

61G15-22.001 Continuing Education Requirements.

(1) Each licensee shall complete eighteen (18) continuing education hours during each license renewal biennium as a condition of license renewal. Four (4) hours shall relate to the licensee's area(s) of practice; one (1) hour must be related to professional ethics; and one (1) hour shall relate to chapter 471, F.S., and the rules of the Board. The remaining hours may relate to any topic pertinent to the practice of engineering as defined in rule 61G15-22.002, F.A.C. The one (1) hour of professional ethics must be obtained from a professional ethics course approved for credit in any US jurisdiction. ~~The one~~ (1) hour of laws and rules required by section 471.017, F.S., must be obtained from courses approved by the Board pursuant to rule 61G15-22.0105, F.A.C.

(2) No change.

(3) Beginning with the Fifth Edition of the Florida Building Code, all licensees actively participating in the design of engineering works or systems in connection with buildings, structures, or facilities and systems covered by the Florida Building Code, as identified within section 553.73(1)(a), F.S., shall:

(a) Complete at least one (1) advanced Florida Building Code course within twelve (12) months of each edition of the Florida Building Code effective date,

(b) No change.

(4) No change.

Rulemaking Authority 471.008, 471.017(3), 471.0195 FS. Law Implemented 471.017(3), 471.0195 FS. History—New 8-19-80, Formerly 21H-22.01, Amended 5-14-86, Formerly 21H-22.001, Amended 6-22-99, 6-13-00, 2-22-01, 9-16-01, 3-7-13, 9-29-14, 2-18-16, 8-1-18,_____.

61G15-22.006 Demonstrating Compliance; Audits; Investigations.

(1) No change.

(2) The Board will randomly audit a minimum of three percent (3%) of licensees to assure that the continuing education requirements are met.

(a) No change.

(b) Licensees whose void license was reactivated during the previous renewal cycle will be included within the group of licensees audited for the current renewal cycle.

(c) A failure to produce documentation of compliance with continuing education requirements during an audit will result in the opening of a disciplinary complaint against the licensee for violation of paragraph 61G15-19.001(6)(s), F.A.C. If a violation is proven, the penalty shall be within the guidelines established by sub-subparagraph 61G15-19.004(2)(g)4.i., F.A.C.

(3) through (4) No change.

Rulemaking Authority 455.213(6), 455.2178, 471.008, 471.017(3) FS. Law Implemented 455.2177, 455.2178, 471.017(3) FS. History—New 9-16-01, Amended 7-13-04, 8-20-12, 1-2-18, 8-1-18,_____.

61G15-22.009 Exemptions.

(1) ~~New~~ Licensees who have achieved licensure by examination, pursuant to Section 471.013, F.S., shall be exempt for their first renewal period. This exemption does not apply to licensees by endorsement, licensees who directly registered for examination with NCEES, or to licensees upon reinstatement of previously void licenses. This exemption does not apply to the requirement of section 471.0195, F.S., regarding Advanced Building Code training.

(2) through (3) No changes.

Rulemaking Specific Authority 455.213(6), 455.2178, 455.2179, 471.017(3), 471.019 FS. Law Implemented 455.213(6), 455.2177, 455.2178, 455.2179, 471.008, 471.017(3), 471.019 FS. History—New 9-16-01, Amended_____.

61G15-20.008 Educational Requirements for Applicants without ETAC/ABET Accredited Engineering Technology Degrees.

(1) Applicants having a baccalaureate degree in engineering technology from programs that are not accredited by ETAC/ABET must demonstrate:

(a) A minimum of 24 college semester credit hours of higher mathematics and basic sciences. Credit hours may be substituted with engineering science courses that are not used to satisfy the requirements of paragraph (1)(c).

1. A minimum of 9 semester hours of mathematics which must be beyond algebra and trigonometry and must emphasize mathematical concepts and principles rather than computation. Courses in differential calculus and integral calculus are required. Additional courses may include differential equations, linear algebra, numerical analysis, probability and statistics, and advanced calculus. Computer skills and/or programming courses cannot be used to satisfy mathematics requirements.

2. A minimum of 12 semester hours in basic sciences, which must include at least three courses. These courses must be in general chemistry, calculus-based physics, biological sciences, or earth sciences (geology, ecology, or oceanography), but no more than two of the three courses may be in the same area. For an applicant who has earned both a baccalaureate degree in engineering technology and a graduate degree in engineering, only two courses are required. Additional courses towards the requisite 24 semester hours of mathematics and basic sciences may include physical science, natural science, and/or an advanced science. Computer skills and/or programming courses cannot be used to satisfy basic science requirements.

(b) A minimum of 9 college semester credit hours in general education. Examples of acceptable courses include philosophy, religion, history, literature, fine arts, sociology, psychology, political science, anthropology, economics, (micro and macro), professional ethics, and social responsibility. Examples of other general education courses deemed acceptable include management (such as organizational behavior), accounting, written and oral communications, business, and law. No more than 6 credit hours can come from courses in management, accounting, business, or law. Courses in engineering economics, engineering management, construction management, systems

engineering/analysis, production, or industrial engineering/management will not be counted. Up to 6 credit hours of languages other than the applicant's native language are acceptable for credit. English and foreign language courses in literature and civilization may be considered in this area. Courses that instill cultural values are acceptable, while routine exercises of personal craft are not. Other means towards satisfying the general education requirement are as follows: Earning a doctoral degree is equivalent to 10 credit hours if the degree is from a college or university in the U.S. that has an EAC/ABET-accredited engineering or ETAC/ABET engineering technology program in a related discipline at the baccalaureate level.

(c) A minimum of 40 college semester credit hours of engineering technology, engineering science, or engineering design taught within the college or by the faculty of engineering. Courses in this area shall have their roots in mathematics and basic sciences but carry knowledge further toward creative application of engineering principles. Examples of approved engineering technology courses are mechanics, thermodynamics, heat transfer, electrical and electronic circuits, materials science, transport phenomena, engineering economics, and computer science (other than computer programming skills). Courses in engineering design stress the establishment of objectives and criteria, synthesis, analysis, construction, testing, and evaluation. Course work should incorporate hands-on laboratory work as described in ETAC/ABET criteria, and shall contain a sufficiently designed engineering technology program to provide minimal competency in the use of engineering algorithms and procedures. Graduate-level engineering courses may be included to fulfill curricular requirements in this area. A maximum of six credit hours will be granted for thesis, dissertation, special topics and independent study at any level. Graphics or surveying courses will not be considered to meet engineering technology, science and design requirements. Cooperative training, practicums, internships, and continuing education activities will not receive credit.

(d) Credit will also be given for other technical coursework that enhances the applicant's ability to practice engineering as defined in Chapter 471.005(7), F.S.

(2) An applicant whose only educational deficiency is under paragraph (1)(b), above, shall be entitled to receive conditional approval to take the Fundamentals of Engineering examination. Such an applicant shall not become eligible

for the Principles and Practice examination until satisfactory completion and documentation of the necessary hours required in paragraph (1)(b), above.

(3) College Level Examination Programs (CLEP) examinations that are outlined at <http://clep.collegeboard.org/exams> may be recognized as satisfying education deficiencies, provided the exams are in courses that meet the requirements of paragraph (1)(b), above. CLEP exams in biology, chemistry, natural sciences, and/or calculus may be used to meet the requirements of paragraph (1)(a), above. For credit to be given, the applicant shall achieve a passing score as determined by CLEP; 3 credit hours shall be granted for each exam, unless the applicant provides evidence that a college or university with an EAC/ABET or ETAC/ABET accredited engineering program will grant more credit. College- or university-level courses can also be taken to satisfy deficiencies. Credit shall not be given for a college, university, or CLEP course if credit in a similar course has already been earned.

(4) An applicant with an engineering technology degree from a non-ETAC/ABET-accredited degree program must request an evaluation of his or her credentials through Joseph Silny & Associates, Inc., P.O. Box 248233, Coral Gables, Florida 33124.

(5) The FBPE education committee shall make the final decision regarding equivalency of education credentials and shall make recommendations to the Board as to whether an applicant shall be approved for admittance to the examination or for licensure by endorsement. The applicant requesting an equivalency determination by the Board bears the burden of presenting evidence regarding equivalency to the Board.

(6) Credit toward meeting the education requirements will only be given for coursework with a Grade of 'C' or better.

Rulemaking Authority 471.008, 471.013(1) FS. Law Implemented 471.013(1) FS. History—New _____.