

Further Your Career

Join the US Army Corps of Engineers Galveston District



What You Need to Know:

All Professional Engineering Positions, 0800 Individual Occupational Requirements Basic Requirements:

A. Degree: Engineering. To be acceptable, the program must: (1) lead to a bachelor's degree in a school of engineering with at least one program accredited by ABET; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); and (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics.

OR

- B. Combination of education and experience -- college-level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying engineering, and (2) a good understanding, both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such background must be demonstrated by one of the following:
- 1. Professional registration or licensure -- Current registration as an Engineer Intern (EI), Engineer in Training (EIT)1, or licensure as a Professional Engineer (PE) by any State, the District of Columbia, Guam, or Puerto Rico. Absent other means of qualifying under this standard, those applicants who achieved such registration by means other than written test (e.g., State grandfather or eminence provisions) are eligible only for positions that are within or closely related to the specialty field of their registration. For example, an applicant who attains registration through a State Board's eminence provision as a manufacturing engineer typically would be rated eligible only for manufacturing engineering positions. 2. Written Test -- Evidence of having successfully passed the Funda-mentals of Engineering (FE)2 examination or any other written test required for professional registration by an engineering licensure board in the various States, the District of Columbia, Guam, and Puerto Rico.
- 3. Specified academic courses -- Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and that included the courses specified in the basic requirements under paragraph A. The courses must be fully acceptable toward meeting the requirements of an engineering program as described in paragraph A.

 4. Related curriculum -- Successful completion of a curriculum leading

to a bachelor's degree in an appropriate scientific field, e.g., engineering technology, physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a bachelor's degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance. Ordinarily there should be either an established plan of intensive training to develop professional engineering competence, or several years of prior professional engineering-type experience, e.g., in interdisciplinary positions. (The above examples of related curricula are not all-inclusive.)

Additional Experience and Training Provisions for Graduates of Engineering Programs:

Definition of Professional Engineering Experience: The professional engineering experience required for grades GS-12 and above is defined as non-routine engineering work that required and was characterized by (1) professional knowledge of engineering: (2) professional ability to apply such knowledge to engineering problems; and (3) positive and continuing development of professional knowledge and ability. Professional knowledge of engineering is defined as the comprehensive, in-depth knowledge of mathematical, physical, and engineering sciences applicable to a specialty field of engineering that characterizes a full 4-year engineering program leading to a bachelor's degree, or the equivalent, Professional ability to apply engineering knowledge is defined as the ability to (a) apply fundamental and diversified professional engineering concepts, theories, and practices to achieve engineering objectives with versatility, judgment, and perception; (b) adapt and apply methods and techniques of related scientific disciplines; and (c) organize, analyze, interpret, and evaluate scientific data in the solution of engineering problems; (4) a minimum of 2 years of engineering experience after obtaining engineering degree.

Types of Creditable Experience: Professional work in engineering, like that in other professions, is marked by continuing personal effort to keep abreast of the advancing and changing discipline. Continuing education in engineering and related fields is an important element of full professional competence as an engineer that should be considered in evaluating the qualifications of applicants for professional engineering positions. In some situations, experience may be creditable even if it is not clearly professional engineering work. In such cases, the experience must have been preceded by prior responsible professional engineering experience and must contribute directly and significantly to the applicant's engineering competence. For example, an engineer might be assigned to a management-type position in preparation for assumption of higher-level responsibilities in engineering project or program management.

What You Need to Know: Civil Engineer

Conditions of Employment

Appointment may be subject to a suitability or fitness determination, as determined by a completed background investigation.

Specialized Experience:

GS-13: Includes at least one (1) year of specialized experience equivalent to the GS-12 level in the Federal Service which includes 1) professional knowledge of civil engineering concepts, principles, and practices concerned with the design, layout, and construction of facilities, dredge disposal, and flood control structures. 2) Ability to produce analysis in writing. 3). Knowledge and skill performing dredging and disposal area management. 4). Ability to analyze complex problems, prepare findings of facts, and support negotiation of complex modifications and claims of varied contracts. 5) Knowledge of computer aided design software and hardware used with projects.