193C—7.4 (542B,272C) Professional development guidelines. Continuing education activities that satisfy the professional development criteria are those that relate to engineering or land surveying practice or management. It is recognized that an engineer's specialized skills must have as their foundation a fundamental knowledge of chemistry, physics, mathematics, graphics, computations, communication, and humanities and social sciences. However, continuing education in the fundamentals alone will not be sufficient to maintain, improve, or expand engineering skills and knowledge. For that reason, licensees will be limited in their use of fundamental courses in proportion to ABET criteria for accreditation of engineering curricula. Continuing education activities are classified as:

7.4(1) *Group 1 activities.* Group 1 activities are intended to maintain, improve, or expand skills and knowledge obtained prior to initial licensure. The following chart illustrates the maximum PDH allowable per renewal period for Group 1 activities:

Type of course/activity	Number of PDH allowed per renewal period
Mathematics and basic sciences Math beyond Trigonometry Basic sciences: Chemistry, Physics, Life sciences, Earth sciences	10 PDH
Engineering sciences Mechanics, Thermodynamics, Electrical and electrical circuits, Materials science, *Computer science *Courses in computer science will generally be considered a part of the Engineering Sciences category in the ABET criterion and, therefore, limited to a maximum of 10 PDH per renewal period.	10 PDH
Humanities and social sciences Philosophy, Religion, History, Literature, Fine arts, Sociology, Psychology, Political science, Anthropology, Economics, Foreign languages, Professional ethics, Social responsibility	5 PDH
Engineering curriculum courses Accounting, Industrial management, Finance, Personnel administration, Engineering economy, English, Speech, *Computer applications *Courses in CAD and fundamental computer applications will generally not be applicable in either Group 1 or Group 2 activities. The computer is viewed as a tool available to the engineer or land surveyor, much as a pencil or hand-held calculator is a tool. Only computer courses that have the solution of engineering or land surveying problems as a purpose will be considered acceptable. An example of this might be a course that trains an engineer in the utilization of a specific software package to perform structural analysis. The concept of the computer as a tool does not apply to a computer engineer.	10 PDH

7.4(2) Group 2 activities. Group 2 activities are intended to develop new and relevant skills and knowledge. Credit for participation in activities in the group is unlimited, subject to maximum carryover. Typical areas include postgraduate level engineering science or design, new technology, environmental regulation and courses in management of engineering or land surveying activity (regular work duties do not qualify).

7.4(3) *Independent study.* To be readily acceptable by the board, independent study as defined in rule 193C—7.2(542B,272C) must meet all of the following criteria:

- a. A written evaluation process is completed by the independent study provider; and
- b. A certificate of satisfactory completion is issued by the provider; and
- c. An evaluation assessment is issued to the licensee by the provider; and

d. Documentation supporting such independent studies is maintained by the licensee and provided to the board as required by subrule 7.8(2).

A maximum of ten professional development hours of independent study activity will be allowed per biennium per licensee.

7.4(4) *Exclusions.* Types of continuing education activities which will be excluded from allowable continuing education are those in which it is not evident that the activity relates directly to the licensee's practice of professional engineering or land surveying or the management of the business concerns of the licensee's practice, or which do not comply with the board's administrative rules. Examples of activities that do not qualify as continuing education include the following:

- Regular employment;
- Toastmasters club meetings;
- Service club meetings or activities;
- Personal estate planning;
- Banquet speeches unrelated to engineering;
- Professional society business meeting portions of technical seminars;
- Financial planning/investment seminars;
- Foreign travel not related to engineering study abroad;
- Personal self-improvement courses;
- Real estate licensing courses;
- Stress management;
- Trade shows;
- Peer review;
- Accreditation review;
- Independent study or self-study that does not meet the requirements of subrule 7.4(3);
- Basic CAD and fundamental computer application courses;
- Undergraduate engineering seminars.