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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2017

A N A C T

RELATING TO BUSINESSES AND PROFESSIONS-ENGINEERS

Introduced By: Senators Seveney, Felag, Coyne, DiPalma, and Ciccone

Date Introduced: March 29, 2017

Referred To: Senate Commerce

It is enacted by the General Assembly as follows:

1 SECTION 1. Sections 5-8-2, 5-8-3, 5-8-14 and 5-8-17 of the General Laws in Chapter 5-
2 8 entitled "Engineers" are hereby amended to read as follows:

3 **5-8-2. Definitions.**

4 As used or within the intent of this chapter:

5 (a) "Accredited program" means specific engineering curricula within established
6 institutions of higher learning that have both met the criteria of, and have been designated by, the
7 Engineering Accreditation Commission of the Accreditation Board for Engineering and
8 Technology, Inc. (ABET-EAC). In the absence of ABET-EAC software engineering criteria,
9 software engineering criteria provided by the National Society of Professional Engineers'
10 Professional Engineers in Industry (PEI) Task force for the NPSE Licensure & Qualifications for
11 Practice.

12 (b) "Board" means the state board of registration for professional engineers subsequently
13 provided by this chapter.

14 (c) "Engineer" means a person who, by reason of his or her special knowledge and use of
15 the mathematical, physical, computing and engineering sciences and the principles and methods
16 of engineering analysis and design, acquired by engineering education and engineering
17 experience, is qualified to practice engineering, as subsequently defined, and as attested by his or
18 her registration as an engineer.

19 (d) "Engineer-in-training" means a person who complies with the requirements for

1 education, experience, and character, and has passed an examination in the fundamental
2 engineering subjects, as provided in §§ 5-8-11 and 5-8-13.

3 (e) "National Council of Examiners for Engineering and Surveying (NCEES)" is a
4 nationally recognized organization which assists state boards and territorial boards to better
5 discharge their duties and responsibilities in regulating the practice of engineering and land
6 surveying.

7 (f) (1) "Practice of engineering" means any service or creative work, the adequate
8 performance of which requires engineering education, training, and experience in the application
9 of special knowledge of the mathematical, physical, [computing](#) and engineering sciences to
10 services or creative work such as consultation, investigation, evaluation surveys, planning and
11 design of engineering systems, [software systems](#), and the supervision of construction for the
12 purpose of assuring compliance with specifications; and embracing those services or work in
13 connection with any public or private utilities, structures, buildings, machines, [computer systems](#),
14 [information technologies](#), equipment, processes, work, or projects in which the public welfare or
15 the safeguarding of life, health, or property is concerned.

16 (2) Any person shall be construed to practice or offer to practice engineering, within the
17 meaning and intent of this chapter, who:

18 (i) Practices any branch of the profession of engineering;

19 (ii) By verbal claim, sign, advertisement, letterhead, card, or in any other way represents
20 himself or herself to be an engineer, or through the use of some other title implies that he or she is
21 an engineer or that he or she is registered under this chapter; or

22 (iii) Holds himself or herself out as able to perform, or who does perform any engineering
23 service or work or any other service designated by the practitioner or recognized as engineering.

24 (g) "Professional engineer" means a person who has been registered and licensed by the
25 state board of registration for professional engineers.

26 (h) "Responsible charge" means direct control and personal supervision of engineering
27 work.

28 (i) "Rules and regulations" means that document of the same title, as amended from time
29 to time, subject to the director's approval, that has been adopted by the board and filed with the
30 secretary of state in accordance with §§ 42-35-3(a), 42-35-4(b), and 5-8-8.

31 (j) "Department" means the department of business regulation.

32 (k) "Director" means the director of the department of business regulation or his or her
33 designee.

34 **5-8-3. Board -- Creation -- Duties -- Composition -- Appointments -- Terms.**

1 (a) The duty of the board of engineers is to administer those provisions of this chapter
2 that relate to the regulation of professional engineering and the registration of professional
3 engineers.

4 (b) Subject to the approval of the director, the board of engineers shall establish any rules
5 and regulations for the conduct of its own proceedings; for examination of applicants; for
6 registration of professional engineers and engineers-in-training; for continuing education
7 requirements; for investigating complaints to the board; and for governing the practice of
8 engineering all that it deems appropriate.

9 (c) (1) Members of the board are subject to the provisions of chapter 14 of title 36. The
10 board consists of five (5) persons, who are appointed by the governor, and must have the
11 qualifications required by § 5-8-4. Each member of the board shall receive a certificate of his or
12 her appointment from the governor and shall file with the secretary of state his or her written oath
13 or affirmation for the faithful discharge of his or her official duty. Appointments to the board
14 shall be in the manner and for a period of time that the term of each member expires at a different
15 time. On the expiration of the term of any member, the governor shall, in the manner previously
16 provided, appoint for a term of five (5) years a registered professional engineer having the
17 qualifications required in § 5-8-4. A member may be reappointed to succeed himself or herself,
18 but shall not serve more than two (2), full, consecutive terms. Each member may hold office until
19 the expiration of the term for which appointed or until a successor has been appointed and has
20 qualified.

21 (2) The board shall designate and establish a system of registration by discipline not later
22 than December 31, 1994, and shall subsequently administer that registration system.

23 (3) The registration system shall provide, at a minimum, for the registration of:

- 24 (i) Civil engineers;
- 25 (ii) Chemical engineers;
- 26 (iii) Electrical engineers;
- 27 (iv) Mechanical engineers;
- 28 (v) Structural engineers;
- 29 (vi) Environmental engineers; and
- 30 (vii) Fire protection engineers.
- 31 (viii) Software/Computer engineers;

32 (4) The board may establish additional classifications by rule and regulation subject to
33 the approval of the director.

34 (5) Classification of disciplines shall conform to the standards established by the NCEES.

1 Nothing in this section shall be construed to limit the registration of a qualified applicant to only
2 one discipline.

3 (d) [Deleted by P.L. 2015, ch. 82, § 4 and P.L. 2015, ch. 105, § 4].

4 **5-8-14. Certificates of registration -- Enrollment cards -- Seals.**

5 (a) With the assistance of the department, the board shall issue and renew a certificate of
6 registration, upon payment of the registration fee as provided for in this chapter, to any applicant,
7 who, in the opinion of the board, has met the requirements of this chapter. Enrollment cards shall
8 be issued to those who qualify as engineers-in-training. Certificates of registration shall carry the
9 designation "professional engineer", show the full name of the registrant without any titles, have a
10 serial number and shall be signed by the chairperson of the board.

11 (b) The issuance of a certificate of registration by the board is prima facie evidence that
12 the person named in the certificate is entitled to all rights and privileges of a professional engineer
13 while the certificate remains unrevoked or unexpired.

14 (c) Each registrant under this chapter may, upon registration obtain a seal of the design
15 authorized by the board bearing the registrant's name, serial number, and the legend "Registered
16 professional engineer". Final engineering drawings, specifications, plats, ~~and~~ reports, and
17 software specifications, designs and reports prepared by a registrant shall be, when issued, signed,
18 dated, and stamped with his or her seal or facsimile of a seal. It is unlawful for an engineer to
19 affix, or permit his or her seal or facsimile of a seal to be affixed, to any work of which the
20 engineer has not been responsibly charged to any engineering drawings, specifications, plats, or
21 reports, including software specifications, designs and reports, after expiration of a certificate or
22 for the purpose of aiding or abetting any other person to evade or attempt to evade any provision
23 of this chapter.

24 (d) Any party aggrieved by the board's decision regarding license issuance or renewal
25 may, within ten (10) days of the decision, appeal the matter to the director by submitting a written
26 request for a formal hearing to be conducted in accordance with the provisions of § 5-8-18.

27 **5-8-17. Public works.**

28 This state and its political subdivisions, such as county, city, town, township, borough, or
29 legally constituted boards, districts, commissions, or authorities, shall not engage in the
30 construction of public works including software systems development, involving the practice of
31 engineering unless the engineering drawings and specifications and estimates have been prepared
32 by, and the construction is executed under the direct supervision of, a registered professional
33 engineer, software engineer, or supervision of the Rhode Island department of transportation
34 when applicable to a municipal transportation project. Any contract executed in violation of this

1 section is null and void.

2 SECTION 2. Chapter 5-8 of the General Laws entitled "Engineers" is hereby amended by
3 adding thereto the following section:

4 **5-8-1.1. Legislative intent and purpose.**

5 (a) The general assembly finds it necessary to invest in large scale, high expense, public
6 works projects involving complex software system development; and

7 (b) Expected performance of software system development projects is becoming
8 increasingly difficult to achieve, resulting in significant cost and schedule overruns, costly legal
9 expenses, and most importantly, the disruption and delay of critical state operations related to
10 social services, administration of policy and law, and the general effectiveness and efficiency of
11 service delivery to our citizenry; and

12 (c) There exists a body of state law, herein contained in chapter 8 of title 5, established to
13 safeguard life, health, and property, and to promote public welfare through the proper
14 certification of professional engineering as pertains to execution of public works projects,
15 specifically to ensure the state's interests and public's general welfare are protected by certifying a
16 minimum standard of education, experience and knowledge assessment; and

17 (d) The discipline of "software engineering," despite its rapidly growing importance,
18 complexity, and expense in delivering effective state public services, is not specifically included
19 in chapter 8 of title 5, at a time when ecommerce, the internet of things and general social
20 complexity have fundamentally altered the way that government services are delivered. The
21 impact of failure can have potentially serious and far-reaching implications for the state and its
22 citizens in terms of cost and denial of critical services; and

23 (e) It is the intent of the general assembly to amend certain provisions of chapter 8 of title
24 5 so as to the safeguard our citizens' lives, health, and property, and to promote general public
25 welfare through the proper certification of professional engineering as pertains to the execution of
26 software public works projects.

27 SECTION 3. This act shall take effect upon passage.

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EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF
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RELATING TO BUSINESSES AND PROFESSIONS-ENGINEERS

1 This act would create a professional designation and registration criteria for professional
2 software engineers with the subsequent purpose of requiring professional certification as a
3 condition of participating in software development related public works projects.

4 This act would take effect upon passage.

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