

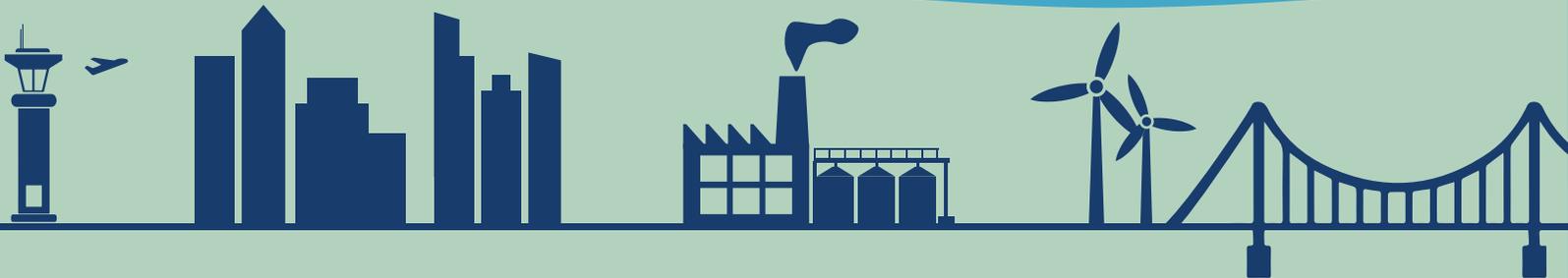
The *Civil Engineering Body of Knowledge*

A ROADMAP FOR CIVIL ENGINEERING STUDENTS

Rapid change is transforming civil engineering and the complexity of the problems we must solve.

Civil engineers must continuously enhance both technical and professional skills to operate, maintain, and rebuild America's infrastructure.

The *CEBOK* is a roadmap to help you take ownership of your professional career.



The CEBOK identifies 21 interrelated outcomes in four categories that prepare you to **assume responsible charge**.

1. Foundational outcomes provide the knowledge on which all other outcomes are built.



2. Engineering Fundamentals outcomes form the bridge between foundational and technical outcomes for civil engineering practice.



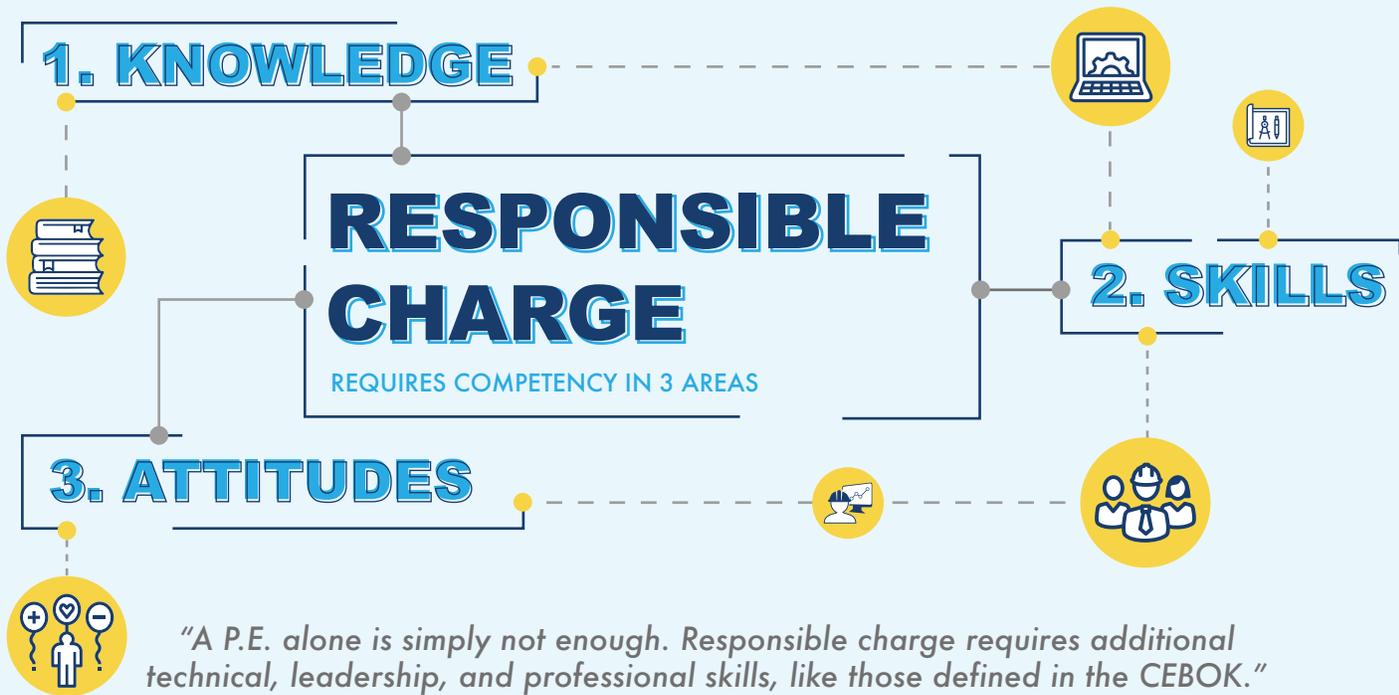
3. Technical outcomes specify knowledge and skills more specific to civil engineering.



4. Professional outcomes focus on interpersonal and leadership skills needed.



Responsible charge means taking **direct supervision, control, and responsibility** for engineering services and deliverables.



– Brad Aldrich, P.E., F.ASCE, F.NSPE

- STEP 1**

Download a free copy of the *Civil Engineering Body of Knowledge*
go.asce.org/BOK3.

STEP 2

Get engaged with your **ASCE student chapter** now and explore **local leadership opportunities** after graduation.

STEP 3

Seek internships with employers who provide **structured mentored experience**.

The CEBOK is your roadmap to a successful career in civil engineering.

FULFILLING THE CEBOK

There is no single path to attain the CEBOK, but a typical pathway includes the following:

UNDERGRADUATE EDUCATION

Earn a degree from an ABET accredited institution.

Take the Fundamentals of Engineering (F.E.) exam.

Earn a bachelor's degree from an ABET accredited institution.

POSTGRADUATE EDUCATION

Learn throughout your career by formal graduate education or other professional development opportunities.

MENTORED EXPERIENCE

Gain early career experience under the mentorship of a civil engineer in responsible charge.

Earn a master's degree. While optional, it can advance your career and your salary.

SELF DEVELOPMENT

Pursue personal growth through continuing education, professional activities, observation, and reflection throughout your career.

Take the Principles and Practice of Engineering (P.E.) exam and earn your P.E. license.

The median salary for civil engineers with a P.E. license was **\$21K - \$31K higher** than those without any professional credentials.
Source: ASCE 2020 Salary Survey

Seek and obtain additional professional credentials throughout your career.

LIFELONG LEARNING AHEAD

Civil engineers with a master's degree earn **\$14K more per year** on average.

Source: ASCE 2020 Salary Survey



WHAT IS THE *CIVIL ENGINEERING BODY OF KNOWLEDGE*?

The *Civil Engineering Body of Knowledge* defines the knowledge, skills, and attitudes necessary to exercise responsible charge in the practice of civil engineering and pathways to achieve them.

As a civil engineer, your fundamental responsibility is to protect and advance the health, safety, and welfare of the public.

The *CEBOK* helps ensure that you gain the knowledge, skills, and attitudes necessary to take on that great responsibility.

Read the *CEBOK* at go.asce.org/BOK3.