

# Why obtain a bachelor's degree in Civil Engineering from the Department of Civil and Environmental Engineering (CEE) at the University of Virginia?

## 1) Demand for Civil Engineers is high!

Out of all bachelor's degrees, a degree in civil engineering is one of the top five degrees with respect to job opportunities in 2008 ([www.careerbuilder.com](http://www.careerbuilder.com)). Bureau of Labor Statistics (BLS 08-09) predicts 18% and 25% growth in jobs in civil and environmental engineering over the decade ending in 2016.

## 2) Demand for Civil Engineers is steady

Civil engineering is one of the most stable professions, since it provides the basic infrastructure of our society, which is always present and always advancing. A fifth of all engineers in the U.S. are employed in Civil or Environmental Engineering (BLS 08-09). At the U.Va. Department of Civil and Environmental Engineering, engineers apply science and technology to the planning, design, analysis, construction, operations and maintenance of infrastructure and the natural environment.

## 3) Civil engineering is a service-oriented profession

The CEE department focuses on teaching and research to meet society's need for a sustainable and adaptive infrastructure. Civil engineers provide:

- Buildings where we work, live and play
- Transportation networks for travel and commerce
- Water supply and distribution for communities and agriculture
- Waste treatment and pollution prevention to protect the environment

Our students embark on their careers committed to environmental sustainability.

## 4) Curriculum Flexibility

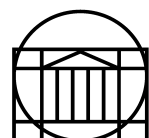
The undergraduate civil engineering degree at U.Va. allows students to select proficiency areas including structural engineering, environmental engineering, water resources engineering, transportation engineering and infrastructure engineering and management. Students can readily customize their studies by adding minors, such as the Engineering Business Minor, or participating in unique programs like the Science, Technology and Policy Internship Program or the Engineering-in-Context capstone experience.

## 5) Preparation to succeed in a wide range of positions

With the skills and expertise to be leaders, 75% of our recent graduates are working in the field of civil engineering, including consulting firms, government agencies, and industry. Other career paths of our recent graduates include education, information technology, marine engineering, aviation, law, and environmental policy.

## 6) Excellent preparation for becoming a Licensed Professional Engineer

The passing rate of our students and alumni on recent Fundamentals of Engineering Exams is 97%.



## 7) Excellent preparation for graduate and professional school

Over 40% of our recent graduates pursue advanced degrees in fields including: engineering, law, business and management, medicine, environmental planning and policy, education, landscape architecture, and applied mechanics. 40% of these students are studying within Top 25 ranked engineering programs.

## 8) Award-Winning Faculty

Faculty recognitions include:

Memberships in the National Academy of Engineering  
National Science Foundation Career awards for research and teaching  
NASA Innovation Awards  
University of Virginia Alumni Board of Trustees Teaching Awards  
AEESP National Award for Outstanding Teaching in Environmental Engineering

## 9) Undergraduate thesis projects and undergraduate research experiences

Every student in the engineering school completes a bachelor's thesis portfolio offering an opportunity to interact closely with faculty and many complete research experiences. In recent years, undergraduate projects have included:

- a study of the impact of cameras at intersections
- the design of a pedestrian bridge at the national zoo, and
- appropriate technology for waste disposal in the developing world.

## 10) Great Students

**High diversity:** The U.Va. School of Engineering and Applied Science (SEAS) has one of the highest rates of diversity of any engineering school in the country. Approximately one quarter of our students are women and about the same percentage are minorities.

**High retention:** Our retention and graduation rates are among the highest of any public university – 9 out of 10 students graduate with their degree from U.Va.

**Highly involved:** Our civil students are active in many organizations, including the student chapter of the American Society of Civil Engineers, fraternities and sororities, sports clubs and teams, service organizations, and honor societies.

**Talented:** U.Va. SEAS attracts some of the brightest, most talented students from around the country. Nearly everyone comes to us from the top ten percent of his or her high school class.

## 11) Communication skills and impact on society emphasized

The Science, Technology, and Society (STS) courses throughout the curriculum and the undergraduate thesis project challenge U.Va. engineering students to become proficient in oral and written communication while appreciating the broad impacts of engineering. Recent civil graduates rank communication skills as the number one strength of our program, helping them succeed on many career paths. In a recent University assessment of undergraduates' oral communication skills, SEAS students demonstrated the highest proficiency of any School at the University.

