EXAMINATION
 1800 2500 EDUCATION AND EXPERIENCE
 1800 2600 ORAL EXAMINATION
 1800 2700 WRITTEN EXAMINATION

1800 2800 ENGINEERS QUALIFIED BY
 GRADUATION, LONG EXPERIENCE,
 AND EXAMINATION
 1800 2805 QUALIFYING EXPERIENCE
 DEFINED
 1800 2900 PROCEDURES

1800.0500 FEES.

Subpart 1. Requirements. Application for examination for certification as engineer-in-training, or licensure, including renewal of licensure, as an architect, professional engineer, land surveyor, or landscape architect, shall be accompanied by a fee in the amount provided for in this part. The fee for examination for certification as land surveyor-in-training shall be paid upon approval of the application by the board.

[For text of subp 2, see M.R.]

Subp. 3. Initial licensure and renewal. The fee for licensure, or renewal of licensure, as an architect, professional engineer, land surveyor, or landscape architect is \$58 per biennium. The initial license fee is prorated at six-month intervals during each biennium. The fee for months 24 to 18 is \$58; for months 18 to 12, \$43.50; for months 12 to 6, \$29; and for months 6 to 0, \$14.50. The renewal fee shall be paid biennially on or before June 30 of each even-numbered year. The board may delete from the roster of licensees the name of any licensee who fails to timely pay the required renewal fee. The renewal fee, when paid by mail, is not timely paid unless it is postmarked on or before June 30 of each even-numbered year.

[For text of subp 4, see M.R.]

Subp. 5. Certification or licensure examination fee. The fee for examination for certification or licensure as an architect, professional engineer, land surveyor, or landscape architect is as follows:

A. Architect Registration Examination (ARE), 1990 \$385, 1991 \$475.

B. Professional engineer:

(1) fundamentals of engineering examination, \$30;

(2) principles and practice of engineering examination, \$70.

An applicant for examination in more than one branch of engineering shall submit a separate examination fee for each additional branch of engineering for which the applicant has applied for examination.

An applicant, currently licensed as a professional engineer (civil) may apply for registration as a professional engineer (structural) by submitting an examination fee of \$110 for 1990 and \$170 for 1991 and thereafter.

[For text of item C, see M.R.]

D. Landscape architect Uniform National Examination (UNE), 1990 \$325, 1991 \$345.

Subp. 6. Reexamination fees. The fee for retaking all or any part of any exam-

ination for certification or licensure is as follows each time the examination, or any part of it, is retaken:

A. Architect, uniform architect registration examination:

- (1) division A, predesign, 1990 \$40, 1991 \$50;
- (2) division B, site design;
 - (a) written, 1990 \$25, 1991 \$35;
 - (b) graphics, 1990 \$60, 1991 \$70;
- (3) division C, building design, 1990 \$90, 1991 \$100;
- (4) division D/F, structural technology, general and long span, 1990 \$35, 1991 \$45;
- (5) division E, structural technology, lateral forces, 1990 \$20, 1991 \$30;
- (6) division G, mechanical, plumbing, electrical, and life safety, 1990 \$40, 1991 \$50;
- (7) division H, materials and methods, 1990 \$40, 1991 \$50;
- (8) division I, construction documents and services, 1990 \$40, 1991 \$50.

B. Professional engineer:

- (1) fundamentals of engineering, \$30;
- (2) principles and practice of engineering, \$60;
 - (a) special structural I, 1990 \$40, 1991 \$60;
 - (b) special structural II, 1990 \$60, 1991 \$110.

C. Land surveyor:

- (1) fundamentals of land surveying, \$32.50;
- (2) principles and practice of land surveying:
 - (a) part III, \$20;
 - (b) part IV A, \$35;
 - (c) part IV B, \$15;
 - (d) parts III and IV A, \$55;
 - (e) parts III and IV B, \$35;
 - (f) parts IV A and IV B, \$50.

D. Landscape architect:

- (1) section 1, professional practice, 1990 \$28, 1991 \$29;
- (2) section 2, design, 1990 \$34, 1991 \$36;
- (3) section 3, design application, 1990 \$100, 1991 \$107;
- (4) section 4, design implementation, 1990 \$95, 1991 \$101; and
- (5) section 5, grading and drainage, 1990 \$68, 1991 \$75.

[For text of subp 7, see M R]

Statutory Authority: *MS s 214.06; 326.06*

History: *14 SR 2988*

1800.1000 EDUCATION AND EXPERIENCE.

Subpart 1. Written examination requirement. An applicant for licensure as an architect shall pass a written examination as provided in part 1800.1200. Written examinations are required of all applicants except those licensed under part 1800.0800, items D and G, that apply to those architects licensed in one or more states other than Minnesota. An applicant for licensure under part 1800.0800, items D and G, must satisfy the Minnesota licensing requirements that were in effect at the time of the applicant's original licensure in the other state.

Subp. 1a. **Admission to written examination.** To qualify for admission to the written examination, an applicant shall present evidence that the applicant has obtained at least 13 qualifying credits as provided in this part. At least ten of the qualifying credits must be for education and at least three of the qualifying credits must be for experience. The qualifying credits shall be granted as provided in subparts 5 and 6.

Subp. 2. [Repealed, 14 SR 2988]

Subp. 3. [Repealed, 14 SR 2988]

Subp. 4. [Repealed, 14 SR 2988]

Subp. 5. **Credits for education.** Qualifying credits for education shall be granted as follows:

A. An applicant who has graduated from an architectural curriculum accredited by the National Architectural Accrediting Board (NAAB), shall, at the time of graduation or within two years after graduation, receive ten qualifying credits for education.

B. An applicant holding a four-year baccalaureate preprofessional degree in environmental design or architectural studies shall be granted credit depending on the number of years of architectural design courses successfully completed. An applicant with three years of design courses shall be granted eight qualifying credits. An applicant with two years of design courses will be granted six qualifying credits. In no case shall the applicant holding a preprofessional degree be granted less than six qualifying credits for education.

C. An applicant holding a four-year baccalaureate degree from the following curricula shall be given six qualifying credits for education:

(1) curricula in architectural, chemical, civil, electrical, mechanical, or structural engineering accredited by the Accreditation Board for Engineering and Technology (ABET);

(2) curricula in landscape architecture accredited by the American Society of Landscape Architects Committee on Education; or

(3) curricula in interior design accredited by the Foundation on Interior Design Education Research.

D. An applicant holding a two-year associate degree in architectural technology or architectural drafting from a community college or technical institute shall receive two qualifying credits for education.

E. For the purposes of this subpart, 32 semester credit hours or 48 quarter credit hours is considered to be one year of education. Fractions of a year of education shall be given credit in the amount earned.

F. An applicant holding a degree or having completed coursework from a foreign college or university shall be granted credit toward the requirements of this subpart on the same basis as a graduate of a United States college or university if the board determines that the educational requirements for the degree are equivalent to the requirements of this subpart. The applicant shall furnish a copy of the applicant's grade transcript, including course descriptions of courses successfully completed, in English, with the initial application for evaluation by the board.

Subp. 6. **Credits for experience.** Qualifying credits for experience shall be granted as follows:

A. The applicant's total experience must meet the requirements for qualifying experience in subpart 7.

B. Experience must be acquired after graduation, except that continuous experience in periods of ten or more weeks gained before graduation shall be counted if gained as specified in subpart 7 after graduation from high school.

C. Each year of experience gained under the direct supervision and control of a licensed architect shall count for one qualifying credit.

D. Each year of architecturally related experience gained under the direct supervision and control of a licensed professional engineer, licensed landscape architect, or an interior designer certified by the American Society of Interior Designers shall count for one-half qualifying credit.

Subp. 7. **Qualifying experience defined.** As used in this part, qualifying experience consists of experience gained in each of the following areas of the practice of architecture in accordance with the minimum number of hours shown.

A. Design and construction:

- (1) programming and client contact, 80 hours;
- (2) site and environmental analysis, 80 hours;
- (3) schematic design, 120 hours;
- (4) building code analysis, 80 hours;
- (5) code research, 120 hours;
- (6) design development, 320 hours;
- (7) construction documents, 1,240 hours;
- (8) specifications and materials, 120 hours; and
- (9) document checking, 120 hours.

B. Construction and administration:

- (1) bidding procedures, 80 hours;
- (2) construction office, 120 hours; and
- (3) construction observation, 120 hours.

C. Office management:

- (1) office procedures, 120 hours; and
- (2) professional activities, 80 hours.

The number of hours shown are minimum time requirements for the areas of practice listed and do not represent three years of experience. More experience may be gained in any of these areas of practice to total 5,600 hours or three years of experience. Persons requiring more than three years of experience shall document qualifying experience in the amount of 1,867 hours for each year required.

Subp. 8. **Future admission requirements.** Effective January 1, 1991, admission to the registration examination is limited to holders of a degree from a curriculum accredited by the National Architectural Accrediting Board (NAAB), or architectural education equivalent to that curriculum as determined by the board. Persons with board approved applications as of January 1, 1991, are permitted to continue the examination process until licensed to practice architecture in Minnesota.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.1100 PROCEDURES.

Subpart 1. **Completion date.** An applicant may request to be admitted to an examination if the applicant has completed, or will have completed the educational and experience requirements in part 1800.1000 by the time of the examination.

Subp. 2. **Preliminary admission request.** Applicants shall submit to the board a preliminary request for admission to the licensing examination. The request shall be submitted on a form provided by the board and must include a detailed listing of all architecturally related experience gained in accordance with part 1800.1000. The experience listing shall include the name and mailing address of the applicant's supervising licensed architect or other supervisor for each period of employment. A transcript of grades showing the date of award of any degree earned shall accompany the submittal. Upon approval of the preliminary request

by the board, the applicant shall be provided formal application materials. The preliminary request shall be submitted to the board by February 1 for the June examination and by August 1 for the December examination.

Subp. 3. Formal admission application. Applicants shall by April 1 for the June examination and by October 1 for the December examination submit a formal application for admission to the licensing examination on a form provided by the board. The formal application shall include one signed copy of board rules of professional conduct and a fee as specified in part 1800.0500, subpart 5, item A.

Subp. 4. Obtaining application. Application materials may be obtained by calling or writing the board office.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.1200 WRITTEN EXAMINATION.

Subpart 1. Architect Registration Examination. The Architect Registration Examination (ARE) shall be administered twice annually at a time and place determined by the board to those applicants determined by the board to meet the requirements of part 1800.1000 for admission to the examination. Any person failing one or more parts of the ARE shall retake the failed parts.

Subp. 2. [Repealed, 14 SR 2988]

Subp. 3. [Repealed, 14 SR 2988]

Subp. 4. [Repealed, 14 SR 2988]

Subp. 5. Equipment during examinations. Silent, hand-held, battery-operated electronic calculators may be used as required during the ARE.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2500 EDUCATION AND EXPERIENCE.

Subpart 1. Written examination requirement. An applicant for licensure as a professional engineer shall pass a written examination as provided in this subpart. Written examinations are required of all applicants except those licensed under part 1800.0800, items E and G, that apply to those professional engineers licensed in one or more states other than Minnesota. An applicant for licensure under part 1800.0800, items E and G, must satisfy the Minnesota licensing requirements that were in effect at the time of the applicant's original licensure in the other state. The written fundamentals of engineering (EIT) examination shall be waived by the board if the applicant meets the requirements in part 1800.2800.

Subp. 2. Admission to written examination. To qualify for admission to the written examination, the applicant shall present evidence of:

A. Graduation from an engineering curriculum accredited by the Engineering Accrediting Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET) at the time of graduation; and

B. Completion of a minimum of four years of qualifying engineering experience, if the applicant has graduated from a baccalaureate curriculum in engineering accredited by the ABET-EAC. Three years of qualifying engineering experience is required, if the applicant has graduated from a masters or doctoral curriculum in engineering from an institution with an ABET-EAC accredited baccalaureate curriculum in that discipline of engineering. Not more than two years credit shall be allowed for qualifying engineering experience, gained before graduation from an accredited engineering curriculum. The two years experience before graduation must have been gained after completion of the second year of approved engineering education. The experience shall be credited at the rate of 50 percent up to the maximum allowable credit of two years.

Subp. 3. **Exception for nonaccredited education.** An applicant who does not meet the requirements of subpart 2 may qualify for admission to the examinations if evidence is submitted to the board that education and qualifying engineering experience completed meet the following requirements:

A. The education requirements of an applicant whose education was not obtained in an engineering curriculum accredited by the Accreditation Board for Engineering and Technology shall be accepted only if the education is determined by the board to be equivalent to the content of the accredited curriculum required for a bachelor of science degree in engineering. The applicant shall be required to submit a transcript of grades, along with descriptions of courses taken from the educational institution from which the applicant graduated, for evaluation by the board to determine the credit to be allowed for that education.

B. If the applicant holds a degree from a nonaccredited four-year engineering curriculum, that person will be required to document six years of qualifying and verifiable engineering experience following graduation. If the applicant also holds a master's or doctoral degree in engineering, the applicant shall document five years of qualifying and verifiable engineering experience following graduation. Up to two years credit shall be allowed for qualifying and verifiable engineering experience gained before graduation, as provided in subpart 2, item B.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2600 ORAL EXAMINATION.

An applicant shall appear before the board for oral examination and submit two exhibits of engineering work the applicant has performed if:

A. the experience record does not clearly indicate the required qualifying engineering experience;

B. the applicant does not hold a degree from an approved engineering curriculum; or

C. the applicant qualifies for waiver of the fundamentals of engineering examination as provided in part 1800.2800.

An applicant residing in an overseas area shall submit one exhibit of the applicant's engineering work with a written critique of that exhibit in lieu of the oral examination.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2700 WRITTEN EXAMINATION.

Subpart 1. **Two-part examination.** The written examination consists of the two parts described in subparts 1a and 2.

Subp. 1a. **Fundamentals examination.** Part I is the fundamentals of engineering examination that may be taken upon graduation from an engineering curriculum meeting the requirements of part 1800.2500. The passing of this examination gives the applicant the status of engineer-in-training as defined in Minnesota Statutes, section 326.10, subdivision 7. The applicant shall not again be required to take this examination. The applicant shall take and pass the fundamentals of engineering examination (EIT) before being permitted to take the professional examination.

Subp. 2. **Professional examination.** Part II is the professional examination covering the principles and practice of engineering examination, is an examination in a field of major practice and is required as outlined in this subpart. Examinations are presently offered in the following fields of major practice in engineering: aeronautical/aerospace, agricultural, ceramic, chemical, civil, elec-

trical, fire protection, geological, industrial, manufacturing, mechanical, metallurgical, mining/minerals, nuclear, petroleum, sanitary, and structural.

Subp. 3. Scope of examinations. The scope of the fundamentals of engineering examination, EIT and the principles and practice of engineering examination is as follows:

A. Fundamentals of engineering examination, EIT: multiple-choice questions in mathematics and the basic and engineering sciences as presented in accredited college or university engineering curriculum. Allotted time: eight hours.

B. Principles and practice of engineering examination: problems embracing knowledge of professional practice and applied economics as acquired in connection with the planning, design, and construction of engineering work during the required period of qualifying engineering experience. This part of the examination, together with the oral examination or exhibit with written critique, shall not be permitted until the full required period of qualifying engineering experience has been completed. Allotted time: eight hours.

Subp. 4. Purpose of the principles and practice of engineering examination. The principles and practice of engineering examination is given to determine the proficiency of the applicant in professional practice. This examination shall include questions designed to test whether the applicant has learned to apply the knowledge and understanding of the basic and engineering sciences gained through training and experience to the solution of engineering problems.

[For text of subp 5, see M.R.]

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2800 ENGINEERS QUALIFIED BY GRADUATION, LONG EXPERIENCE, AND EXAMINATION.

The fundamentals of engineering examination must be waived in those cases where the applicant furnishes evidence of:

A. graduation from an accredited engineering curriculum, or receipt of a graduate degree based upon at least one academic year of resident study in a department whose undergraduate curriculum is accredited by the Accreditation Board for Engineering and Technology (ABET); being at least 40 years of age; and having a verified professional engineering record of 20 years or more of qualifying engineering experience;

B. holding membership in a British Institute of Engineering as a chartered engineer by examination or other national certification by examination as approved by the board; or

C. having a doctorate degree in engineering from an educational institution whose baccalaureate curriculum is accredited by ABET-EAC or whose education is equivalent thereto.

An applicant qualifying under item A, B, or C shall pass a written professional practice examination of at least eight hours duration. To qualify for waiver of the fundamentals of engineering examination under item A, the applicant's engineering experience shall show responsible charge of engineering projects for at least ten years and advancement in the character of the work performed. The experience gained before reaching the age of 20 years shall not be credited as a part of the required engineering experience, except that graduation from an accredited baccalaureate engineering curriculum shall be considered equivalent to four years of engineering experience. Credit shall not be given for more than a total of four years experience because of undergraduate educational qualifications.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2805 QUALIFYING EXPERIENCE DEFINED.

As used in this part and parts 1800.2600, 1800.2700, and 1800.2800, qualifying experience consists of varied, progressive, nonrepetitive, practical experience at engineering work, developing the ability to apply the theoretical knowledge gained during academic training in making sound judgments in solving engineering problems. The varied experience must include increments of design, planning, technical specification, codes and standards research and analysis, engineering economics, safety, observation, and inspection of construction of products. Experience shall be written in detail and submitted with the application for evaluation and approval by the board.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.2900 PROCEDURES.

Subpart 1. Application deadline. An applicant shall submit an application for admission to the fundamentals of engineering examination explained in part 1800.2700, subpart 1a, by February 1 for the April examination or by August 1 for the October examination. Application shall be made on a form provided by the board and shall include the fee specified in part 1800.0500, subpart 5, item B, subitem (1). A transcript of grades showing the date of award of the degree earned shall be submitted before the applicant may be certified as engineer-in-training.

Subp. 2. Preliminary request for professional examination. An applicant shall submit a preliminary request for admission to the principles and practice of engineering examination explained in part 1800.2700, subpart 2, by November 1 for the April examination or by June 1 for the October examination. The request shall be made on a form provided by the board and shall include a detailed listing of engineering experience gained. The experience listing shall include the name and mailing address of the applicant's supervisor for each period of employment. The board shall verify listed experience by sending an employer reference form to each listed supervisor. A transcript of grades showing the date of award of the degree earned shall accompany the completed form, unless previously submitted. Upon approval of the preliminary request by the board, the applicant will be so notified and provided formal application materials.

Subp. 3. Formal application for professional examination. An applicant shall submit a formal application for admission to the principles and practice of engineering examination by January 2 for the April examination or by August 1 for the October examination. Application shall be made on a form provided by the board and shall include one signed copy of board rules of professional conduct and a fee as specified in part 1800.0500, subpart 5, item B, subitem (2).

Subp. 4. Obtaining application material. Application materials may be obtained by calling or writing the board office.

Statutory Authority: *MS s 326.06*

History: *14 SR 2988*

1800.3000 [Repealed, 14 SR 2988]