

Virginia Polytechnic Institute and State University, commonly known as Virginia Tech, is a leading public research university dedicated to teaching and learning, discovery, innovation, and service to humanity. Virginia Tech pushes boundaries of knowledge by taking a hands-on, transdisciplinary approach to preparing students to be leaders and problem solvers. Through experiential learning, future-focused research, and an inclusive, spirited culture, Virginia Tech strives to accomplish the charge of its motto *Ut Prosim* (That I May Serve).



- Virginia Tech is responding to **critical issues that impact the human condition** through our transdisciplinary communities.



127 new cluster hires are working across disciplinary boundaries

- Teams of faculty are engaging departments, institutes, and centers in a **collaborative effort to address complex problems**. Efforts are generating new solutions and innovative educational experiences for students.



Engaging internally as the communities collaborate with 8 research institutes, 9 colleges, and over 75 departments



Engaging externally as the communities have received support from alumni, private donors, industry partners, and major agencies like NSF, NIH, and the USDA

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Virginia Tech is committed to serving humanity, particularly within the context of technological leadership.

SYLVESTER JOHNSON
Assistant Vice Provost for Humanities



GLOBAL LAND-GRANT

Virginia Tech's motto is *Ut Prosim*, "That I May Serve." This motto emerged from our founding as a United States "land-grant" institution in the 19th century. Land-grant institutions were created with the specific mission of providing educational opportunities for individuals who had not historically attended college and for applying research to the practical needs of society. At the time, the focus was on local and regional advancement in agriculture and engineering. In the 21st century, we carry out this same mission in a broader global context. Virginia Tech provides opportunities for education and service to individuals around the world who can benefit from our particular strengths in engineering, architecture and design, business, natural resources, and physical, biological, medical and social sciences. Virginia Tech is committed to creating global impacts built upon a foundation of diversity, inclusion, and social engagement.

■ TRANSDISCIPLINARY COMMUNITIES

Transdisciplinary communities are offering educational experiences that provide students with hands-on learning opportunities that allow them to approach problem solving from multiple disciplinary perspectives in dynamic team based environments. These opportunities allow students to develop disciplinary depth and interdisciplinary abilities through purpose driven engagement.

ADAPTIVE BRAIN AND BEHAVIOR We focus on advancing the understanding of brain plasticity as it pertains to decision-making, physical and psychological trauma, and development across the lifespan as it pertains health and the human condition.

CREATIVITY AND INNOVATION We meld the exploration of innovative technologies and the design of creative experiences with best practices for developing impact-driven and meaningful outcomes and solutions.

DATA AND DECISIONS We integrate data analytics and decision sciences with the objective of advancing the human condition and society with better decisions through data.

ECONOMICAL AND SUSTAINABLE MATERIALS We innovate the future of manufacturing from atoms to systems through integrated discovery of materials, processes, and technologies while serving society through novel and resilient products and jobs creation.

EQUITY AND SOCIAL DISPARITY FOR THE HUMAN CONDITION We focus on equity in the human condition, maximizing, wherever possible, the equitable distribution and availability of physical safety and well-being, psychological well-being, and access to crucial material, social, and moral resources.

GLOBAL SYSTEMS SCIENCE We focus on understanding and finding solutions to critical problems associated with human activity and environmental change, that together, affect disease states, water quality, and food production.

INTEGRATED SECURITY We focus on themes related to cyber security, privacy and ethics, governance, and global security with the goal to understand and foster a world in which people, institutions, and nations are secured by technology and social systems that follow ethical principles and promote values.

INTELLIGENT INFRASTRUCTURE FOR HUMAN-CENTERED COMMUNITIES We address problems that exist at, and along, the interdependencies between humans, communities, and infrastructures to ultimately improve quality of life.

POLICY We develop novel approaches to policymaking and policy analysis by focusing on the dynamics (e.g., inputs, outcomes, impacts) of complex decision making in multiple contexts and policy settings.

learning + discovery + engagement