

Dean, College of Science Northeastern University Boston, MA

THE SEARCH

Northeastern University – renowned for its innovative and entrepreneurial model of education and research – welcomes applications and nominations for the position of Dean of the College of Science. Northeastern's unique value proposition is grounded in several key tenets: an experiential education that prepares graduates to thrive in a technology-driven world; a global network of campuses and partners for students and faculty to leverage for learning and research; a deep investment in lifelong and experiential learning; a premium placed on pedagogical innovation; and a highly collaborative, partner-fueled research enterprise focused on high-impact solutions.

Northeastern has embarked on a new academic plan, *Beyond 2025*, that presents a unique vision of the future of education rooted in experience, emphasizing impact through education and research, and promoting deeply held values of diversity, service, and respect. The Dean of the College of Science will lead the college's efforts to rethink the way education is delivered, with a greater focus on technology, personalization, and lifelong learning. They will build productive and creative partnerships across the whole of the university, including its global network, to leverage the strengths and experience of other academic units. As the college continues to grow, the dean will recruit and retain the best faculty and students, expanding the breadth of academic offerings and increasing the research productivity. The dean will engage outside partners—one of the hallmarks of the Northeastern model—to identify ways the college can coalesce academia and industry around greater societal challenges. Finally, the dean will strengthen Northeastern's position as a truly global university, shaping its activities and fostering integrated education and research enterprise systems across all campuses around the world.

Northeastern has experienced unprecedented growth over the last 20 years. Annual external research funding has increased dramatically, fueled by its highly collaborative, interdisciplinary institutes and centers and the hiring of more than 1,000 tenured and tenure-track faculty. Northeastern's experiential model, with its signature co-op program, has expanded to include a vast array of real-world projects and experiences that attract top students at all stages of learning from around the world.

Over the past decade, Northeastern has also established 12 campuses outside Boston, across North America and in the U.K., that offer diverse opportunities in undergraduate and graduate learning, research, and entrepreneurship. This global network provides faculty and students a myriad of ways to learn and discover in new contexts, enriching education and maximizing the ability to make an impact. Northeastern is deeply committed to expanding global education, partnerships, and research, enabling learners to become leaders equipped to navigate and influence an interconnected world.

Northeastern has retained Isaacson, Miller, a national executive search firm, to assist in this search. All applications, inquiries, and nominations, which will remain confidential, should be directed to the search firm as indicated at the end of this document.

NORTHEASTERN UNIVERSITY

Trajectory

Founded in Boston in 1898, Northeastern is renowned for its experiential learning model, high-impact research, deep partnerships, and worldwide reach. From day one, the university has pursued innovative ways of teaching and research that place a premium on experience and engagement with the world. Today, its signature approach spans the world, empowering not only students, but faculty, alumni, partners, and innovators to explore ideas, solve problems, and scale impact.

Our global university provides our community and academic, government, and industry partners with unique opportunities to think locally and act globally. It includes 13 campuses across the U.S., U.K., and Canada, 320,000-plus alumni, and more than 3,800 employer partners worldwide, serving as a platform for scaling ideas, talent, and solutions.

The university's residential campuses for undergraduate and graduate education and research are located in Boston, London, and Oakland, California. Our research- and graduate-focused campuses are in the Massachusetts communities of Burlington and Nahant; Arlington, Virginia; Charlotte, North Carolina; Miami; Portland, Maine; Seattle; Silicon Valley, California; Toronto; and Vancouver.

Northeastern's personalized, experiential undergraduate and graduate programs lead to degrees through the doctorate in 10 colleges and schools across our campuses. Learning emphasizes the intersection of data, technology, and human literacies, uniquely preparing graduates for an Al-driven world and the careers of the future.

Our research enterprise, with an R1 Carnegie classification, is solutions-oriented and spans the world. Our faculty scholars and students work in teams that cross not just disciplines, but also sectors—aligned around solving today's highly interconnected global challenges and focused on transformative impact for humankind.

Isaacson, Miller

Measure of Success

The pace of change and progress at the university has accelerated significantly under the leadership of <u>President Joseph E. Aoun.</u> Northeastern's research profile and external funding levels have risen sharply: External research funding was \$296.3 million in 2024, up more than 500% since 2006. In 2015, the university moved into the top tier for research activity when it achieved R1 status under the Carnegie Classification system. The university had an endowment of \$1.9 billion as of June 30, 2024, and an FY24 operating budget of \$2.3 billion.

Northeastern's faculty totals more than 4,000 (more than 2,000 are full-time) and comprises a diverse and talented group of teachers and scholars. The <u>Academic Plan</u> prioritizes research, personalized experiential learning, and global impact. The chairs, deans, and provost have built a tenure-track faculty aligned with Northeastern's strategic themes, supported by large investments in new campuses, facilities, and startup packages. Faculty productivity and distinction is at the heart of the Northeastern mission and of the university's commitment to growing its academic enterprise. The non tenure-track faculty progressive titles for promotion, training on the science of teaching and learning, and directly participate in Northeastern's strong shared governance tradition. Faculty cite the interdisciplinary and translational intellectual culture of the university, Northeastern's excellence in foundational disciplinary research, and institutional momentum as key reasons for joining the university community.

Northeastern's distinctive, internationally recognized programs for experiential learning attract an increasingly diverse and academically talented pool of students. The university's signature cooperative education program (co-op) and other experiential programs have enabled Northeastern undergraduate and graduate students to have professional, research, and service opportunities in 151 countries, giving students real-world experience that adds enriching new dimensions to their classroom studies. Northeastern received 98,124 applications for the fall 2024 entering class, and the mean composite SAT score was 1483. Applications for master's and certificate programs exceeded 71,000 as of fall 2024, up 260% in the last decade. Over the past five years, 97% of Northeastern graduates were employed (full- or part-time) or in graduate school within nine months of graduation, and 91% of employed 2022 graduates were doing work related to their major. About 60% of graduates obtain their first job placement at one of their co-op employers.

About the Global Campuses

The university campuses operate as a distributed global network. For example, new programs may be developed and established at one of the network campuses, enhanced locally, and then offered throughout the broader campus system, consistent with local needs and demand. The successful <u>Align</u> computer science master's program—which accelerates people with no prior computer science education or training into a career in computing—is an example of this approach. It was designed, implemented, and revised in Seattle before being offered in Boston and other campuses. The university also encourages and enables students to benefit from pursuing learning and experiential opportunities at more than one

campus in the system. Faculty are encouraged to use the campuses to scale their research, and several of the university's research institutes are located across multiple campuses. The Academic Plan envisions that all members of the Northeastern community will have a "passport" to the university's global network to maximize their own opportunities and the impact of their work.

THE COLLEGE OF SCIENCE

The College of Science integrates research, teaching, and experiential learning to provide students a dynamic and cross-disciplinary academic experience and understanding of science in society. The college offers a variety of distinguished programs in fields that are at the forefront of discovery, invention, and innovation. Academic offerings in the physical sciences, life sciences, and mathematics provide students with a deep understanding of emerging fields. The college is home to 3,865 undergraduate students, 1,685 graduate students, 193 tenure-track faculty, 125 non-tenure track faculty, and 130 staff.

Like all colleges across Northeastern, the College of Science seeks opportunities to leverage the global network for teaching, learning, and research collaborations. One example is Mills College at Northeastern University, a college on the Oakland campus in the network that has embraced the biosciences as a core area of focus and expands the College of Science's reach beyond Boston.

Academic Programs

The College of Science offers a range of undergraduate and graduate programs, many with an interdisciplinary focus. The college is made up of <u>12 departments and programs</u>: behavioral neuroscience, biochemistry, bioinformatics, biology, biotechnology, chemistry and chemical biology, linguistics, mathematics, marine and environmental science, physics, psychology, and premed & prehealth. In addition to traditional bachelor, master, and doctoral degrees, the college also offers <u>15 graduate level</u> certificate programs reinforcing Northeastern's commitment to lifelong learning and professional development.

Research

With innovation at the forefront, the College of Science works to solve crucial global challenges facing health, security, and sustainability with groundbreaking fundamental and applied research. By harnessing powerful tools and algorithms, researchers decode scientific complexities faster and at greater scale proving that the new, data-driven frontier has emerged and that scientists are empowered to transform our understanding of the world. 15 of Northeastern's 37 interdisciplinary research centers and institutes are housed in the College of Science, positioning them to be leaders in the next era of discovery. All research centers and institutes at Northeastern represent flagship initiatives of the research enterprise to drive growth and ignite transformation. In the College of Science, research centers and institutes explore the frontier of science, from interdisciplinary, cross-sector teams working on societal changes with wide-

ranging applications to groups with a more singular focus. Learn more about the research and impact of Northeastern's research centers and institutes <u>here</u>.

Experiential Learning

A hallmark of a Northeastern education, the College of Science offers a number of <u>experiential learning</u> opportunities for students. Founded over a century ago, Northeastern's co-op program is one of such opportunities. By alternating semesters of academic study with periods of full-time work, students are able to experience work across academic and professional contexts, explore or refine potential career paths, make valuable industry connections, broaden perspectives, and acquire the skills and knowledge needed to succeed.

The College of Science promotes a global perspective and as such encourages students to consider global learning experiences. Students study at universities abroad, work for foreign companies, perform service projects in nations around the world, and conduct research on a global scale all while being immersed in the local language and culture. Options for a global experience include traditional study abroad, global coop opportunities, and the signature Dialogue of Civilizations – faculty-led educational experiences offered in the summer semester that bring students to a different country for 30 days.

A third experiential learning opportunity available to College of Science students are service-learning opportunities. Combining academics with civic responsibility, service-learning opportunities marry the real needs of society with challenging coursework. Courses, co-ops, internships, and research assignments engage students in faculty coordinated service projects. Students gain insight through formal, structured reflection and gain practical experience while making a difference in society.

THE ROLE OF THE DEAN

As the chief academic and executive officer of the college, the Dean of the College of Science reports to the Provost and Senior Vice President for Academic Affairs and serves alongside the other deans and the Chancellor as a member of Northeastern's academic leadership team. The dean holds ultimate responsibility for the college's human capital – its faculty, staff, students – as well as its long-term planning and material resources, both physical and fiscal. The dean operates in a hybrid responsibility center management (RCM) university-wide budgeting model, and as such is responsible for the college's revenue streams, fundraising, and overall financial health, while sharing some central services at the university level.

The dean plays a critical role in promoting the College of Science externally, with public- and private-sector partners at the local, state, national, and international levels. The dean is the primary advocate and champion for the college internally, garnering support from university leadership for large-scale initiatives and to seed collaborations that break through academic siloes. Importantly, the dean is not just the dean in Boston, but across the whole Northeastern global campus network and will advance College of Science



programs, partnerships, and research across the entirety of the university ecosystem and the markets it occupies.

Reporting directly to the dean are associate deans for academic affairs, PhD programs and graduate affairs, research, professional programs and lifelong learning, equity and teaching, administration and finance, and the global university. Six academic department chairs in chemistry and chemical biology, psychology, biology, mathematics, marine and environmental sciences, and physics complete the leadership team.

KEY OPPORTUNITIES AND CHALLENGES FOR THE DEAN

Deans at Northeastern are considered true institutional leaders and intellectual partners with the President, Provost, Chancellor, and other deans. The university eschews incremental measures of progress in lieu of creativity, nimbleness, and transformational change among its leadership ranks. To that end, the dean will address the following opportunities and challenges:

Define a pioneering strategy for the college in alignment with Northeastern's ambitious vision.

The incoming dean will lead the college in formulating an inspired and forward-thinking strategy for the future, creating innovative programs and initiatives that capitalize on their strengths and potential, while staying attuned to Northeastern's ambitions for the future of learning, work, and research beyond the walls of the academy. Opportunities abound for bridging the college's established strengths in research and practice and building connections across departments, colleges, and the entirety of the global network. Embedded in any growth strategy for the college is recognition that one of the key outcomes is an expanded portfolio of offerings in the professional space ranging from new courses, graduate degrees, and certificate programs that can exist on ground or online. The creation of new relevant academic programs aligns with Northeastern's commitment to lifelong learning and reputation as a cutting-edge institution of higher education. The dean will work with faculty, staff, and university leadership to advance a college that is nimble, entrepreneurial, and willing to explore new ways to deliver education, award credentials, collaborate, and pursue research that are valued by all.

The dean must be strategic about formalizing and advancing the cross-disciplinary work of the College of Science on campus and advocating for the continued support of the college's academic programs and research. As the leader of a diverse college, the dean must understand and be aware of the current and coming changes and influences across science writ large and align the college's strategic priorities accordingly. An ability to translate ideas into action that consider the college's strengths and the university's aspirations will be critical.

Cultivate strong relationships and leverage the power of the global network.

Northeastern has built one of the most vibrant educational ecosystems in the world, and navigating and leveraging its highly matrixed, globally dispersed structure is key to success in any leadership role at the university. The dean will aggressively pursue creative partnerships with other college and regional deans, institute leaders, and outside stakeholders to craft interdisciplinary programs, initiatives, and research endeavors that effectively and efficiently expand the reach and impact of Northeastern for students and for the communities in which Northeastern resides. The new dean must build and cultivate strong relationships internally to ensure effective communication, strategic alignment, and coordination. Developing forward-thinking, cross-disciplinary programs, initiatives, and research requires deeply matrixed relationships and collaboration with partners across academic units and the whole of the global network to not only ensure operational excellence and delivery but also drive innovation at the enterprise level.

Improve operational excellence and sustainability in response to rapid growth.

Operational excellence is critical to success in this role. Core programs and services must function well and drive value for a range of stakeholders, most importantly students, on a daily basis. The dean must be aware of the unique needs of the college's courses, labs, and programs to strategically allocate resources and solve operational challenges. There is opportunity for a new dean to think creatively about how to leverage the global network to scale the college's operation and meet growing demand. Coordinating across multiple campuses can present logistical challenges, adding complexity to curriculum coordination, faculty hiring, and infrastructure development. In response, the incoming dean should be both practical and savvy, able to see what is possible with native resources while also identifying new innovative solutions and alternative courses of action.

Strengthen and expand partnerships with a range of external stakeholders.

Northeastern's ambition to provide a diversity of applied learning and research opportunities will guide the dean's agenda and priorities. Actualizing such ambition will require a strengthening and deepening of relationships with external partners – with the goal of developing sustainable partnerships and attracting resources into the college – while simultaneously bolstering Northeastern's research infrastructure and encouraging faculty pursuit of new opportunities. The dean will serve in an externally facing capacity and be equipped to understand, navigate, and capitalize on the community in the Boston area as well as the communities surrounding Northeastern's global campuses.

Increasingly, industry partners look to future-focused universities like Northeastern as partners for developing innovative ideas, conducting data-driven research to guide economic development decisions, and providing workforce development opportunities. The dean will build productive partnerships with industry, government agencies, and other academic institutions to advance applied learning and research, secure external funding, expand Northeastern's signature co-op program, and identify potential adjunct

faculty candidates. It will be critical that the dean create an easily accessible avenue for external partners to engage with the College of Science and eliminate any barriers to such collaboration.

Champion Northeastern's vision and advocate for the College of Science.

The incoming dean will serve as a facilitator of the broad university vision and translate how it manifests itself in the College of Science to college constituents. The global network presents opportunity for an enriched student experience, creative sponsored research arrangements, the expansion of applied learning, and the possibility for new institutes and initiatives beyond the reach of the Boston campus alone. The dean will assist the college in identifying how to leverage the global network, building a comprehensive understanding that the whole of Northeastern is greater than the sum of its parts. Translating Northeastern's greater ambition is essential for inspiring buy in and galvanizing faculty, staff, and students in the college around a common vision for the future.

Equally important will be the dean's ability to be an effective advocate for the college with senior administration. Budget constraints, space limitations, and operational complexities are present challenges; the incoming dean will be expected to creatively confront these challenges, amplifying the college's voice with senior administration in critical conversations about future planning. The dean will be responsible for creating a culture of transparent communication between the college and the university that provides clarity, inspires action, and transforms challenges into opportunities.

QUALIFICATIONS AND CHARACTERISTICS

Northeastern has a bold vision and an aggressive plan for the institution's future. The senior officers of the university embody and cultivate an institutional culture of rigorous engagement focused on strategic and operational excellence. Successful leaders at Northeastern demonstrate confidence and flexibility, enjoy creative and collaborative planning and problem-solving, and combine outstanding capability in their own domains with an appetite and enthusiasm for discussing programs, initiatives, and challenges that span the university. Innovation is a cornerstone of the Northeastern culture.

Northeastern seeks a dean with exemplary strategic and operational leadership ability and an entrepreneurial spirit. The successful candidate will bring many of the following personal and professional qualities and characteristics:

- A deep appreciation for Northeastern University's mission, and for a liberal arts education that includes core technological, data, and human literacies.
- A proven record of strategic and effective leadership and project management in a complex, decentralized environment with confidence and diplomacy, preferably at a major research institution; a demonstrated ability to execute ambitious, fiscally responsible, entrepreneurial initiatives.

Isaacson, Miller

- A distinguished record of credentials and achievements that demonstrate scholarly and research excellence.
- Clear capacity for strategic visioning; a track record of innovation, imaginative problem-solving, and impeccable judgment.
- A commitment to the success of bold initiatives set forward in the Academic Plan, including the expansion of the global university system. An entrepreneurial spirit to realize the ambitions of the university.
- A commitment to global education and to fostering a sense of inclusion and belonging among students, faculty, and staff.
- An effective change agent, with the ability to think strategically and translate ideas into action; a
 calculated risk-taker comfortable working with ambiguity. A self-assured problem solver who can
 anticipate challenges and obstacles and has the intelligence, creativity, and tenacity to provide
 and execute strategic and effective solutions.
- Outstanding oral and written communication skills and excellent interpersonal skills.
- Unimpeachable character and personal integrity.
- Politically adept and experienced in negotiation, with well-honed problem-solving skills and experience navigating a large organization.
- An earned terminal degree in a field represented within the college and a record of scholarly and research achievement appropriate for appointment as a tenured full professor.

APPLICATIONS, INQUIRIES, AND NOMINATIONS

Screening of complete applications will begin immediately and continue on a confidential basis until the completion of the search process. Inquiries, nominations, referrals, and CVs with cover letters should be sent via the Isaacson, Miller website: https://www.imsearch.com/open-searches/northeastern-university-college-science/dean. Electronic submission of materials is strongly encouraged.

Andy Lee, Managing Partner Vijay Saraswat, Partner Courtney Cabansag, Associate Hannah Moore, Senior Associate Madeline Fitzpatrick, Managing Search Coordinator Isaacson, Miller 263 Summer Street Boston, MA 02210

All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by the law.

Northeastern is an E-Verify Employer.



APPENDIX 1: Academic Plan

In 2021, the Northeastern community adopted a new strategic plan, *Beyond 2025*, that builds on previous efforts and sets ambitious goals for Northeastern's coming decade. At the heart of the framework is the central goal of maximizing Northeastern's positive impact in the world. To do this, the University aspires to:

- Recognize the complexity of acute and chronic challenges, and work across disciplines to address them.
- Translate excellence in scholarship and learning into measured impact.
- Ensure all students, faculty, and staff have access to the skills and tools they need to take projects from idea to implementation.
- Advance leadership in experiential education by enabling globally mobile, culturally agile lifelong learners.
- Promote an academic community in which all members share a sense of belonging and fully participate.
- Provide an unparalleled experience for those that place their trust in Northeastern—learners, employers, research partners, families—enabled by seamless technology integration.

APPENDIX 2: University Leadership

President Joseph E. Aoun

Joseph E. Aoun, a well-known higher education thought leader and renowned scholar in linguistics, is the seventh president of Northeastern University. An internationally respected voice on the value of global and experiential education, President Aoun has led the expansion of experiential learning—centered on Northeastern's signature co-op program—to offer opportunities for work, research, service, and global study in 136 countries.

President Aoun has strategically aligned the University's use-inspired research enterprise with three global imperatives—health, security, and sustainability—a focus supported by eight interdisciplinary research institutes. Northeastern has also established a network of 13 campuses in the U.S., Canada, and the United Kingdom, as part of the president's vision for a global university system that will expand opportunities for lifelong learning and collaborative research. As a result of these and other initiatives created during the president's tenure, Northeastern has attracted record numbers of high-talent students, while external awards for research have more than tripled.

Among his awards and honors, President Aoun was recently appointed as Chevalier of the Legion of Honor by the President of the French Republic. He is a member of the American Academy of Arts and Sciences, fellow of the American Association for the Advancement of Science, and a past chair of the American Council on Education.

Provost and Senior Vice President for Academic Affairs David Madigan

David Madigan, Ph.D., serves as Provost and Senior Vice President for Academic Affairs at Northeastern University, where he has implemented transformative initiatives. His leadership has advanced the university's AI vision, launched an ambitious 500-faculty in five years hiring initiative focused on interdisciplinary research, developed a global research strategy, and initiated an Irish research entity, among many other endeavors. Dr. Madigan also led the Dialogue and Action series across Massachusetts universities, fostering important conversations on pressing societal issues.

Prior to Northeastern, Dr. Madigan held the positions of Executive Vice President for Arts and Sciences and Dean of the Faculty of Arts and Sciences at Columbia University. His tenure there was marked by the expansion of lifelong learning programs and increased faculty and student diversity.

Dr. Madigan earned his bachelor's degree in Mathematics and Ph.D. in Statistics from Trinity College Dublin. His career spans both academia and industry, contributing to his multifaceted approach to academic leadership. Renowned for his work in Big Data and healthcare innovation, Dr. Madigan has authored over 200 publications covering topics such as Bayesian statistics, text mining, and probabilistic graphical models.

A Fellow of the American Statistical Association, the Institute of Mathematical Statistics, and the American Association for the Advancement of Science, Dr. Madigan has also served as Editor-in-Chief for Statistical Science and Statistical Analysis and Data Mining. Through his ongoing efforts, Dr. Madigan continues to drive innovation in higher education and research, solidifying Northeastern's position as a leader in addressing complex global challenges.