

Dean of the College of Engineering and Mathematical Sciences

Leadership Profile

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The Search

The University of Vermont invites applications for the position of Dean of the College of Engineering and Mathematical Sciences (CEMS). This is an exciting opportunity for a motivated leader to shape the future of the College embedded within a Carnegie R1 designated University. CEMS is a community of problem solvers, inspiring each other to build true world solutions that will lead to healthy, sustainable societies. The College offers modern facilities, focused energies, and unique interdisciplinary partnerships that span the campus, the state, and the region.

UVM seeks a distinguished scholar and educator with a record of academic and administrative excellence, leadership in institutional planning, and enrollment management. Experience with curriculum innovation, program assessment, fiscal management, policy and technology development, and promoting the values enshrined in UVM's <u>"Our Common Ground"</u> are preferred. The Dean must exhibit a balanced appreciation for engineering, computer science, mathematics, and physics, an aptitude for creating interdisciplinary collaborations across the University, and the desire to collegially promote UVM's collective goals. A record of fundraising, philanthropic development, and securing other forms of external funding is highly desired. A doctorate in an appropriate discipline and a stellar record of teaching and scholarship, as evidenced through promotion to full professor (or attributes enabling appointment as a full professor at UVM), are required. For information regarding nomination or expression of personal interest, please consult the section entitled Procedure for Candidacy.

UVM, located in Burlington, VT, is a Carnegie R1 designated public research university that offers a challenging academic experience and has a strong record of student success. UVM celebrates its interdisciplinary community of scholars, scientists, and learners with seven undergraduate colleges in addition to the Patrick Leahy Honors College, the Graduate College, the Larner College of Medicine (LCOM), and Professional and Continuing Education.

As part of this educational and research ecosystem, CEMS includes the Departments of <u>Civil and</u> <u>Environmental Engineering</u>, <u>Electrical and Biomedical Engineering</u>, <u>Mechanical Engineering</u>, <u>Mathematics & Statistics</u>, <u>Physics</u>, and <u>Computer Science</u>. The faculty and programs are highly collaborative, with established connections to virtually every other college at the University. The College is home to 1,400 undergraduates, 260 graduate students, 70 tenured/tenure-track faculty, 40 lecturers and senior lecturers, 30 research faculty and associates, and 30 staff. In addition, CEMS houses several research centers: the UVM Transportation Research Center, the Center for Resilient Energy and Autonomous Technologies in Engineering (CREATE), the Center for Biomedical Innovation, and the Vermont Space Grant Consortium.

Enrollments have stabilized in the last five years after a period of strong growth and are anticipated to grow again at both undergraduate and graduate levels. CEMS is on a sound financial footing; its budget and fundraising success have enabled continual strategic growth and investment. The new Dean will be responsible for ensuring the successful completion of the ABET accreditation process in 2027 in Civil and Environmental Engineering, Electrical and Biomedical Engineering, and Mechanical Engineering. The new Dean will be expected to shepherd the growth, manage finances strategically, develop new revenue, recruit and support distinguished faculty, and build innovative academic programs.

Opportunities and Expectations for Leadership

The following priorities have been identified for the incoming Dean:

Articulate a Vision and Strategy

The Dean will join UVM under new presidential leadership, and the Dean will have the opportunity to develop a compelling vision and corresponding strategic plan consistent with the University's pending new plan, and with the College's commitment to research and teaching excellence and practical impact. It is imperative that the next Dean articulates and disseminates the College's strengths to attract and retain the highest quality students who will transition into engaged alumni. The College will benefit from highlighting its outstanding academic programs that position graduates for success in the STEM workforce, in collaboration with regional industry partners and trade associations. The Dean will evaluate the College's current organizational structure and resources, making appropriate changes to support its continued growth and success.

Promote Academic Excellence across All Programs

The Dean will engage faculty in assessing the curriculum and current programmatic strengths to address current demand and emerging needs of STEM fields. This includes exploring opportunities to expand and enhance industry partnerships, technology development, and interdisciplinary programs with other UVM colleges or institutions in the region. It is expected that the Dean will lead collaboration across departments and programs to ensure cohesion and to leverage intra- and extramural collaborations. The Dean will also identify opportunities to increase student enrollment, increase the College's revenues and funding, and identify areas where technology can enhance productivity and lead to innovative teaching methods.

Recruit and Retain a Distinguished Faculty

CEMS faculty are accomplished in their areas of expertise and continually strive for success at all levels. The Dean will continue developing a faculty of distinction, establishing the highest standards in faculty recruitment, appointment, tenure, and promotion to enhance consistent excellence in teaching and research. This will include identifying recruitment needs to support curriculum changes and program expansion at the junior, mid-level and senior faculty levels, and retaining and recruiting faculty with strong records in STEM education and research. The Dean will support the ongoing professional development of the faculty, by mentoring early career faculty and emerging academic leaders, and encouraging faculty engagement in curriculum evaluation and program development.

Advance Scholarship and Research

Building upon the College's current research activity, the new Dean will lead further expansion of research productivity and funding, consistent with an R1 institution. UVM achieved Carnegie R1 status in 2025, a designation earned by less than 3 percent of U.S. higher education institutions. The Dean will identify opportunities for interdisciplinary

collaboration with industry partners and other external organizations, fostering the development of synergistic relationships that will advance UVM's research enterprise.

Engage Stakeholders and Develop Resources and Opportunities

As a public research and land-grant university, UVM is committed to providing regional, national, and international leadership in STEM fields through CEMS. As the voice and advocate of the College for an array of audiences, the CEMS Dean must be engaging and able to foster commitment to UVM's sustained success. The Dean is responsible for bringing prominence to CEMS and for developing beneficial collaborations, opportunities, and resources. They will advocate within and beyond UVM for the many societal benefits of CEMS' educational, research, and service programs.

As leader of the research enterprise, the Dean will ensure effective infrastructure and engage in strategic planning to enhance the breadth, depth, and impact of CEMS activities. Opportunities exist for significant expansion of extramural support for research in the College. The Dean will emphasize the importance of graduate students to advance the research agenda and advocate for the entire research spectrum — from basic to applied research, and the translation of technologies into commercial assets. The Dean must also appreciate how single investigator projects and multi-investigator transdisciplinary initiatives both contribute to the University's overarching research mission.

The Dean's interactions involve a wide range of constituencies within and beyond the College; these include the administration, deans, faculty, students, foundations, government and funding agencies, industry partners, trade associations, civic leaders, donors, and alumni. The Dean serves as the principal architect for building and maintaining relationships with various partners to develop research opportunities and academic initiatives, to enhance revenue streams, and to stimulate economic growth and workforce development in the state and beyond. The Dean will support current partnerships within New England, especially its northern tier, and Canada, and is expected to develop new partnerships to advance the mission of the College.

Professional Qualifications and Personal Qualities

UVM seeks a visionary scholar with impeccable credentials to lead the College into the future. The background, skills, and qualities the successful candidate will offer, ideally, are these:

Leadership

- <u>Academic accomplishment</u>: A record of instruction, scholarship, and research excellence that merits appointment as a tenured professor in one of the departments of the College.
- <u>Commitment to excellence</u>: Sincere and intense appreciation for excellence in research and scholarly endeavors, and a record of recruiting and developing people and programs of the highest quality.

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- <u>Strategic vision</u>: Ability to engage the community in crafting a compelling vision that builds on completed work, and then to create an environment that enables the College to achieve that vision.
- <u>Collaborative leadership</u>: A collaborative and relationship-based leadership style; experience that brings people together to solve challenges while empowering others.

Management

- <u>Management experience</u>: A history of administrative leadership; strong human resources and financial management experience as well as being adept at conflict resolution and negotiation.
- <u>Inclusive Excellence</u>: A commitment to advancing inclusive excellence, particularly with respect to students, staff, and faculty; a track record of individual action and institutional leadership to advance inclusive excellence in all its forms.
- <u>Breadth</u>: Familiarity with challenges and opportunities associated with colleges of engineering, physics, computer science, and mathematics; natural and instinctive curiosity about widely diverse intellectual and creative endeavors.
- <u>Fundraising</u>: The capacity to attract external resources to the College through fundraising initiatives.
- <u>Progressive management style:</u> Experience leveraging the talents of faculty and staff to design and implement initiatives that enrich the University community. Evident commitment to contemporary research-based management strategies that enable faculty and staff to achieve their full potential within the university community. A leadership style that evinces respect for others and demonstrates focus on clearly defined goals over a significant period of time. A capacity to delegate to others.

Communication and Interpersonal Skills

- <u>Emotional Intelligence</u>: Ability to negotiate and work with others; an inclination to circulate, listen, learn and to be a visible presence on campus; adeptness at working with faculty, students, staff, and the media, as well as high-level corporate, university and government leaders; exceptional listening skills; understanding of the intersection between emotions, motivations, and behavior.
- <u>Commitment to student success</u>: Strong commitment to student success, demonstrated by advocacy for adequate resources, including human resources, to support innovative teaching and academic mentoring.
- <u>Commitment to mission</u>: The ability to thrive in the UVM environment through passionate advocacy for the College; identification with its mission and a deep understanding of the role of the College and University in the broader higher education landscape.

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• <u>Personal qualities</u>: Unquestionable personal integrity; strong self-awareness; inspiring and energetic with the ability to earn the trust of faculty, staff, and students, and to work collegially with the President, the Provost, the other Deans, and the senior leadership team; the ability to empathize with others; resilience under pressure; a sense of humor and progressive outlook that is a balance of optimism and realism.

Role of the Dean of Engineering and Mathematical Sciences

Appointed by the President, reporting to the Provost and Senior Vice President, the Dean of CEMS is its chief executive and academic officer. The Dean will establish the standard for intellectual accomplishment by the College faculty and provide strategic vision and operational leadership for all academic and scholarly programs in the College. The Dean will foster an environment supportive of the faculty, students, staff, alumni and other stakeholders. They will assure that the College serves its students by providing exceptional academic programs and scholarly distinction, and will promote achievement through intercultural excellence in faculty, student, and staff recruitment. To execute these responsibilities, the Dean will collaborate with the President, the Provost, CEMS Department Chairs and the campus leadership team. The Dean will be, in general, a conspicuous advocate for the College to garner resources and support that will ensure success. This will include execution of UVM's Incentive-Based Budgeting model (IBB) and development and maintenance of facilities.

To fulfill these responsibilities, the Dean will be supported by a leadership team that is comprised of two Associate Deans, six Department Chairs, and a range of directors, managers, and assistants.

Reporting Relationships	
Reports to:	Provost and Senior Vice President
Partners with:	Deans of other UVM Colleges and Schools
	Provost's Operational Management Team
Direct Reports:	
	Associate Deans
	Director of Operations
	Director of Student Services
	Senior Financial Manager
	Senior Outreach Professional
	Communications Professional
	(functional) Major Gifts Officer

Relates to:President's Cabinet
Council of Deans
CEMS Board of Advisors

Procedure for Candidacy

Inquiries, nominations, and applications are invited. Applications should be submitted through the University's online recruitment site: <u>https://www.uvmjobs.com/postings/81019</u>. Nominations and inquiries should be sent to <u>UVM.CEMS.Dean.Search.2025@office.uvm.edu</u>. Candidates should provide:

- 1. A letter of application addressing the central themes described in this leadership profile, including advancing the College's mission in education, service, scholarship, and research.
- 2. A professional CV
- 3. The names and contact information for three references. References will only be contacted with prior notice to the candidate.
- 4. A separate statement on how, as Dean, you would advance <u>Our Common Ground Values</u> at UVM and among the populations we serve.

Review of applications will begin on **October 1, 2025**, and will continue until an offer is made. Applications received by **September 30, 2025**, will receive priority consideration. Employment is subject to a successful Background Check.

Compensation range: \$337,000 - \$357,000. Compensation is competitive and will be commensurate with both experience and achievement, and includes a highly competitive array of benefits.

UVM is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other category legally protected by federal or state law.

The College of Engineering and Mathematical Sciences

Vision Statement

UVM's College of Engineering and Mathematical Sciences will create a more sustainable and equitable future through its excellence in education and research focused on solving the complex problems facing our world. The College's graduates will be recognized for their acumen in a discipline, communication skills, commitment to a better world, lifelong learning, creativity, and empathetic leadership.

Mission Statement

UVM's College of Engineering and Mathematical Sciences is an open and conscientious intellectual community focused on excellence and committed to its public responsibilities as part of a comprehensive land grant institution. The College's mission is to:

- Prepare the next generation of technical and societal leaders who thrive in a world that is volatile, complex, and full of promise, and who are committed to a sustainable and equitable world, lifelong learning, and empathetic leadership.
- Advance knowledge in fields that align with our commitment to a more sustainable future.
- Provide leadership and develop partnerships across VT with K-12 STEM educators, companies, and municipalities.

The College of Engineering and Mathematical Sciences (CEMS) currently comprises the Departments of <u>Civil and Environmental Engineering</u>, <u>Electrical and Biomedical Engineering</u>, <u>Mechanical Engineering</u>, <u>Mathematics & Statistics</u>, <u>Physics</u>, and <u>Computer Science</u>. The engineering departments offer four accredited degrees: Civil, Environmental, Electrical, Biomedical and Mechanical Engineering. Interdisciplinary degree programs include B.S. and B.A. in Engineering Management and B.S. in Computer Science and Information Systems, in partnership with the Grossman School of Business, and a B.S. in Data Science.

At the graduate level, CEMS provides ten Master's degree programs and six Doctoral offerings, as well as a Certificate of Graduate Study. Graduate degree programs (M.S. and Ph.D.) exist in Civil and Environmental Engineering, Electrical Engineering, Biomedical Engineering and Mechanical Engineering, Computer Science, Physics, and Mathematics and Statistics. Interdisciplinary graduate degrees are available in Biomedical Engineering (M.S. and Ph.D.), Complex Systems and Data Science (M.S. and Ph.D.). An accelerated M.S. Program permits students to earn a B.S. and M.S. in five years.

CEMS currently includes 70 tenured/tenure-track faculty, 40 lecturers and senior lecturers, 30 research faculty and associates, and 30 staff.

The College faculty are passionate about both teaching and developing knowledge in their areas of expertise. They have been recognized for their scholarly achievements — as members of the National Academy of Engineers, fellows of the leading professional engineering organizations, recipients of the Presidential Early Career Award for Scientists and Engineers, and National

Science Foundation CAREER awards.

Research expenditures in the College for fiscal 2025 totaled \$23.6 million, which represents our highest year of research expenditures to date. Sponsors include such federal agencies as NASA, NSF, USDOT, DOE, ONR, and NIH, as well as various Vermont state agencies. The College has an annual general fund budget of \$54 million that includes both operating funds and personnel.

UVM's fiscal 2025 budget totals \$860 million. For the same period, the total general fund budget, excluding auxiliaries and sponsored research, is \$430 million. State support represents \$33 million annually. The market value of the University's endowment on June 30, 2024 totaled \$896 million.

CEMS takes pride in supporting student engagement in research and industry; our upper- division undergraduate students work in teams on real-world problems, in collaboration with clients from industry, with faculty on research-related problems, and with local municipalities and non-profits. In addition to capstone and project-based courses that involve external stakeholders, the College also supports robust internship and co-op programs to help students gain experience in industry and operates its own internal Research Experience for Undergraduates program to support student involvement in faculty research.

Department of Civil and Environmental Engineering (CEE): Combining a rigorous technical education with an emphasis on social awareness, the Civil and Environmental Engineering program prepares students to become leaders and innovators who are empowered to make the world better for all. The program teaches students to develop sustainable systemic solutions that address short and long-term environmental, social, political, regulatory, and economic issues while identifying, defining, and solving engineering challenges. Deeply rooted in stewardship and sustainability, the undergraduate and graduate degree programs promote an interdisciplinary education with research and collaborative opportunities across campus that include not only other engineering and science departments but also social science, policy, and medicine. Students master essential skills such as critical thinking, data analysis and modeling, use of information and advanced engineering technology, as well as interpersonal communication through project-based and service learning. CEE faculty research addresses critical worldwide issues related to water, sustainability and energy; infrastructure systems; climate change, hazard mitigation, and adaptation; and environmental and public health.

CEE degrees and certificates:

- <u>B.S. in Civil Engineering</u>
- B.S. in Environmental Engineering
- <u>Sustainable Energy Minor</u>
- Accelerated Master's Programs (AMP) in Civil and Environmental Engineering
- <u>M.S. in Civil and Environmental Engineering</u>
- Ph.D. in Civil and Environmental Engineering

Coming degrees and certificates:

• Certificate of Graduate Study in Data Analytics for Water Resources

Department of Electrical and Biomedical Engineering (EBE): In the Department of Electrical and Biomedical Engineering, innovation drives collaboration, world-class research, and transformational educational programs that embrace flexible curricula, allowing students to gain broad design experience in a supportive, hands-on environment. As a student-centered program, the Electrical and Computer Engineering (ECE) program features a flexible curriculum allowing students to pursue their degree with one or more focus areas (Power and Energy Systems, Autonomy and Robotics, and Computer and Semiconductor Engineering) with technical electives that support these tracks to gain a depth of knowledge in their area of interest. As a result, our graduating Electrical Engineers are employed in a broad spectrum of industries, working on everything from high-power electric grids to low-power circuitry for smart devices and from medical instrumentation to fiber optics communications. Leveraging strong ties between CEMS and UVM's Larner College of Medicine, the Biomedical Engineering program trains students to work at the interface between engineering and the biomedical sciences with a rigorous curriculum structured into three phases: Foundational, Skills, and Specialization. Progressing through these stages, students build a solid foundation in quantitative engineering methods and biomedical science, develop a broad set of multidisciplinary engineering skills, and pursue electives germane to their interests as they embark on their team-based senior capstone design experience.

EBE degrees and certificates:

- <u>B.S. in Electrical Engineering</u>
- <u>B.S. in Biomedical Engineering</u>
- Minor in Electrical Engineering
- Minor in Sustainable Energy Engineering
- <u>Undergraduate Certificate in Semiconductor Engineering and Physics</u>
- Accelerated Masters Program (AMP) in Electrical Engineering
- Accelerated Masters Program (AMP) in Biomedical Engineering
- <u>M.S. in Electrical Engineering</u>
- <u>M.S. in Biomedical Engineering</u>
- <u>Ph.D. in Electrical Engineering</u>
- <u>Ph.D. in Biomedical Engineering</u>
- <u>Certificate of Graduate Study in Semiconductor Engineering and Physics</u>

Coming degrees and certificates:

• <u>Minor in Computer Engineering</u>

Department of Mechanical Engineering (ME): Providing a modern approach to mechanical engineering education with an appreciation of the societal impact of engineering practice, the Mechanical Engineering program focuses on developing essential decision-making skills using a strong foundation of mathematics, physical science, engineering science, and design. The robust technical curriculum culminates in their senior year with a team-based capstone design project, providing students with experience that can be applied immediately to an engineering career or expanded into more advanced education in other engineering or related fields. The Mechanical Engineering department offers undergraduate and graduate programs with concentrations aligned with the Department's research strengths, specifically in material science, computational mechanics, fluid dynamics, aerospace engineering, health-monitoring and sensing of structures,

manufacturing, biomechanics, and tissue engineering. Recent graduates have launched their careers with engineering positions among nationally recognized companies in the industries including IBM, NASA, General Dynamics, General Electric, Monsanto, and Ford. Others with an entrepreneurial spirit have launched growing enterprises locally such as Microstrain, a high-tech company that manufactures instruments for medical researchers and physicians, and BioTek Instruments, which designs and produces microscale biological analysis instruments.

ME degrees and certificates:

- B.S. in Mechanical Engineering
- Accelerated Master of Science (AMP) in Mechanical Engineering
- <u>M.S. in Mechanical Engineering</u>
- Ph.D. in Mechanical Engineering

Coming degrees and certificates:

• Certificate of Graduate Study in Materials Science and Engineering

Department of Mathematics and Statistics: Boasting a long and proud tradition of excellence in education as well as an international reputation for world-class research, the Department of Mathematics and Statistics offers some of the most flexible and marketable STEM degree programs at UVM. The Department features an internationally acclaimed roster of faculty researchers in a wide variety of specialties and takes pride in its well-earned reputation for the personal attention and support they provide students. Organized in six broad areas (algebra and number theory, analysis, applied mathematics, combinatorics and graph theory, complex systems and data science, and statistics and biostatistics), the scope of departmental research spans interdisciplinary collaborations with scholars across campus through the investigation of theoretical mathematics in local K-12 schools and leads several annual outreach projects including MATHCOUNTS, the Governor's Institute in Mathematical Sciences, the Vermont High School Math Contest, and the Putnam Exam.

Mathematics and Statistics degrees and certificates:

- <u>B.S. in Mathematics</u>
- <u>B.A. in Mathematics</u>
- <u>Co-Major in Mathematics</u>
- <u>B.S. in Statistics</u>
- <u>B.S. in Data Science</u>
- <u>Minor in Mathematics: Pure</u>
- <u>Minor in Statistics</u>
- Accelerated Master's Program (AMP) in Mathematics
- <u>M.S. in Mathematical Sciences</u>
- <u>M.S. in Biostatistics</u>
- <u>M.S. in Statistics</u>
- Ph.D. in Mathematical Sciences

Coming degrees and certificates:

• Certificate of Graduate Study in Applied Statistics

Department of Computer Science (CS): Providing students with a solid foundation in both applied and theoretical aspects of computing, the Department of Computer Science boasts faculty who are internationally recognized leaders in a diverse range of research areas including evolutionary robotics, complex systems, data science, computational social sciences and humanities, computational linguistics, deep learning, programming languages, and cybersecurity. Balancing a flexible curriculum with a mixture of lecture-based and hands-on experiential learning exercises, the Computer Science department offers several collaborative degrees with campus partners, including a B.A. in Computer Science through the College of Arts, a B.S. in Data Science in collaboration with the Department of Mathematics and Statistics, and graduate degrees with UVM's Complex Systems Institute. The Department prides itself on building a strong sense of community through active student groups such as the CS Crew and the Society of Women in Computing (SWICs) who help organize and host both the annual Computer Science Fair and the UVM Hackathon, both with local industry support.

CS degrees and certificates:

- B.S. in Computer Science
- B.S. in Computer Science and Information Systems
- <u>B.A. in Computer Science</u> (with College of Arts and Sciences)
- <u>B.S. in Data Science</u> (with Department of Mathematics and Statistics)
- Minor in Computer Science
- <u>Computer Science Education Minor</u> (with College of Education and Social Services)
- Accelerated Master's Program (AMP) in Computer Science
- <u>M.S. in Computer Science</u>
- <u>Ph.D. in Computer Science</u>
- <u>Master's in Complex Systems and Data Science</u> (with Vermont Complex Systems Institute)
- <u>Ph.D. in Complex Systems and Data Science</u> (with Vermont Complex Systems Institute)
- <u>Certificate of Graduate Study in Complex Systems</u> (with Vermont Complex Systems Institute)

Department of Physics: With an emphasis on active learning, the core curriculum of the Department of Physics provides a comprehensive education in the fundamentals of physics, including mechanics, electromagnetism, statistical physics, and quantum theory. From this solid foundation, students can explore subfields such as astrophysics, biological physics, condensed matter physics, nanotechnology, quantum optics, and computational physics through a diverse and engaging array of electives and student research opportunities. The department boasts cutting-edge research at the forefront of three major areas: Experimental Materials Physics, Theoretical Condensed Matter Physics, and Biophysics. Spanning fundamental investigations of properties of materials to explorations of complex biological systems, the complex research interests of the department often blur the boundaries between traditional scientific disciplines. Interdisciplinary collaboration is a cornerstone of our research culture, with strong partnerships across campus in departments such as Chemistry, Mechanical Engineering, Electrical and Computer Engineering, Molecular Physiology and Biophysics, and Cell and Molecular Biology. These collaborations drive innovation in areas like nanotechnology, quantum materials, soft matter, and biological

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physics, opening doors to real-world applications in energy, health, and technology.

Physics degrees and certificates:

- B.S. with Major in Physics
- B.A. with Major in Physics
- <u>Minor in Astronomy</u>
- <u>Minor in Physics</u>
- <u>Undergraduate Certificate in Semiconductor Engineering and Physics</u>
- <u>M.S. in Physics</u>
- <u>Ph.D. in Physics</u>
- Accelerated Master's Program (AMP) in Physics
- <u>Certificate of Graduate Study in Semiconductor Engineering and Physics</u>

Coming degrees and certificates:

• Certificate of Graduate Study in Materials Science and Engineering

Transportation Research Center (TRC): Launched in 2006 to advance environmentally sustainable transportation through cutting-edge research, innovative outreach programs, and education of our future leaders, the Vermont Transportation Research Center has served as a hub for cutting-edge, multidisciplinary transportation research. The center focuses on sustainable and equitable solutions for smaller cities and rural communities in Vermont, New England, and beyond. A team member of the National Center for Sustainable Transportation, the TRC is an interdisciplinary hub for research, workforce development, and outreach on sustainable transportation system solutions. Its faculty and professional staff focus on transportation planning as related to resilience, energy, and equity. It currently hosts the Vermont Clean Cities Coalition, one of five Federal Highway Administration centers around the country. The TRC manages the New England Transportation Consortium for the six state DOTs in New England, and the Vermont Transportation Research Collaborative for the Vermont Agency of Transportation.

<u>Center for Resilient Energy & Autonomous Technologies in Engineering (CREATE)</u>: An interdisciplinary research center focused on advancing the next generation of energy and autonomous technologies, CREATE exists at the intersection of technologies that enable resilient and responsive power and energy systems, as well as data-driven feedback control solutions. Their three-fold mission is: to advance human knowledge and solve critical problems facing our society today in the broad areas of energy systems and autonomy; to design, develop, optimize, and control autonomous energy systems to enable a sustainable energy future; and to scale the impact of research efforts in the broad areas of energy systems and autonomy to better serve people and the planet, including use-inspired research for Vermont's industry & communities. CREATE features an interdisciplinary team of faculty, graduate students, and industry partners working to solve critical problems facing our society today in the broad areas of energy systems and autonomy. The center actively cultivates collaborative partnerships with industry, national laboratories, organizations, and academic centers to facilitate the sharing of hardware and data, providing real-world platforms for testing and validation while enriching the research process and advancing workforce development efforts.

Vermont Space Grant Consortium (VTSGC): Part of a national network of colleges and

universities connecting NASA with the educational and research institutions of the United States, The Vermont Space Grant Consortium consists of academic institutions, private industry, and public organizations. Funded in part by a grant from NASA's National Space Grant College and Fellowship Program, the goals of the VTSGC are: to build aerospace-related research infrastructure within the state; to promote science, technology, engineering and mathematics (STEM) education among Vermont students; and to train and encourage students to pursue careers in aerospace-related areas. VTSGC is dedicated to connecting Vermonters interested in science, technology, engineering, and mathematics with opportunities to work on NASA projects or alongside NASA professionals. We offer student research experiences, graduate fellowships, library grants, and community-focused events and programming.

<u>Vermont Complex Systems Institute (VCSI)</u>: The Vermont Complex Systems Institute (VCSI) is a post-disciplinary group of faculty, graduate students, postdocs, and research scientists who collaborate to describe and explain complex physical, biological, technological, and sociological systems. The VCSI focuses on the use of sophisticated mathematical and computational modeling and analysis techniques to engage real-world challenges. These include the development of next-generation information technology for a national smart grid, the evolution of intelligent robots, improving the dissemination of innovation and information in healthcare, and mapping the global influence of social media. The VCSI features an outstanding cadre of internationally recognized faculty who have produced highly cited complex systems scholarship over the last three decades. The VCSI has attracted significant and novel funding from governmental, corporate, and private connections, now in the many tens of millions.

Vermont Advanced Computing Center (VACC): Managed by the Office of the Vice President for Research (OVPR) in partnership with UVM's Enterprise Technology Services (ETS) to support compute and data-intensive research programs across disciplines, the VACC is a vital part of the research infrastructure at UVM. The supercomputing clusters currently at the VACC, both central processing unit (CPU) and graphics processing units (GPU) clusters, are a thriving virtual laboratory, catalyzing interdisciplinary science across campus for a growing research community. The VACC supports 828 active scholars, including 261 faculty PIs, with over \$100M in active funding. At UVM alone, more than 200 of these VACC users include GPU-specific processes in their research pipeline. It is also home to the research done by staff, post-docs, graduates, and undergraduates working in PI research groups across 22 departments. Faculty consistently credit the VACC as an essential resource in recruiting trainees, producing high-profile publications, and securing extramural funding. Several prominent and growing degree programs offer unique training through coursework performed on the clusters, including at least ten courses to be offered in 2025.



The University of Vermont: Its Founding and History

An institution like no other. Chartered in 1791 as the fifth college in New England, UVM rapidly claimed a respected reputation among progressive thinkers and doers in the rugged, vibrant, and spectacular place that became the State of Vermont that same year. The University has evolved significantly and continuously for over 230 years to become a leading public research institution, achieving an R1 Research Activity Designation from the prestigious Carnegie Foundation, a designation earned by less than 3 percent of U.S. higher education institutions. in 2025.

In harmony with our early roots as a champion of the liberal arts, the institution is chartered with a Latin name, *Universitas Viridis Montis* (University of the Green Mountains), abbreviated to the familiar "UVM" used to this day. Anchored in scholarly tradition yet helping to define a new state's and nation's future, UVM established a reputation "like no other" from the beginning.

The charter explicitly supported freedom of religion, breaking ranks with institutions like Harvard, Yale, Dartmouth, and Brown to become the first institution of higher learning to publicly declare a secular stance. In 1838, Andrew Harris became the first African American graduate. In 1871, UVM defied convention yet again by admitting two women students. UVM's chapter of the Phi Beta Kappa honor society was also pioneering, becoming the first chapter of the honor society to admit women (1875) and African Americans (1877).

New approaches, age-old values. UVM played a significant role in the region's social, intellectual, and economic development during the late 18th and throughout the 19th century—realizing the ambitious vision of founder Ira Allen. In 1822, a medical college was formally created—the seventh in the nation. A generation later, following the passage of the Morrill Land Grant Act, Vermont's legislature built a new State Agricultural College at UVM. One year later, in 1865, the two institutions merged, and the state committed annual support to the new enterprise for the first time.

In the mid-20th century, state and UVM leaders collaborated to designate UVM a public university that would forever serve as Vermont's flagship, offering discounted tuition to state residents. An unwavering commitment to accessibility and affordability continues today with the creation of the <u>UVM Promise</u> to ensure most Vermonters from families below the state's median household income pay zero tuition.

A comprehensive public mission emerged, combining the rigorous scholarship of the liberal arts, the engagement ideals of the Land Grant Act, and the curiosity and innovation of a research

university. These influences have formed a powerful combination of academic gravitas and practical outcomes. Throughout our history, UVM has maintained enrollment at a scale that fosters meaningful personal engagement and a robust feeling of community on a vibrant campus in an exceptional location.

<u>Our Common Ground</u>—a set of six universal values—is a prominent feature of life on the UVM campus, literally carved in stone in front of the student center and visible in many ways through annual awards and other forms of recognition. Regardless of our many backgrounds, cultures, and points of view, we share "Our Common Ground" of Respect, Integrity, Innovation, Openness, Justice, and Responsibility. We believe they represent the course of UVM's history as much as they provide purpose and aspiration to today's students, faculty, and staff.

Our faculty play an essential role in university governance, primarily through the Faculty Senate. In the early 2000s, UVM faculty established a chapter of United Academics (AAUP/AFT) fulland part-time faculty unions.

UVM in 2025. UVM achieved an R1 Research Activity Designation from the prestigious Carnegie Foundation in 2025 and ranks among the nation's top public research universities today. The National Science Foundation ranks UVM #85 among public universities based on total research activity. We are also ranked by multiple sources as the "greenest universities," "best places for LGBTQ students," and "most bike-friendly campus." UVM has earned the number one ranking on the 2024 "Best Schools for Making an Impact" list of public universities and colleges, a Best Value College category published by The Princeton Review. The Peace Corps ranked the University of Vermont No. 3 among medium-sized U.S. schools on the agency's latest listing of top 25 volunteer-producing colleges and universities for 2025. Enrollment (Fall 2024) included 11,743 undergraduates, 1,713 graduates, and 487 medical students. Recent years have attracted record-breaking applications in all categories and incoming classes with the highest-ever academic credentials and most diverse backgrounds.

The University is committed to our students' success in all realms—academic, professional, and social. The culture of our campus and region is conducive to health and wellness, helped by four seasons of unmatched opportunity for outdoor recreation and other activities. Hundreds of students choose to live in our Wellness Environment residential community, one of our residential learning communities on campus.

The University's research enterprise has grown significantly over the past decade, reaching total external funding of over \$266 million in Fiscal Year 2024. Distinctive areas of research excellence include human and animal health, environmental sciences, energy, sustainability, food systems, hydrology, agriculture, advanced computing, and engineering. The University's faculty of more than 1,800 supports UVM's teaching, research, and engagement mission. Among our faculty are winners of Guggenheim Fellowships, Pulitzer Prizes, and other prestigious scholarly awards. Nine out of ten faculty members hold the highest degree in their academic discipline or professional field.

In 2019, the UVM Board of Trustees adopted a new strategic plan, <u>Amplifying Our Impact</u>. The plan calls for three strategic imperatives to guide major decisions about the university's future:

ensuring student success, investing in research excellence, and engaging with the people, organizations, businesses, and government of Vermont. Connected directly to our mission as a Land Grant university, these imperatives provide a framework for allocating resources, organizational structure, and breadth of programs.

Our Commitment to Advancing Inclusive Excellence. The University of Vermont is a welcoming, educationally purposeful community committed to creating an inclusive environment that embraces intellectual diversity and global perspectives. We seek to prepare students to be accountable leaders who will bring to their work a grasp of complexity, effective problem-solving and communication skills, and an enduring commitment to learning and ethical conduct. Members of the University of Vermont community embrace and advance the values of Our Common Ground: Respect, Integrity, Innovation, Openness, Justice, and Responsibility.

Location

The UVM campus sits in the heart of Burlington, land and home of the Abenaki People, Vermont's largest city, with 50,000 people in town and 214,000 more in the greater urban area. The city boasts a bustling shopping and restaurant scene, a thriving arts community, and an unparalleled Lake Champlain waterfront. Burlington is consistently extolled as one of the nation's most livable, safest, and healthiest cities. The spectacular natural setting and dynamic small-city culture make Burlington a fixture on "Best" lists, including number 13 on *Travel + Leisure*'s "America's Best College Towns," *Kiplinger*'s "10 Best Cities for the Next Decade," and "One of the Top 100 Best Places to Live 2018" by Livability.com. Burlington was the first city in America to start running completely on renewable energy.