TITLE 864 STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

Final Rule

LSA Document #13-333(F)

DIGEST

Amends <u>864 IAC 1.1-2-2</u> to eliminate a prohibition on otherwise qualifying degrees obtained entirely by correspondence from qualifying. Amends <u>864 IAC 1.1-3</u> and <u>864 IAC 1.1-4.1</u> to make changes necessary or appropriate for conversion of the fundamentals of engineering and ultimately the principles and practice of engineering examination from paper to computer based, allows most individuals taking the fundamentals of engineering examination to apply for admission to the examination directly to the testing service and without meeting the educational and experience requirements prior to being allowed to take the examination, and reduces the requirements that must be met by an examinee who has failed an examination three times to be readmitted to the examination. Amends <u>864 IAC 1.1-12-1</u> to revise the fee for engineering intern applicants. Amends <u>864 IAC 1.1-15</u> to allow certain activities to qualify for continuing education credit, to increase the amount of continuing education credit that an instructor at a continuing education course may receive, and to expand the extent to which continuing education courses may qualify for continuing education credit without Board approval. Makes various corresponding changes and revisions of obsolete or archaic provisions in the Board's rules. Effective January 1, 2014.

864 IAC 1.1-2-2; 864 IAC 1.1-2-4; 864 IAC 1.1-3-2; 864 IAC 1.1-3-3; 864 IAC 1.1-3-4; 864 IAC 1.1-4.1-1; 864 IAC 1.1-4.1-2; 864 IAC 1.1-4.1-3; 864 IAC 1.1-4.1-3; 864 IAC 1.1-4.1-5; 864

SECTION 1. 864 IAC 1.1-2-2 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-2-2 Engineers; education and work experience

Authority: <u>IC 25-31-1-7; IC 25-31-1-8</u> Affected: <u>IC 25-31-1-12</u>

Sec. 2. (a) This section establishes the minimum education and experience requirements under <u>IC 25-31-1-12</u> for admission to the professional engineer examination.

(b) The following table establishes provisions for evaluating combined education and experience to determine if it is sufficient to satisfy minimum registration requirements under <u>IC 25-31-1-12</u> for professional engineer registration applicants holding the stated degrees:

Education (Qualifying Degree)	Minimum Years of Progressive Work Experience Following Baccalaureate Degree
Doctorate in an engineering discipline following a baccalaureate degree in an approved engineering curriculum	2
Master of science degree in an engineering discipline following a baccalaureate degree in an approved engineering curriculum	3
Doctorate in an engineering discipline following a baccalaureate degree which is not in an approved engineering curriculum	4
Master of science degree in an engineering discipline following a baccalaureate degree which is not in an approved engineering curriculum	5
Baccalaureate degree in an approved engineering curriculum	4
Baccalaureate degree and completion of specific educational courses as required in subsection (c)	6

(c) The education of all applicants, except those who have obtained a baccalaureate degree in an approved engineering curriculum, must include the following:

(1) At least twelve (12) semester credit hours in college level mathematics, excluding college algebra and trigonometry, which must include a minimum of nine (9) semester credit hours of calculus and a minimum of three (3) semester credit hours of advanced calculus based mathematics, such as differential equations, linear

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algebra, or numerical analysis.

(2) At least eight (8) semester credit hours in college level courses in the physical sciences, which must include a minimum of three (3) semester credit hours of calculus based physics and a minimum of three (3) semester credit hours of chemistry.

(3) At least twelve (12) semester credit hours of engineering sciences that require calculus as a prerequisite or corequisite.

(4) Effective January 3, 2003, At least twelve (12) semester credit hours in engineering design.

(d) For a course to qualify as an engineering design course, the course must instruct on the decision making process in which the basic sciences and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing, and evaluation. The content of an engineering design course must include some of the following features:

(1) Development of student creativity.

(2) Use of open-ended problems.

(3) Development and use of modern design theory and methodology.

(4) Formulation of design problems statements and specifications.

(5) Consideration of alternative solutions, feasibility considerations, production processes, concurrent engineering design, and detailed system descriptions.

Further, it is essential that a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics, and social impact be included.

(e) An applicant for admission for the examination must:

(1) include on the application, or a document attached to the application, which courses meet the requirements of subsection (c) by stating the course names and numbers; and

(2) submit all college transcripts that show that college credit was awarded for the claimed courses.

(f) No degree requirement under this section may be achieved by obtaining an honorary degree. or a degree obtained entirely by correspondence.

(g) College courses with substantial duplication of content may be counted only one (1) time toward the requirements of subsection (c).

(h) College courses that cover two (2) or more categories in subsection (c) shall be counted only in one (1) category. The appropriate category is that which is the greatest portion of the course. In determining the greatest portion of the course, the board may take into account information from the institution offering the course.

(i) Progressive experience of sufficient quality when used relative to the requirement for experience on engineering projects as provided for in <u>IC 25-31-1-12</u>(a) means the applicant has demonstrated the ability to assume continuously increasing levels of responsibility for engineering projects.

(j) No experience obtained prior to a baccalaureate degree shall qualify.

(k) Part-time experience acquired while the applicant was a full-time student shall not qualify. All other part-time experience shall be converted to its full-time equivalent in evaluating an application.

(I) Notwithstanding other provisions of this section, applicants an applicant who hold either holds a valid certificate as an El or an engineer in training (EIT) do engineering intern does not need any additional education beyond that which was required for admission to the El or EIT examination certification as an engineering intern in Indiana, at the time of an applicant's first taking the engineering intern (fundamentals of engineering) examination so long as they apply the applicant applies for admission to the professional engineer examination no later than the first examination applicant took and passed the engineering intern examination.

(State Board of Registration for Professional Engineers; Rule 2, Sec 2; filed Feb 29, 1980, 3:40 p.m.: 3 IR 627; filed Oct 17, 1986, 2:20 p.m.: 10 IR 435; filed Sep 24, 1992, 9:00 a.m.: 16 IR 726, eff Jan 1, 1993; filed Mar 28,

1995, 2:00 p.m.: 18 IR 2103, eff Jul 4, 1995; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2112, eff Jan 3, 1997; filed Mar 27, 2000, 8:58 a.m.: 23 IR 2002; filed May 4, 2001, 11:13 a.m.: 24 IR 2694, eff Jul 3, 2001; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; filed Sep 23, 2002, 9:59 a.m.: 26 IR 379, eff Dec 1, 2002; filed Nov 7, 2003, 12:00 p.m.: 27 IR 874, eff Jan 3, 2004; readopted filed Nov 17, 2010, 9:56 a.m.: 20101215-IR-864100408RFA; filed Nov 15, 2013, 2:51 p.m.: 20131211-IR-864130333FRA, eff Jan 1, 2014)

SECTION 2. <u>864 IAC 1.1-2-4</u> IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-2-4 Engineering intern; education and work experience

Authority: <u>IC 25-31-1-7; IC 25-31-1-8</u> Affected: <u>IC 25-31-1-12</u>

Sec. 4. (a) This section establishes the minimum education and experience requirements under <u>IC 25-31-1-12</u> for certification as an engineering intern. The education and experience requirements of section 2 of this rule for professional engineer applicants apply for engineering intern applicants except that individuals with:

(1) a baccalaureate degree meeting the course requirements of section 2(c) of this rule shall only be required to obtain two (2) years of work experience;

(2) a master of science degree in an engineering discipline following a baccalaureate that is not in an approved engineering curriculum shall only be required to obtain one (1) year of work experience; and
(3) the other degrees listed in section 2(b) of this rule shall not be required to obtain any work experience.

(b) An individual who is enrolled as a senior in an engineering curriculum in a college or university in Indiana that has at least one (1) approved engineering curriculum may take the last El examination offered prior to the individual's scheduled graduation. This subsection does not apply to any individual enrolled in any other baccalaureate degree program.

(State Board of Registration for Professional Engineers; Rule 2, Sec 4; filed Feb 29, 1980, 3:40 p.m.: 3 IR 628; filed Oct 17, 1986, 2:20 p.m.: 10 IR 438; errata filed Mar 8, 1990, 5:00 p.m.: 13 IR 1189 voided by the attorney general filed Apr 18, 1990: 13 IR 1863; errata filed Dec 20, 1990, 5:00 p.m.: 14 IR 1071; filed Sep 24, 1992, 9:00 a.m.: 16 IR 726, eff Jan 1, 1993; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2105, eff Jul 4, 1995; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; filed Sep 23, 2002, 9:59 a.m.: 26 IR 380, eff Dec 1, 2002; filed Sep 16, 2004, 9:00 a.m.: 28 IR 603, eff Nov 1, 2004; readopted filed Nov 17, 2010, 9:56 a.m.: 20101215-IR-864100408RFA; filed Nov 15, 2013, 2:51 p.m.: 20131211-IR-864130333FRA, eff Jan 1, 2014)

SECTION 3. <u>864 IAC 1.1-3-2</u> IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-3-2 Engineer application

Authority: <u>IC 25-31-1-7; IC 25-31-1-8</u> Affected: <u>IC 25-31-1-13; IC 25-31-1-14</u>

Sec. 2. (a) The board shall require at least three (3) favorable reports of the engineering applicant's competence from registered professional engineers familiar with the applicant's engineering work before admitting the applicant to examination or accepting the applicant for registration by comity in engineering.

(b) The board may exempt An applicant **shall be exempt** from taking the fundamentals of engineering portion of the engineer's **professional engineer** examination if the applicant has previously passed the fundamentals of engineering portion of the examination for professional engineers in another state.

(State Board of Registration for Professional Engineers; Rule 3, Sec 2; filed Feb 29, 1980, 3:40 p.m.: 3 IR 629; filed Oct 17, 1986, 2:20 p.m.: 10 IR 439; filed Sep 24, 1992, 9:00 a.m.: 16 IR 727; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2105; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: 20070808-IR-864070063RFA; readopted filed Jul 29, 2013, 1:25 p.m.: 20130828-IR-864130228RFA; filed Nov 15, 2013, 2:51 p.m.: 20131211-IR-864130333FRA, eff Jan 1, 2014)

SECTION 4. 864 IAC 1.1-3-3 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-3-3 Engineering intern application

Authority: IC 25-31-1-7; IC 25-31-1-8 Affected: IC 25-31-1-13

Sec. 3. (a) An applicant for El under <u>864 IAC 1.1-2-4</u>(b) shall submit the application to sit for the fundamentals of engineering examination to the designee of the board located on the student's campus.

(b) All other El applicants shall submit their applications to the board's office. engineering intern certification shall apply to the board. As provided for by <u>864 IAC 1.1-4.1-2</u>(b), an application is required only for the engineering intern certification and not for admission to the engineering intern (fundamentals of engineering) examination.

(State Board of Registration for Professional Engineers; Rule 3, Sec 3; filed Feb 29, 1980, 3:40 p.m.: 3 IR 630; filed Oct 17, 1986, 2:20 p.m.: 10 IR 439; filed Sep 24, 1992, 9:00 a.m.: 16 IR 727; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2105; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: 20070808-IR-864070063RFA; readopted filed Jul 29, 2013, 1:25 p.m.: 20130828-IR-864130228RFA; filed Nov 15, 2013, 2:51 p.m.: 20131211-IR-864130333FRA, eff Jan 1, 2014)

SECTION 5. <u>864 IAC 1.1-3-4</u> IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-3-4 Examination applicants filing dates

Authority: <u>IC 25-31-1-7;</u> <u>IC 25-31-1-8</u> Affected: <u>IC 4-21.5-3-1;</u> <u>IC 25-31-1-13</u>

Sec. 4. (a) Applications for admission to the professional engineer examination applications, including:

- (1) the completed application form;
- (2) the applicable application fee;
- (3) certified copy of educational transcripts; and
- (4) required references;

shall be filed with the board on or before January 2 for the April examination or July 1 for the October examination unless the applicant's principles and practice of engineering examination discipline has converted to computer based testing as described in <u>864 IAC 1.1-4.1-3.5</u>(c). If the applicant's examination discipline has converted to computer based testing or the applicant has not previously passed the fundamentals of engineering examination, the deadline shall be one (1) month prior to beginning of the testing window desired by the applicant.

(b) As used in this section, the date an application is filed shall be calculated in the manner provided for in \underline{IC} <u>4-21.5-3-1</u>(f).

(c) This section does not apply to applications filed under section 3(a) of this rule.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-3-4</u>; filed Sep 24, 1992, 9:00 a.m.: 16 IR 727; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2106; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 6. 864 IAC 1.1-4.1-1 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-1 Scope of rule

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14</u>

Sec. 1. This rule applies to the taking of examinations for registration as a professional engineer and certification as an El. engineering intern.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-1</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3905; filed Sep 24, 1992, 9:00 a.m.: 16 IR 727; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2106; readopted filed Jun 21,

2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 7. 864 IAC 1.1-4.1-2 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-2 Admission to examinations Authority: IC 25-31-1-7 Affected: IC 25-31-1-12; IC 25-31-1-14

Sec. 2. (a) The board will admit an applicant to an **the professional engineer** examination only if the applicant otherwise qualifies for the registration or certification for which application has been made, as a **professional engineer**, including meeting applicable education and experience requirements established in IC <u>25-31-1-12</u> and <u>864 IAC 1.1-2</u>.

(b) Notwithstanding subsection (a), an applicant shall qualify for admission to the engineering intern examination without having to have completed any applicable experience required for certification as an engineering intern.

(c) An applicant will not be certified as an EI until the examination has been passed and any applicable experience requirements have been met, submitted to, and approved by the board.

(d) An EI applicant who passed the examination, under the provisions of subsection (b), without first completing the experience requirements must submit the completed experience requirements within five (5) years after the last day of the month in which the applicant took and passed the engineering intern examination or the examination results will be voided.

(b) Except for an applicant who has not passed the fundamentals of engineering examination prior to applying for admission to the professional engineer examination, an applicant may be admitted to the fundamentals of engineering examination without obtaining approval from the board. Application is only required to the testing service. However, in order to be certified as an engineering intern, the applicant after passing the fundamentals of engineering examination must subsequently file an application with the board and to be approved, the applicant must meet all of the engineering intern certification requirements, including meeting the applicable education and experience requirements established in IC <u>25-31-1-12</u> and <u>864 IAC 1.1-2</u>.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-2</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3905; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2106; filed Apr 23, 1999, 2:03 p.m.: 22 IR 2878, eff Jul 2, 1999; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 8. 864 IAC 1.1-4.1-3 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-3 Content of engineering examinations

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14</u>

Sec. 3. (a) The examination for registration as a professional engineer shall consist of three (3) parts. Part I shall be known as the fundamentals of engineering examination. Part II shall be known as the principles and practice examination. Parts I and II are further described in <u>IC 25-31-1-14</u>(a) through <u>IC 25-31-1-14</u>(c). Part III shall concern professional conduct and Indiana registration law for professional engineers. In order to be granted registration as a professional engineer, the applicant must pass Part I, Part II, and Part III.

(b) Part II of the professional engineer examination shall be by engineering discipline, for example, electrical, mechanical, or civil. The applicant shall be required to choose the discipline in which the applicant desires to be

examined.

(c) Part III of the professional engineer examination will be a take home examination to be taken in conjunction with Part II.

(d) The examination for certification as an \blacksquare engineering intern shall be the fundamentals of engineering examination described in subsection (a).

(e) Regularly scheduled examinations will be given twice each year, normally in April and October.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-3</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3906; filed Sep 24, 1992, 9:00 a.m.: 16 IR 727; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2106; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 9. 864 IAC 1.1-4.1-3.5 IS ADDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-3.5 Scheduling of examinations

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14</u>

Sec. 3.5. (a) The fundamentals of engineering examination will be a computer based test that will be given during testing windows of approximately two (2) months length during each calendar quarter. An eligible applicant may schedule for the examination at a testing center any time during a testing window as space is available. An applicant may not take the examination more than once in a testing window, or even if readmitted under section 5.5(c) or section 8(b) of this rule, more than three (3) times in a twelve (12) month period.

(b) Until it becomes available as a computer based test, a discipline of the principles and practice of engineering examination will be given twice each year, normally in April and October. Disciplines that only get limited participation may only be given once in a given year.

(c) Once it becomes available as a computer based test, a discipline of the principles and practice of engineering examination will be given in the same manner provided for the fundamentals of engineering examination in subsection (a).

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-3.5</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 10. 864 IAC 1.1-4.1-5 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-5 Notice of examination; failure to sit

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14</u>

Sec. 5. (a) This section addresses the deadline for an applicant's initial taking of the professional engineer examination after being admitted by the board. All applicants will be required to take and pass Part II, the principles and practice of engineering examination, and Part III of the examination. Only those applicants who are not certified as an engineering intern or otherwise have not previously passed the fundamentals of engineering examination will be required to take and pass the fundamentals of engineering examination.

(a) (b) If admission to an the professional engineer examination is granted, those parts of the examination which that the applicant will be required to take and pass will be stated on a notice sent to the applicant.

(c) An applicant, who has received the notice described in subsection (b) and that notice provides for taking the fundamentals of engineering examination, must take the fundamentals of engineering examination by the end of the testing window that is in effect one (1) year after the issuance of the notice.

(d) This subsection and subsection (e) apply to applicants who have received the notice described in subsection (b) and that notice does not provide for taking of the fundamentals of engineering examination. If the applicant is taking the principles and practice examination in a discipline for which computer based testing is offered, the applicant must take the principles and practice examination, and Part III of the examination, by the end of the testing window that is in effect one (1) year after the issuance of the notice.

(b) An applicant who has received the notice described in subsection (a) (e) If the applicant is taking the principles and practice of engineer examination in a discipline for which computer based testing is not offered, the applicant must take either the principles and practice of engineering examination, to which admission was granted or one (1) of the next two (2) examinations thereafter. and Part III of the examination, no later than the third time it is offered after issuance of the notice.

(f) If the applicant fails to sit for at least one (1) of the three (3) examinations, an examination by a deadline provided in subsection (c), (d), or (e), the application for the registration or certification being sought as a professional engineer shall be deemed terminated and, if the applicant thereafter desires to seek the registration or certification for which application had been made, as a professional engineer, a new application must be filed with, and approved by, the board.

(c) (g) This subsection applies only to individuals who apply for registration as a professional engineer without first having been certified as an engineering intern or otherwise having passed the fundamentals of engineering examination. An individual who passes the fundamentals of engineering examination as a professional engineer applicant must take the principles and practice examination and Part III of the examination no later than the third time it is offered after the applicant passes the fundamentals of engineering examination in a discipline for which computer based testing is offered, the deadline shall be the end of the testing window that is in effect one (1) year after the applicant passes the fundamentals of engineering examination. If the applicant fails to do so, meet the deadline under this subsection, the applicant's applicant and meet the requirements for examination admission before taking the principles and practice examination and Part III of the examination and, therefore, the applicant shall be required to reapply as a professional engineer applicant and meet the requirements for examination admission before taking the principles and practice examination and Part III of the examination. However, such an applicant will not lose credit for passing the fundamentals of engineering examination and Part III of the examination until five (5) years after the last day of the month in which the applicant passed the fundamentals of engineering examination.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-5</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3906; filed Jul 24, 1989, 5:00 p.m.: 12 IR 2284; filed Nov 15, 1990, 1:35 p.m.: 14 IR 757; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2107; filed Apr 23, 1999, 2:03 p.m.: 22 IR 2879, eff Jul 2, 1999; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 11. 864 IAC 1.1-4.1-5.5 IS ADDED TO READ AS FOLLOWS:

<u>864 IAC 1.1-4.1-5.5</u> Engineering intern applicants; time limitation to take fundamentals of engineering examination

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14;</u> <u>IC 25-34.1-1-14</u>

Sec. 5.5. (a) This section addresses the number of examination attempts within a prescribed time period for applicants taking the fundamentals of engineering examination toward certification as an engineering intern or any other purpose other than as a professional engineer applicant.

(b) The three (3) attempts to pass the fundamentals of engineering examination under <u>IC 25-34.1-1-</u> <u>14</u>(h) may be at any time prior to the applicant being admitted to the professional engineer examination. If an applicant has not previously passed the fundamentals of engineering examination prior to being admitted to it as a professional engineer applicant, the applicant's taking of the fundamentals of engineering examination shall be governed by section 7 of this rule.

(c) An applicant, who fails the examination three (3) times as provided for in <u>IC 25-34.1-1-14</u>(h) and this section, shall be permitted to take the examination an additional three (3) times upon submitting to the board certification that the applicant has acquired additional knowledge for the examination which must include a description of the additional knowledge that was acquired.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-5.5</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 12. <u>864 IAC 1.1-4.1-6</u> IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-6 Exemption from Part I of examination for an engineering intern

Authority: <u>IC 25-31-1-7</u> Affected: <u>IC 25-31-1-14</u>

Sec. 6. An applicant for registration as a professional engineer, who:

(1) holds either a valid certificate as an El engineering intern or as an engineer-in-training from Indiana or any other state or territory, by having passed the fundamentals of engineering examination; or

(2) passed the fundamentals of engineering examination in Indiana or any other state or territory without a resultant engineering intern or engineer-in-training certificate;

shall be exempt from Part I of the examination for professional engineers.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-6</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3906; filed Sep 24, 1992, 9:00 a.m.: 16 IR 728; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2107; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 13. 864 IAC 1.1-4.1-7 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-4.1-7 Examination attempts for registration as a professional engineer

Authority: <u>IC 25-31-1-7</u> Affected: IC 25-31-1-14

Sec. 7. (a) This section applies to the examination for registration as a professional engineer.

(b) An applicant who does not pass the entire fundamentals of engineering examination (Part I of the examination for examination for registration as a professional engineer) in the first attempt shall be entitled to take the examination two (2) additional times However, the applicant's: as long as they are taken no later than the end of the testing window that is in effect two (2) years after the applicant took the examination the first time.

(1) second examination must be taken at either of the next two (2) regularly scheduled examinations after the failure of the first examination; and

(2) third examination must be taken at either of the next two (2) regularly scheduled examinations after the failure of the second examination.

(c) An applicant who took the fundamentals of engineering examination two (2) times before July 1, 2005, shall not be entitled to further examination attempts under subsection (b). An applicant who took the fundamentals of engineering examination one (1) time before July 1, 2005, shall be entitled to two (2) additional examination attempts as long as the requirements stated in subsection (b) for timing of each examination attempt are met.

(d) (c) Upon the exhaustion of the examination attempts allowed under subsection (b), the application shall be deemed terminated.

(e) (d) An applicant who does not pass the principles and practice examination (Part II) and Part III on the first attempt shall be entitled to take the examinations two (2) additional times However, the applicant's: as long as they are taken no later than:

(1) the examination administration in the month two (2) years after the applicant took the examination the first time when the first time was not by computer based testing; or

(2) the last day of the testing window for the calendar quarter that is two (2) years after the applicant took the examination the first time when:

(A) the first time was by computer based testing; or

(B) the first time was not by computer based testing, but the engineering discipline is given by

computer based testing at the time the deadline would have been reached under subdivision (1). (1) second examination must be taken at either of the next two (2) regularly scheduled examinations after the failure of the first examination; and

(2) third examination must be taken at either of the next two (2) regularly scheduled examinations after the failure of the second examination.

(f) An applicant who took the principles and practice examination two (2) times before July 1, 2005, shall not be entitled to further examination attempts under subsection (b). An applicant who took the principles and practice examination one (1) time before July 1, 2005, shall be entitled to two (2) additional examination attempts as long as the requirements stated in subsection (b) for timing of each examination attempt are met.

(g) (e) If the applicant passed Part II or Part III of the examination on the first or second attempt, the applicant will not be required to retake the passed part in the second or third examination allowed by subsection (e). (d).

(h) (f) Upon the exhaustion of the examination attempts allowed by subsection (e), (d), the application shall be deemed terminated.

(i) (g) If an application is terminated under subsection (h), (f), the applicant shall not lose credit for a previous passing of the fundamentals of engineering examination. However, the applicant shall lose credit for passing either Part II or Part III.

(i) (h) For purposes of this section, examination attempts out of state count.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-7</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3906; filed Jul 24, 1989, 5:00 p.m.: 12 IR 2284; filed Sep 24, 1992, 9:00 a.m.: 16 IR 728; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2107; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; filed Jul 31, 2006, 8:41 a.m.: <u>20060830-IR-864050295FRA</u>; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 14. 864 IAC 1.1-4.1-8 IS AMENDED TO READ AS FOLLOWS:

<u>864 IAC 1.1-4.1-8</u> Terminated applications; reapplication for admission, qualifications Authority: IC 25-31-1-7

Affected: IC 25-31-1-12; IC 25-31-1-14

Sec. 8. (a) An individual whose application has been deemed terminated under section $\frac{7(d)}{7(h)}$, 7(c) or 9(c) 7(f) of this rule may reapply for admission to the applicable professional engineer examination.

(b) In order for readmission to be granted, the applicant must:

(1) meet the education and experience requirements in effect at the time of reapplication; and must have completed the following:

(1) Since the termination of the application, nine (9) or more semester credit hours of college level courses related to the applicant's examination deficiency.

(2) Appropriate experience of the type required under <u>IC 25-31-1-12</u> for at least two (2) years subsequent to the termination of the application.

(2) certify to the board that the applicant has acquired additional knowledge for the examination; and

(3) describe the additional knowledge that was acquired as provided for in subdivision (2). Under this subsection, the date of termination shall be deemed to be the date the third examination was taken.

(c) An applicant who is readmitted to an examination under this section shall be treated as if the applicant had not previously taken the examination for all purposes under sections 5 and 7 of this rule.

(d) Individuals may be deemed terminated partially or completely because of out-of-state examination attempts. Therefore, an applicant will be required to comply with subsection (b) even if the first, second, third, or all examination attempts are out of state.

(e) Individuals shall be deemed terminated under section 7(d) or 9(e) 7(c) of this rule on the basis of all fundamentals of engineering examination attempts. Therefore, applicants will be required to comply with subsection (b) once the applicant has had three (3) fundamentals of engineering examination attempts regardless of whether the examination attempts were as:

- (1) an engineering intern applicant; or
- (2) a professional engineer applicant.
- (f) For purposes of this section and sections section 7 and 9 of this rule, an examination attempt:
- (1) means the actual taking of the examination; and
- (2) does not include a failure to appear to take the examination.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-4.1-8</u>; filed Jun 21, 1988, 4:00 p.m.: 11 IR 3907; errata filed Feb 5, 1990, 4:15 p.m.: 13 IR 1066; filed Nov 15, 1990, 1:35 p.m.: 14 IR 757; filed Sep 24, 1992, 9:00 a.m.: 16 IR 728; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2108; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; filed Jul 31, 2006, 8:41 a.m.: <u>20060830-IR-864050295FRA</u>; readopted filed Jul 19, 2007, 12:56 p.m.: <u>20070808-IR-864070063RFA</u>; readopted filed Jul 29, 2013, 1:25 p.m.: <u>20130828-IR-864130228RFA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 15. 864 IAC 1.1-12-1 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-12-1 Fees charged by board

Authority: <u>IC 25-1-8-2; IC 25-31-1-7; IC 25-31-1-8</u> Affected: <u>IC 25-1-8-6; IC 25-31-1</u>

Sec. 1. The board shall charge and collect the following fees, which shall all be nonrefundable and nontransferable:

(1) Except for an application for college seniors applying for the fundamental engineering examination under <u>864 IAC 1.1-2-4</u> and <u>864 IAC 1.1-3-3</u>, For review of an application for examination for certification as an engineering intern, one hundred ten dollars (\$100). (\$10).

(2) For review of an application for examination for registration as a professional engineer, three hundred dollars (\$300).

(3) For the processing and review of qualifications for registration as a professional engineer by comity, five hundred dollars (\$500).

(4) For issuance of the original certificate to practice as a professional engineer following passage of the examination or approval for registration on the basis of comity, when the certificate is dated between August 1 of an:

(A) odd-numbered year and July 31 of the following even-numbered year, inclusive, fifty dollars (\$50); and (B) even-numbered year and July 31 of the following odd-numbered year, inclusive, one hundred dollars (\$100).

(5) For biennial renewal of the certificate to practice as a professional engineer, one hundred dollars (\$100) payable prior to July 31 of each even-numbered year.

(6) For renewal reinstatement of an expired certificate to practice as a professional engineer, fifty dollars (\$50), plus all unpaid renewal fees for the four (4) years of delinquency. A certificate may not be renewed after four (4) years of delinquency. The fees as provided for in <u>IC 25-1-8-6</u>.

(7) For a duplicate or replacement certificate to practice as a professional engineer, ten dollars (\$10).

(8) The fee shall be one hundred dollars (\$100) for the proctoring of examinations taken in this state for purposes of registration in other states. This fee shall be in addition to the examination fee.

(State Board of Registration for Professional Engineers; Rule 12, Sec 1; filed Feb 29, 1980, 3:40 p.m.: 3 IR 637;

filed Oct 14, 1981, 1:30 p.m.: 4 IR 2459; filed Oct 17, 1986, 2:20 p.m.: 10 IR 442; errata, 10 IR 445; filed Sep 24, 1992, 9:00 a.m.: 16 IR 735; filed Mar 28, 1995, 2:00 p.m.: 18 IR 2111; filed Jun 14, 1996, 3:00 p.m.: 19 IR 3109; readopted filed Jun 21, 2001, 9:01 a.m.: 24 IR 3824; filed Sep 23, 2002, 9:59 a.m.: 26 IR 380, eff Dec 1, 2002; filed Sep 16, 2004, 9:00 a.m.: 28 IR 604, eff Nov 1, 2004; readopted filed Nov 17, 2010, 9:56 a.m.: 20101215-IR-864100408RFA; filed Nov 15, 2013, 2:51 p.m.: 20131211-IR-864130333FRA, eff Jan 1, 2014)

SECTION 16. 864 IAC 1.1-15-2 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-15-2 Definitions

Authority: <u>IC 25-1-4-8</u>; <u>IC 25-31-1-17.5</u> Affected: <u>IC 25-1-4-0.2</u>; <u>IC 25-1-4-0.5</u>

Sec. 2. (a) As used in this rule, "biennium" means a two (2) year licensure period during which continuing education requirements must be met. It:

(1) commences on August 1 of an even-numbered year; and

(2) concludes on July 31 of the next even-numbered year.

(b) Based on <u>IC 25-1-4-0.5</u> and as used in this rule, "continuing education" means an orderly process of instruction that is:

(1) approved by an approved organization (as defined in <u>IC 25-1-4-0.2</u>) or the board; and

(2) designed to directly enhance a professional engineer's knowledge and skill in providing services relevant to the practice of engineering.

The activities described in section 4 of this rule qualify as continuing education if they augment the professional engineer's knowledge and skill in providing services relevant to the practice of engineering.

(c) As used in this rule, "hour of continuing education" means at least fifty (50) minutes of instruction or course contact time. "Hours of continuing education" has the same meaning for the number of hours stated. An alternate term for an hour of continuing education that is used nationally with continuing education for professional engineers is professional development hour or PDH.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-15-2</u>; filed Jul 19, 2010, 11:22 a.m.: <u>20100818-IR-864090788FRA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 17. 864 IAC 1.1-15-3 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-15-3 Continuing education hours required

Authority: <u>IC 25-1-4-8</u>; <u>IC 25-31-1-17.5</u> Affected: <u>IC 25-1-4</u>

Sec. 3. (a) Except for holders of an inactive certificate under section 9 of this rule, during each biennium a professional engineer shall complete thirty (30) hours of continuing education that meets the requirements of this rule and <u>IC 25-1-4</u> in order to renew his or her professional engineer registration. This continuing education requirement first applies to the biennium of August 1, 2010, through July 31, 2012, and therefore first applies to the July 31, 2012, renewal.

(b) At least one (1) hour of the continuing education required in each biennium under subsection (a) shall be in ethics applicable to the practice of professional engineering.

(c) At least one (1) hour of the continuing education required in each biennium under subsection (a) shall be in Indiana statutes and rules applicable to the practice of professional engineering.

(d) A professional engineer initially licensed in Indiana in the first year of a biennium shall only be required to obtain fifteen (15) hours of continuing education. A professional engineer initially licensed in Indiana in the second year of a biennium shall not be required to obtain any continuing education.

(e) Up to fifteen (15) hours of continuing education may be carried over as follows:

(1) Continuing education obtained after the effective date of this rule and before August 1, 2010, may be carried over to the August 1, 2010, to the July 31, 2012, biennium.

(2) Continuing education obtained during a biennium beyond what is required for that biennium may be carried over to the next biennium.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-15-3</u>; filed Jul 19, 2010, 11:22 a.m.: <u>20100818-IR-864090788FRA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 18. 864 IAC 1.1-15-4 IS AMENDED TO READ AS FOLLOWS:

<u>864 IAC 1.1-15-4</u> Credit for distance learning, teaching, college courses and other qualifying activities Authority: <u>IC 25-31-1-17.5</u> Affected: <u>IC 25</u>

Sec. 4. (a) Distance learning courses obtained by distance learning methods shall qualify.

(b) Courses that are relevant to the professional engineer's professional skills, which are part of the curriculum of an accredited university, college, or educational institution, shall earn:

(1) fifteen (15) hours of continuing education for each academic semester hour completed; or

(2) ten (10) hours of continuing education for each academic quarter hour completed.

(c) Teaching a course at an accredited university, college, or educational institution shall earn two (2) times the number of hours a student is allowed under subsection (b), but only for the first time the instructor teaches the course.

(d) Services as an instructor or presenter at a qualified continuing education course **shall** earn one (1) hour **two (2) hours** of continuing education for each hour taught, but only for the initial instruction or presentation.

(e) Active participation in educational outreach activities with kindergarten to grade 12, or higher education students pertaining to professional engineer registration or the engineering profession shall qualify for a maximum of one (1) hour of continuing education per activity, and a maximum of two (2) hours of continuing education per biennium.

(f) Active participation in a professional or technical society relating to the practice of engineering shall qualify for one (1) hour of continuing education per year of service and, therefore, a maximum of two (2) hours of continuing education per biennium.

(g) Authoring of published papers, articles, or books relevant to the professional engineer's practice of engineering shall qualify for five (5) hours of continuing education in the biennium in which the publication occurred unless peer reviewed for an archival journal, in which case it shall qualify for ten (10) hours of continuing education in the biennium in which the publication occurred. Not more than one (1) paper, article, or book may be counted in any one (1) biennium.

(h) Attainment of a patent relevant to the professional engineer's practice of engineering shall qualify for ten (10) hours for each patent.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-15-4</u>; filed Jul 19, 2010, 11:22 a.m.: <u>20100818-IR-864090788FRA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 19. 864 IAC 1.1-15-5 IS AMENDED TO READ AS FOLLOWS:

864 IAC 1.1-15-5 Approval of continuing education programs

Authority: <u>IC 25-1-4; IC 25-31-1-17.5</u> Affected: <u>IC 25-1-4-0.2; IC 25-1-4-0.5</u> Sec. 5. (a) It is the professional engineer's responsibility to ensure that the course is applicable to enhancing the practice of engineering. According to <u>IC 25-1-4-0.5</u>, certain courses are automatically approved by being approved by an approved organization under <u>IC 25-1-4-0.2</u> assuming the subject matter of the course is acceptable under this rule by being designed to directly enhance the practitioner's knowledge and skill. For any course not automatically approved, the following criteria shall be used for board approval of continuing education programs for professional engineers:

(1) The continuing education course shall have a statement of objectives, which the program should achieve for its participants relating to and enhancing the practice of engineering.

(2) The sponsor of continuing education courses shall provide:

(A) adequate administration, including a responsible person to coordinate and administer the program; and (B) for the maintenance of proper records.

(3) The curriculum of a continuing education course shall be thoughtfully planned and designed to explore in considerable depth one (1) subject or a closely related group of subjects related to the practice of engineering.(4) The continuing education course shall:

(A) have qualified instructors who have demonstrated competence in the subject areas;

(B) be held in adequate facilities that allow for an effective program; and

(C) employ a variety of educational methods and teaching aids that enhance the learning opportunities.(5) Appropriate methods of evaluation shall be devised and used to measure the continuing education course's effectiveness.

(6) The sponsor of the continuing education course shall provide to the participants a meaningful record of attendance stating the continuing education hours involved, such as a certificate of completion.

(b) Continuing education courses may be approved by the board provided the sponsoring organization has submitted the proper documentation.

(c) The sponsor of the course is responsible for monitoring attendance in such a manner that verification of attendance throughout the entire course can be reliably assured.

(d) Notwithstanding subsections (a) and (b), continuing education courses for professional engineers approved by an approved organization under <u>IC 25-1-4-0.2</u> are automatically approved.

(e) Without limiting any other organization that may qualify under <u>IC 25-1-4-0.2</u>, the following shall be an "approved organization" under <u>IC 25-1-4-0.2</u> and this rule:

(1) Professional engineering related technical or professional societies, organizations, councils, associations, or institutions.

(2) Organizations or individuals who are approved by the board as provided for in subsection (f).

(f) To qualify for approval under subsection (e)(2), an organization or individual shall:

(1) Apply to the board certifying that continuing education courses shall comply with the provisions of subsection (a)(1) through (a)(6) and, as applicable, with lC 25-1-4 and other provisions of this rule, and receive the board's approval.

(2) Submit an annual report to the board no later than February 15 that represents that the organization or individual complies with the requirements of subdivision (1).

(3) Be subject to a board audit for compliance with subsection (a)(1) through (a)(6) and, as applicable, with $\frac{|C 25-1-4|}{|C 25-1-4|}$ and other provisions of this rule.

(g) The approval of an organization or individual under subsection (e)(2) may be rescinded if the organization or individual does not comply with subsection (a)(1) through (a)(6) and, as applicable, $\underline{IC 25-1-4}$ and other provisions of this rule.

(State Board of Registration for Professional Engineers; <u>864 IAC 1.1-15-5</u>; filed Jul 19, 2010, 11:22 a.m.: <u>20100818-IR-864090788FRA</u>; filed Nov 15, 2013, 2:51 p.m.: <u>20131211-IR-864130333FRA</u>, eff Jan 1, 2014)

SECTION 20. <u>864 IAC 1.1-4.1-9</u> IS REPEALED.

SECTION 21. SECTIONS 1 through 20 of this document shall take effect on January 1, 2014.

Indiana Register

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