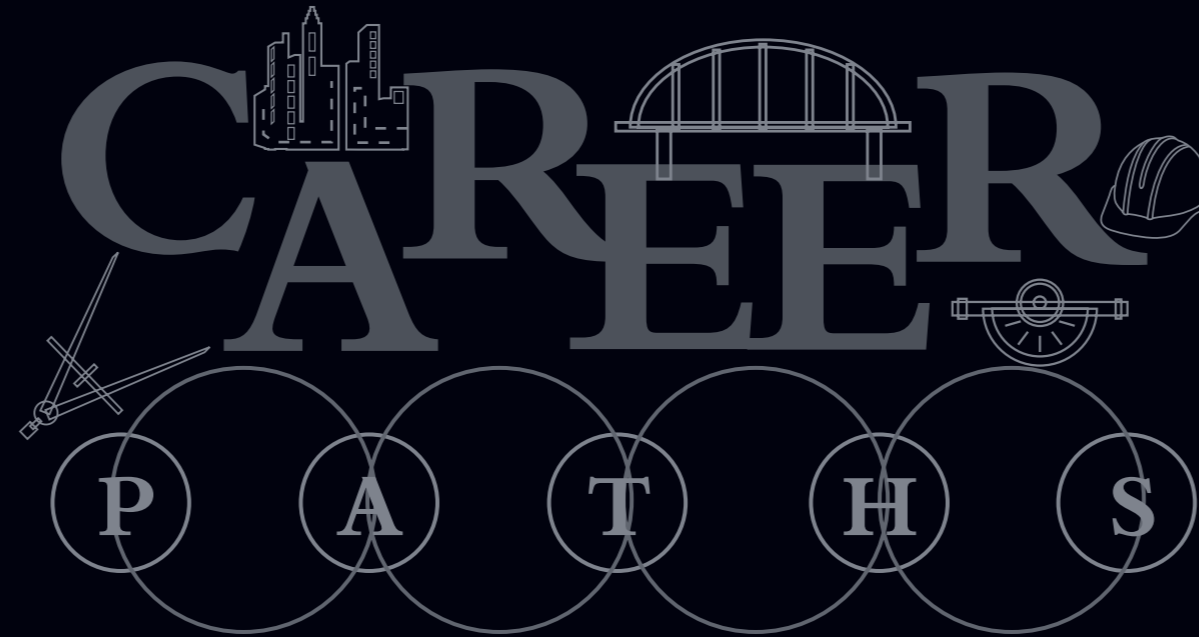




Career Paths

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in Civil Engineering

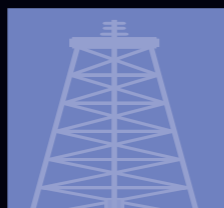


in Civil Engineering

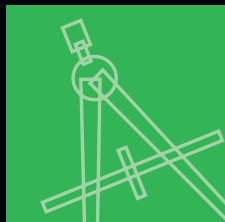
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Do you ever wonder what path you would follow to become the chief executive officer of a company... or what steps you might take to become the public works director for a city or county? How about a career in education? A large firm? A small firm? This brochure provides possible paths to achieve a position in the organization of your choice.

There are no magic formulas for achieving a particular position. Some things are outside your control. However, the career paths contained here were developed by civil engineers in the respective fields and represent their knowledge of a logical career progression.

Six paths have been prepared. They are Basic Career Path; City/County Organization; Education; Private Practice – Small Firm; and Private Practice – Large Firm; Military – U.S. Army.

The authors of this publication understand that there are as many variations on these paths as there are people who take them. In addition, people cross paths throughout their careers. Because of these variations and new career paths that develop from time to time, we would like to make this a living document providing a compendium of career paths. Perhaps your own career path provides an example for others to follow. We encourage you to provide comments and career paths charts to:
 John Segna, American Society of Civil Engineers
 1801 Alexander Bell Drive, Reston, VA 20191-4400
 e-mail jsegna@asce.org.

for Civil Engineers



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CAREER

PATHS

in Civil Engineering

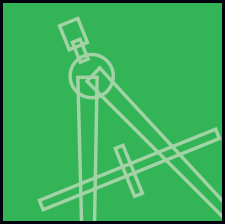


Career Paths

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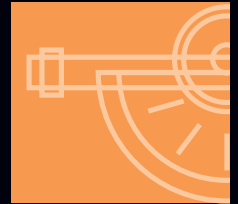
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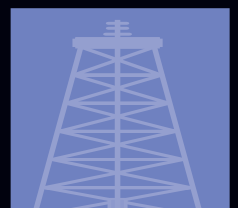
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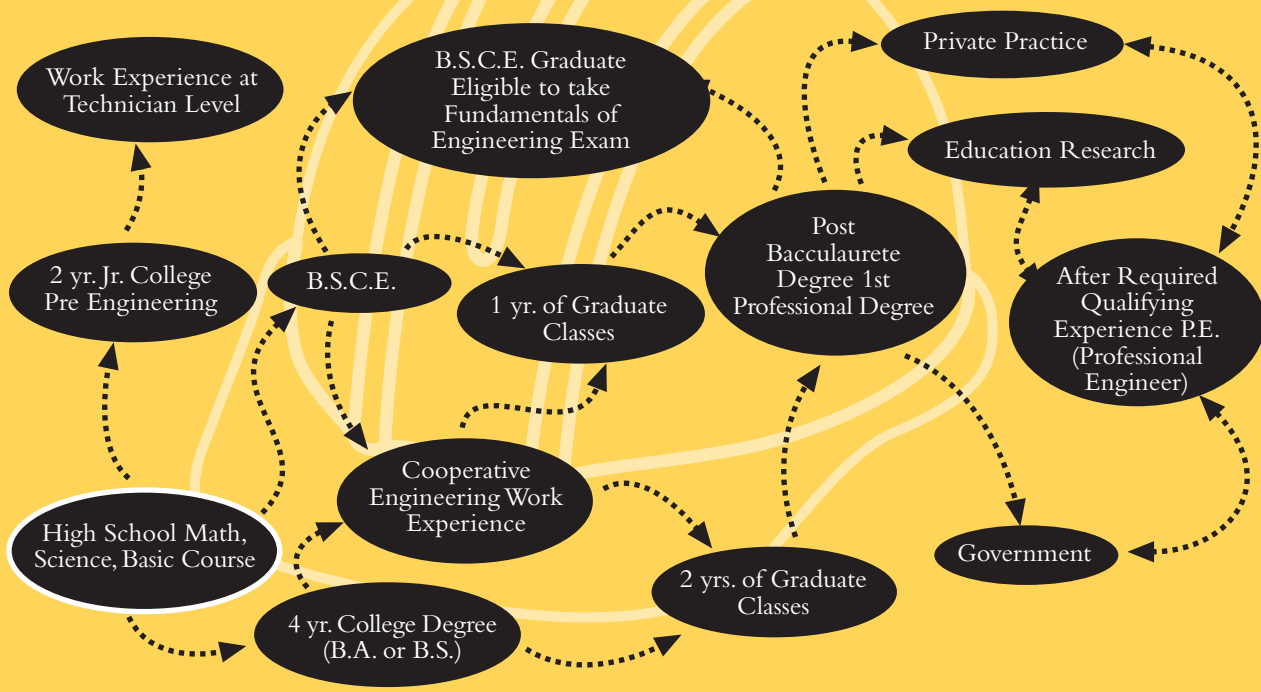
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Civil Engineer - Basic Career Path

This figure illustrates the path to becoming a civil engineer. Several basic steps typically lead to a degree in civil engineering; however, alternatives exist. This path also recognizes the 1 professional degree, a post Baccalaureate degree, as a step to be taken. Following your education and passing the Fundamentals of Engineering exam, you would select from one of three

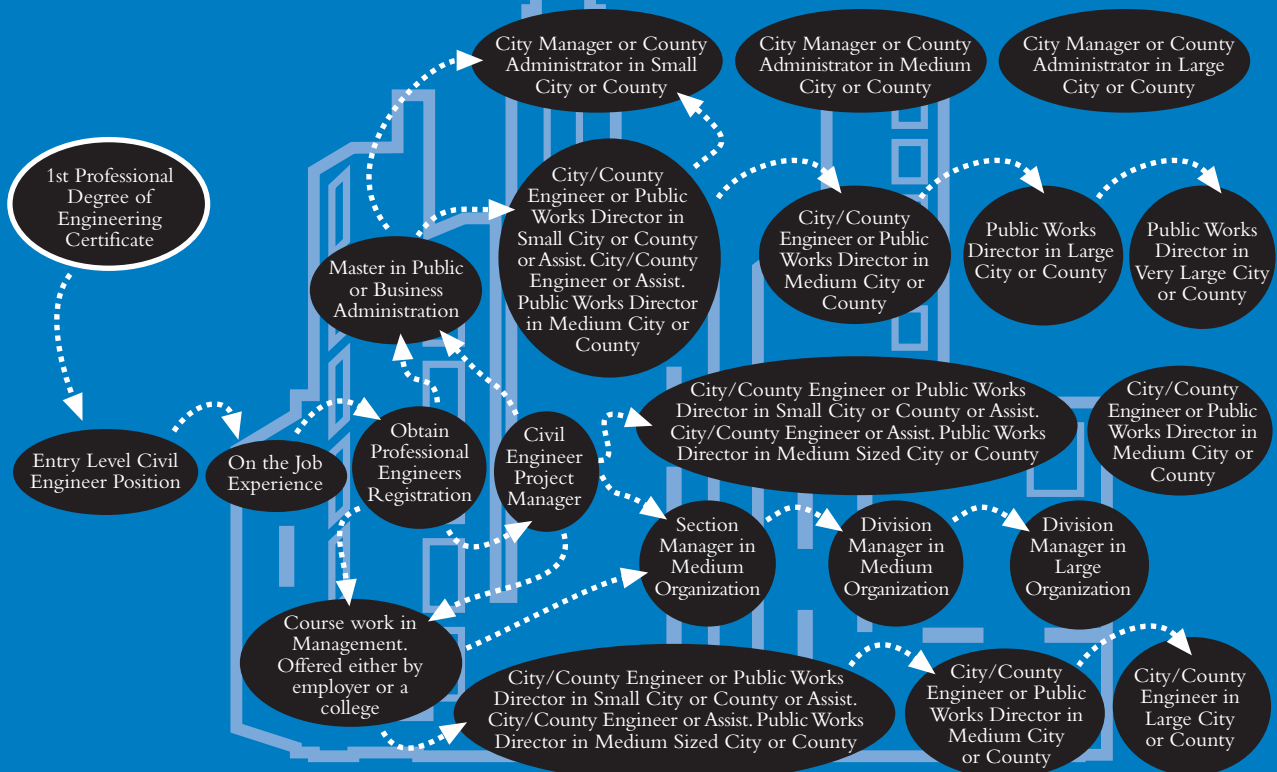
broad career fields: private practice (including industry), education/research, or government. After obtaining qualifying experience, your next step would be licenser as a professional engineering (P.E.). Upon becoming a licensed P.E., you would choose among the three broad career fields.



Civil Engineer - Career Path in City/County Organization

This figure presents the various career options and positions available for civil engineers who have chosen a career in government. It recognizes that some may leave the engineering path as they progress through

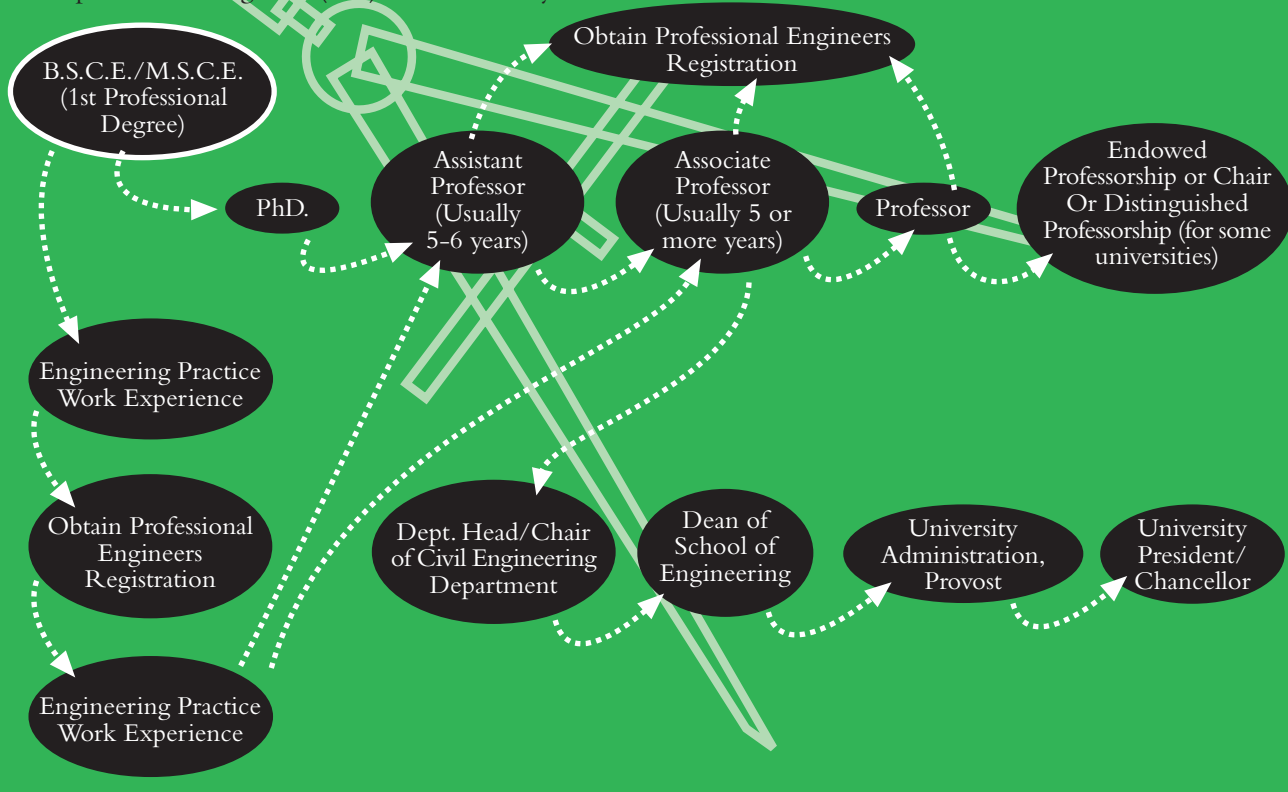
their career and move into city or county general government management. Before or during a transition into general government management, additional education in public management is recommended.



Civil Engineer - Career Path in Education

This figure illustrates the path for a career in higher education. Note the requirement for an advanced degree including, in most cases, a doctorate. In addition, a professional engineer (P.E.) license is always

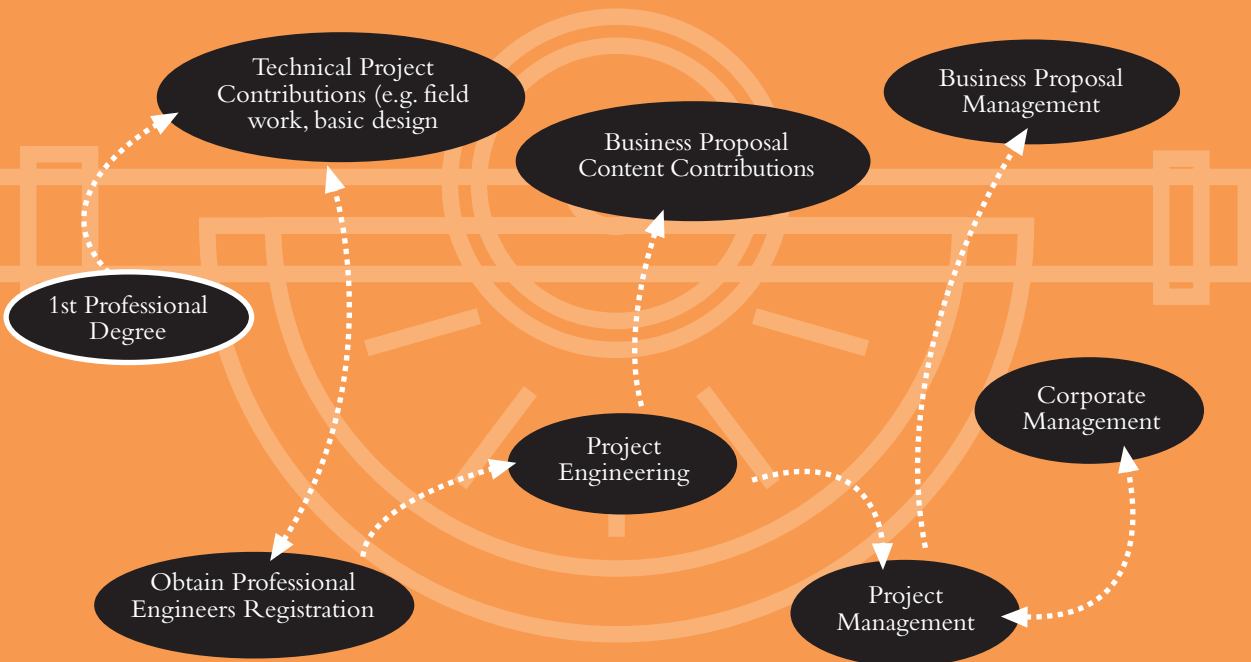
recommended. Given the structure of the university system it is possible to predict the typical number of years in grade for the various positions.



Civil Engineer - Career Path for Private Practice - Small Firm

The career path in a small engineering firm differs from a large firm in that engineers are called upon to perform a variety tasks in a variety of positions. In a small firm, an engineer may rise rapidly to management

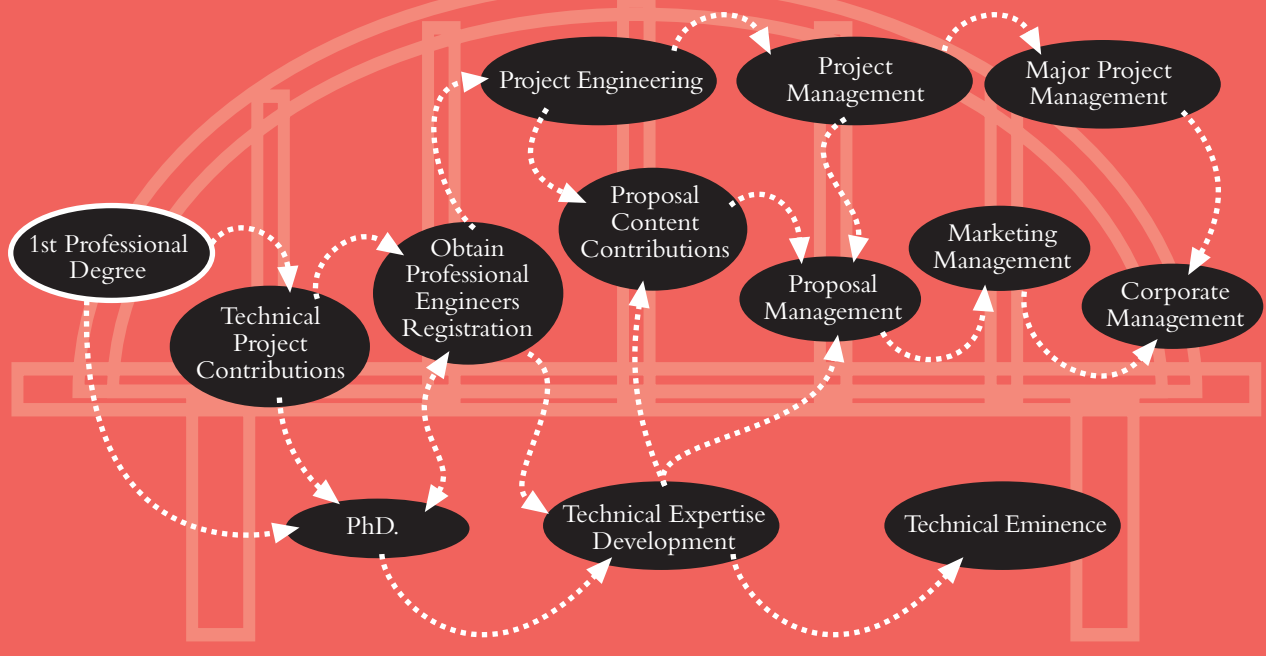
yet still be responsible for technical expertise, project engineering, project management, and project development, in addition to managing the business side of the firm.



Civil Engineer - Career Path for Private Practice - Large Firm

This figure illustrates the career path in a large consulting firm. Three basic tracks emerge after obtaining your license as a professional engineer: technical, management, and marketing. Those who choose management stay on the engineering side of the business, taking on responsibility for small projects and

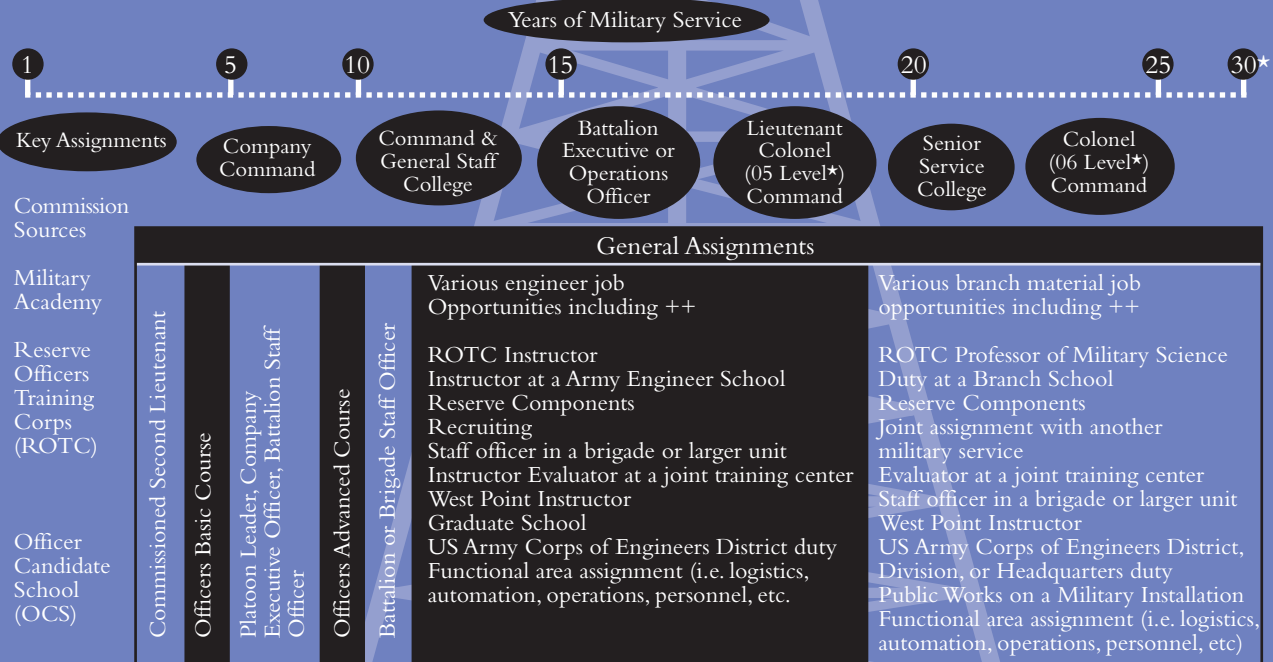
then moving onto larger ones. The second path is a move into the marketing side of the business. The third path is to become a technical expert. While this last path typically does not lead to corporate management, it is a very important role to be filled in a large organization.



Civil Engineer - Career Path in the U.S. Army

Unlike other career paths, an engineering career in the U.S. military is fairly well defined. Requirements and steps are laid out making it easy to understand what is needed to advance. Mandatory retirement occurs after 30 years of active service. Since most

people are relatively young when they retire after 20 to 30 years, it is not uncommon to find career military engineers starting second careers in engineering consulting firms (large or small), public works, or engineering education.



*O5 and O6 level commands include field units, training units and US Army Corps of Engineer commands.
 +30 years of active service is mandatory retirement except under special circumstances determined by the needs of the Army.
 ++Includes only a partial list of possible job opportunities. The sequencing of jobs depends on the specific duty, personal preference, and needs of the Army.



The word "CAREER" is rendered in a large, serif font. The letter 'A' contains a city skyline icon, 'R' contains a bridge icon, and 'E' contains a hard hat icon. To the left of the 'C' is a compass and pencil icon, and to the right of the 'R' is a surveying level icon. Below "CAREER" is the word "PATHS" in a smaller serif font, with each letter enclosed in a circle. The circles for 'P', 'A', and 'T' overlap, as do the circles for 'H' and 'S'.

CAREER PATHS

in Civil Engineering



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