820-010-3010
Education and Experience Requirements for Registration as a Professional Photogrammetrist
The following combinations of education and experience may be used to satisfy subsection (4) of OAR 820-010-3000 (Qualifications for Registration as a Professional Photogrammetrist):
(1) *Accredited Four Year Baccalaureate Degree in Land Surveying and Four Years of Experience.*
(a) Graduation from:
(A) EAC of ABET accredited four-year baccalaureate of land surveying;
(B) TAC of ABET accredited four-year baccalaureate of land surveying program; or
(C) ASAC of ABET accredited four-year baccalaureate of land surveying program.
(b) Four years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or four years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
(c) Graduation from a post-baccalaureate degree program in land surveying, from a college or university that offers an EAC or TAC of ABET, or ACCE accredited undergraduate program in a discipline similar to that of the post-baccalaureate degree program, may be substituted for one year of the experience required in subsection (b) of this rule.
(2) *Accredited Four Year Baccalaureate Degree in Engineering, Additional Course Work, and Four Years of Experience.*
(a) Graduation from:
(A) TAC of ABET accredited baccalaureate of engineering program with 11 semester or 16 quarter hours of surveying instruction and surveying law;
(B) EAC of ABET accredited baccalaureate of engineering program with 11 semester or 16 quarter hours of surveying instruction and surveying law; or
(C) ACCE accredited baccalaureate of engineering program with 11 semester or 16 quarter hours of surveying instruction and surveying law.
(b) Four years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or four years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
(c) Graduation from a post-baccalaureate degree program in land surveying, from a college or university that offers an EAC or TAC of ABET, or ACCE accredited undergraduate program in a discipline similar to that of the post-baccalaureate degree program, may be substituted for one year of the experience required in subsection (b) of this rule.
(3) *Accredited Two Year Degree in Land Surveying Meeting Specific Criteria, with Six Years of Experience.*
(a) Graduation from:
(A) ASAC of ABET accredited Surveying Technology program that includes:
(i) A total of at least 46 semester or 96 quarter hours;

(ii) At least 32 semester hours or 48 quarter hours in technical courses, in which a minimum of 11 semester or 16 quarter hours are in surveying instruction;
(iii) At least 16 semester or 24 quarter hours in subjects such as math, science, basic electricity, hydraulics, road design, construction management and estimating, engineering economics with college level algebra, trigonometry and statistics; and
(iv) At least 9 semester or 13 quarter hours in social sciences, humanities, and communications;
(B) TAC of ABET accredited two-year Surveying Technology program that includes the following:
(i) A total of at least 46 semester or 96 quarter hours;
(ii) At least 32 semester hours or 48 quarter hours in technical courses, in which a minimum of 11 semester or 16 quarter hours are in surveying instruction;
(iii) At least 16 semester or 24 quarter hours in subjects such as math, science, basic electricity, hydraulics, road design, construction management and estimating, engineering economics with college level algebra, trigonometry and statistics; and
(iv) At least 9 semester or 13 quarter hours in social sciences, humanities, and communications; or
(C) TAC of ABET accredited Associate of Applied Science in Surveying Technology program that includes the following:
(i) A total of at least 46 semester or 96 quarter hours;
(ii) At least 32 semester hours or 48 quarter hours in technical courses, in which a minimum of 11 semester or 16 quarter hours are in surveying instruction;
(iii) At least 16 semester or 24 quarter hours in subjects such as math, science, basic electricity, hydraulics, road design, construction management and estimating, engineering economics with college level algebra, trigonometry and statistics; and
(iv) At least 9 semester or 13 quarter hours in social sciences, humanities, and communications.
(b) Six years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or six years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
(4) *Accredited Two Year Degree in Engineering Meeting Specific Criteria, with Six Years of Experience.*
(a) Graduation from a TAC of ABET accredited Associate of Applied Science in Engineering Technology program that includes the following:
(A) A total of at least 46 semester or 96 quarter hours;
(B) At least 32 semester hours or 48 quarter hours in technical courses, in which a minimum of 11 semester or 6 quarter hours are in surveying instruction;
(C) At least 16 semester or 24 quarter hours in subjects such as math, science, basic electricity, hydraulics, road design, construction management and estimating, engineering economics with college level algebra, trigonometry and statistics; and
(D) At least 9 semester or 13 quarter hours in social sciences, humanities, and communications.
(b) Six years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision

of a registered engineer, land surveyor or photogrammetrist; or six years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.

(5) *Graduate Degree in Land Surveying or Geomatics-based program and Four Years of Experience.*

(a) Graduation from a graduate degree program in land surveying at a college or university that offers an ABET accredited undergraduate degree program in the same field.

(b) Completion of 11 semester or 16 quarter hours of surveying instruction from a college or university with an ABET accredited undergraduate degree program in land surveying or land surveying technology.

(c) Four years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or four years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.

(6) *Accredited Baccalaureate Degree Related to Land Surveying or Engineering and Four Years of Experience*

(a) Graduation from a EAC, TAC, or ASAC of ABET accredited baccalaureate degree related to engineering or land surveying that includes:

(A) 21 semester or 32 quarter hours of course work with a direct focus on geomatics that requires direct application of geomatics knowledge and skills. At least one of these courses must be related to surveying law;

(B) 27 semester or 40 quarter hours of course work that requires the application of mathematics for problem solving. At least one of these courses must focus on the integration of differential and integral calculus;

(C) 24 semester or 35 quarter hours of course work related to physical and natural sciences, with laboratory application; and

(D) 4 semester or 6 quarter hours of capstone or integrating experience that develops student competencies in applying both technical and non-technical skills in problem solving.

(b) Four years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or four years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.

(7) *Non-accredited Baccalaureate Degree in Land Surveying with Four Years of Experience.*

(a) Graduation from a four-year baccalaureate program in land surveying, not accredited by ABET, if the degree is evaluated by NCEES Credential Evaluations (*Note: The cost of any NCEES Credentials Evaluation must be borne by the Applicant*), and the Board determines that the degree is substantially equivalent to the educational requirements in subsection (1) of this rule; and

(b) Four years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or four years of

active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.

(c) Graduation from a post-baccalaureate degree program in surveying, from a college or university that offers an ABET accredited undergraduate program in a discipline similar to that of the post-baccalaureate degree program, may be substituted for one year of the experience required in subsection (b) of the rule.

(8) *Non-accredited Baccalaureate Degree with "Core Requirements" with Six Years of Experience.*

(a) Graduation from a four-year baccalaureate program in land surveying, not accredited by ABET, if the degree is evaluated by NCEES Credential Evaluations (*Note: The cost of any NCEES Credentials Evaluation must be borne by the Applicant*), and the Board determines that the degree is substantially equivalent to a degree that includes the following:

(A) 18 semester credit hours of mathematics and basic sciences, including:

(i) At least 12 semester credit hours in mathematics beyond basic mathematics, such as college algebra and higher mathematics, and that focus on mathematical concepts and principles rather than computation. Such courses include college algebra, trigonometry, analytic geometry, differential and integral calculus, linear algebra, numerical analysis, probability and statistics, and advanced calculus.

(ii) At least 6 semester credits must be in the basic sciences, including one or more of the following topics: biology, general or advanced chemistry, geology, ecology, general or advanced physics;

(B) At least 16 college semester credit hours of general education courses, excluding routine exercises of personal craft. Such courses include, philosophy, religion, history, literature, fine arts, sociology, social sciences, economics, and professional ethics and responsibility;

(C) At least 30 college semester credit hours of surveying science and practice, taught by qualified surveying faculty. Graduate-level surveying classes may be evaluated by NCEES for consideration in fulfilling the requirements of subsection (a)(C) above.

(b) Six years of active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor or photogrammetrist; or six years of active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.

(9) *Course work from an Accredited Baccalaureate Program in Land Surveying or Engineering, Accredited Two-Year Program in Land Surveying Technology or Applied Science in Land Surveying or Engineering, Qualifying Graduate Program, or Equivalent Baccalaureate Program in Land Surveying or Engineering, with Additional Experience.*

(a) Course work from a qualifying program identified in subsections (1) to (4), (6), (7), or (8) of this rule, without graduation from that program, may be considered toward qualifying an Applicant for registration to the extent that the course work involves the following classes:

(A) Advanced mathematics, including college algebra, probabilities and statistics, or higher mathematics, all of which must emphasize mathematical concepts and principles rather than computation;

(B) Geology;

(C) Biology;

(D) Ecology;
(E) General or advanced physics;
(F) General or advanced chemistry;
(G) Surveying law;
(H) Basic or route surveying;
(I) Geodesy;
(J) Geographic Information or Global Positioning Systems;
(K) Land development design and planning;
(L) Photogrammetry;
(M) Mapping;
(N) Remote sensing.
(b) The Board will determine the amount of credit, if any, the course work will be given towards qualifying the Applicant for registration as a Professional Photogrammetrist.
(c) When relying on course work from a qualifying program identified in subsections (1) to (4), (6), (7), or (8) of this rule, without graduation from that program, an Applicant must also demonstrate that the Applicant's Board-credited course work, when combined with the Applicant's qualifying photogrammetric mapping work, is equivalent to 12 years of qualifying experience. For example, an Applicant who is granted two years of credit for course work under this subsection, must demonstrate 10 years of qualifying experience.
(d) Qualifying experience under this subsection is:
(A) Active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor, or photogrammetrist; or
(B) Active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
(10) *Military Experience and Training.*
(a) Military experience and training may be considered as qualifying for the required education and experience under this rule if is evaluated by the Joint Services Transcript (JST) and the Board determines that it is substantially equivalent to the education and experience listed in subsections (1) to (5) of this rule.
(b) Military experience and training that is not determined to be substantially equivalent to the education and experience listed in sections (1) to (5) of this rule may be considered toward qualifying an Applicant for registration to the extent that the experience and training involves the subjects listed in subsection (8)(a) of this rule, or to the extent it qualifies as experience.
(c) The Board will determine the amount of educational credit, if any, the military training and experience will be given towards qualifying the Applicant for registration as a Professional Photogrammetrist.
(d) If applying with military training and experience, whether by qualifying military experience alone, a combination of educational credit and qualifying military experience, or a combination of educational credit, qualifying military experience, and qualifying non-military experience, an Applicant must demonstrate that the Applicant's training and experience is equivalent to a total of 12 years of qualifying experience. For example, an Applicant who is granted two years of credit for military training and experience under this subsection, must demonstrate 10 years of qualifying education, experience, or both outside of the military.

(e) Qualifying experience under this subsection is:
(A) Active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor, or photogrammetrist; or
(B) Active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
(11) *Experience Only.*
(a) 12 years of qualifying experience.
(b) Qualifying experience under this subsection is:
(A) Active practice in photogrammetric mapping work as defined in OAR 820-005-0065, in the Applicant's area of competence, and under the direction and supervision of a registered engineer, land surveyor, or photogrammetrist; or
(B) Active practice in photogrammetric mapping work while registered in another jurisdiction with NCEES membership.
Stat. Auth.: ORS 670.310 & 672.255
Stats. Implemented: ORS 672.002 - 672.325

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