



Careers in the Licensed Professions

Professional Engineer



Professional engineers lead and work on projects and processes that apply engineering principles and data to safeguard people and property. Professional engineers:

- evaluate, plan, design, supervise, and consult on the construction and operation of a wide range of structures and systems. This includes utilities; houses and office buildings; roads and bridges; machines and equipment; and much more.
- work in a variety of fields, from chemical, civil, electrical, and mechanical engineering to subfields stretching from aerospace and agriculture to software, textiles, and telecommunications.

Education and Experience

“Credits” toward an engineering license are based on the type of education and experience you have. You will need 12 credits of combined education and experience for licensure. Your experience requirement will depend on the credits granted for your education; at least 4 years of engineering work experience will be required.

Examination

Two-Part Professional Examination:

- 1) Fundamentals Examination (typically during or immediately after college)
- 2) Principles and Practice Examination (typically after 4-6 years of professional experience)

Salary and Projected Growth

- Median salary: depends on discipline and experience
- Salary range: \$45,000 (entry) - \$175,000 (30+ years, non-supervisor)

Where Could I Work?

- Private practice
- Government
- Manufacturing
- Research facilities
- Military
- Colleges and universities

Your Interests and Abilities

- Mathematics
- Preparation in the sciences
- Analysis and design
- Technical writing

Professional Skills

- Attention to detail
- Analytical thinking
- Problem solving
- Communication
- Management