A premier research university

Invent cancer treatments. Build resilient communities. Lead the world in cybersecurity, advance the science of sustainability, and create technology that changes how we live. That's just the beginning of the impact we can make together.

At Virginia Tech, collaboration is at our core. Our world-class faculty, staff, and students have worked side by side with business and industry to accelerate entrepreneurialism and enhance economic impact. Providing research power, intellectual capital, and job creation, Virginia Tech is a catalyst for growth and innovation and a resource to help businesses be more competitive.

Dedicated to its motto, Ut Prosim (That I May Serve), Virginia Tech takes a hands-on, engaging approach to education, preparing scholars to be leaders in their fields and communities.

The university's mission commits Virginia Tech to research and discovery that serve the public good of the community, the nation, and the world. Advancing this mission connects the most advanced fields of inquiry with the obligation to transform this knowledge into practical, aesthetic, social, and commercial applications.

» Groundbreaking research » Globally renowned faculty » Inestimable service to communities and society » Eminent scholarship » Worldwide technological leadership » Talented and motivated students » A heartfelt motto of service



AT A GLANCE

- Founded in 1872
- 9 colleges and graduate school
- 34,000 students
- 2,500 teaching and research faculty members
- 110 bachelor's degree programs
- 170 master's and doctoral degree programs
- Research portfolio of more than \$521 million
- Ranked 43rd in university research in the United States by the National Science Foundation
- Ranked No. 69 among national universities by U.S. News & World Report



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VIRGINIA



TALENT

From student researchers to faculty innovators to state-of-the-art facilities, Virginia Tech offers an abundance of resources to bring an idea to the future. Virginia Tech is the Commonwealth of Virginia's launch pad for innovation.

World-class engineering and science programs

As Virginia's most comprehensive university and its leading research institution, Virginia Tech offers 280 undergraduate and graduate degree programs to more than 34,000 students. Virginia



Tech is consistently recognized for its value and the quality of its programs. For example, the College of Engineering is known throughout the world for its outstanding programs, research, and public service. In 2016, it rose to eighth place on the National Science Foundation's report of research expenditures. Across the university, projects include high-performance computing; advanced materials; wireless telecommunication; housing; human and animal health; and the environment and energy.

Student classroom design projects

Student design projects in collaboration with industry are highly encouraged at Virginia Tech. Such projects are typically one or two semesters long. Student design teams receive opportunities to work on projects proposed by industry partners where the project can range from basic analysis to prototype development. Industry partners are welcome to propose topics or specific projects that have direct impact on their product development.

Continuing and Professional Education

In today's challenging world, private- and public-sector organizations seek answers to challenging issues, innovative solutions, and high-quality learning environments. Continuing and Professional Education (CPE) works with Virginia Tech teaching and research faculty, academic, government, and business leaders, as well as community partners to offer customized programs that



Microsoft named Virginia Tech one of five universities to receive a research grant to explore the potential uses of its HoloLens devices.

achieve results. CPE is the clear point of contact at Virginia Tech for academic, government, business, and nonprofit leaders interested in designing programs that prepare individuals, organizations, and communities through innovative learning experiences.

Learn how CPE can help you design a customized program for your company or organization at www.cpe.vt.edu.

Language and Culture Institute

With a strong commitment to international development and capacity building, the Language and Culture Institute has provided programs and services for academic and professional development for more than 40 years. By creating partnerships with governments, organizations, businesses, and higher-education institutions around the world, the institute helps share the expertise of Virginia Tech's faculty.

Find out about the services the LCI offers at www.lci.vt.edu.

RESEARCH + INNOVATION

The eight Research Institutes of Virginia Tech enhance the university's ability to address large-scale research opportunities by crossing traditional disciplinary and college lines. They provide clients access to world-class expertise across many disciplines and to the scientific and technical capability of specially equipped, advanced laboratories.

The Fralin Life Science Institute promotes interdisciplinary research and education in the sciences

- Focus areas:
- Vector-borne disease
- Infectious disease & microbial sciences .
- Obesity

The Hume Center leads Virginia Tech's research and experiential learning programs in national security, with a focus on cybersecurity, autonomy, and resilience.

Focused on the intersection of the arts, creative technologies, and learning, the Institute for Creativity, Arts, and Technology conducts and applies trans-disciplinary, collaborative research to enhance learning in K-12 and higher-education environments.

- Targeted research and scholarship areas:
- Critical and creative thinking skills
- Learning advancement
- Innovation of trans-disciplinary educational experiences

The Institute for Critical Technology and Applied Science promotes cutting-edge research at the intersection of engineering, science, and medicine. Focus areas:

- Nanoscale science and engineering
- Sustainable energy
- Renewable materials

The Institute for Society, Culture, and Environment

strengthens the university's competitive position in the social sciences, humanities, and arts.

- Targeted research and scholarship areas:
- Global issues initiative
- Human development and health



field study by researchers

public health emergency

prompted by tainted water

led by professor Marc

Edwards exposed a

in Flint, Michigan.

r Gooale, the irginia Tech Transportation the crash Unprecedented scientific rates for selfdriving cars are lower than the national crash rate of conventional cars.



Featuring 75 weather-making towers, the Virginia Smart Road transportation technologies.



• Social complexity, risk, and resilience

The Biocomplexity Institute combines information technology, medicine, and biology to generate, interpret, and apply vast amounts of data to solve problems in the biomedical, environmental, and agricultural sciences. Focus areas:

- High-capacity resources for disease research
- Ultra-scale biomedical data analysis, interpretation, and simulation
- Access to innovative high-performance computing
- Predictive diagnostic tests and therapeutics

The Virginia Tech Carilion Research Institute conducts interdisciplinary and translational research within the medical sciences to facilitate discovery-based medical education and to continually improve patient care through discovery and research.

Focus areas:

- Addiction research
- Cancer biology
- Developmental and regenerative medicine
- Neurobiology, cognitive neuroscience, and decisionscience

Virginia Tech Transportation Institute develops and uses state-of-the-art tools, techniques, and technologies to solve transportation challenges.

Focus areas:

- Roadway infrastructure and traffic mobility
- Injury biomechanics
- Product development

Learn more about the research institutes at www.research.vt.edu/institutes.

The Virginia Tech Research Center — Arlington, near Washington, D.C., is among the best connected research facilities in the world, incorporating nextgeneration Internet with direct fiber access to Internet 2 and multiple federal networks.

Virginia Tech is part of the search of th National Nanotechnology Coordinated Infrastructure, a National Science Foundation network of universities is a 2.2-mile road for testing new with exceptional strengths in nanoscience.



PARTNERSHIPS

Virginia Tech's efforts to solve society's problems and improve quality of life require the speedy transfer of ideas from the laboratory to the marketplace. Working with business and industry is an essential characteristic of the Virginia Tech culture, and it is in the DNA of the university's students and its 2,500 teaching and research faculty, many of whom work to patent discoveries, start companies, and provide practical knowledge to the world.

Industrial Affiliates Programs

Industrial Affiliates programs are designed to facilitate the transfer of knowledge to society and the dialogue between academia and industry. Supported by corporate membership fees, these programs provide an avenue for industry to contribute to and sustain research and teaching in Virginia Tech departments and programs of interest. Virginia Tech faculty and students gain a greater awareness of what goes on in member organizations; similarly, corporate members gain greater familiarity with the university's cutting-edge research, students and instructional programs.

▶ Learn about the benefits of the Industrial Affiliates Programs at www.research.vt.edu/industrial-affiliates-program.

Virginia Tech Corporate Research Center

Nestled in the heart of Virginia's Technology Corridor and adjacent to the Virginia Tech campus, the Virginia Tech Corporate Research Center (VTCRC) is home to more than 180 research, technology, and support companies. The 230-acre park is located in a beautiful mountain setting, with easy access to the metropolitan areas of Northern Virginia and the nation's capital. An expansion on the northwest side of the park provides enough land to construct 15 buildings in addition to the 33 single- and multitenant buildings currently on site. The VTCRC employs over 2,900 employees.

The research park grows businesses that matter by playing a unique role in assisting startups and established companies. The VTCRC does this by advancing:

- Research opportunities with Virginia Tech.
- Educational projects with world-renowned Virginia Tech faculty and the university's highest-achieving students.
- Technology transfer though programs that help to create companies based on university-developed technology.

Find out more about the Virginia Tech Corporate Research Center at www.vtcrc.com.

Tech Center

Modeled after the Virginia Tech Corporate Research Center, the \$450 million Tech Center is a 100-acre, mixed-use development being built in Newport News, Virginia. Situated adjacent to the world-renowned Jefferson Lab, the site will facilitate the transfer of technology from lab to marketplace. The Tech Center Research Park will provide nearly 1 million square feet of office and laboratory space, accommodating both large and small high-tech companies.

Learn more about doing business at the Tech Center at techcenterva.com.

