



College of Natural Sciences & Mathematics

# STRATEGIC PLAN

2019–2024

*Building a better future through fundamental understanding of our natural world*



UNIVERSITY of  
DENVER

NATURAL SCIENCES & MATHEMATICS



*Scientia sol mer*



*Scientia est.*

Knowledge is the light of the mind.

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# COLLEGE OF NATURAL SCIENCES AND MATHEMATICS

## Planning process

In the fall of 2018, the College of Natural Sciences and Mathematics embarked on a strategic planning process to compose a document that would comprehensively represent our mission, values, methods and aspirations.

In October, department faculty was asked to dream and discuss; to create a dialogue about who we thought we were and who we wanted to be. After a month of idea generation within the departments, talk turned into cross-talk as faculty reached across departments to develop special interest groups that existed within Natural Sciences and Mathematics. In December, we held a college-wide work session, bringing faculty and staff together to hear about the ideas that had come forward and to spark discussions that would lead us in new directions.

In the several weeks that followed, a leadership team made up of the dean, associate dean, budget officer and department chairs dove deep into the information that had resulted from the three months of brainstorming. What ultimately emerged was a cohesive, collaborative voice expressing enthusiastic support for the development of key initiatives to best serve our students, faculty and staff as well as DU's community at large. This plan was voted upon on April 2019, and received unanimous support from all five departments.

The following pages summarize the programs and initiatives that arose as top priorities to guide our current upward trajectory into intentional and sustainable growth.

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We are a community of academics organized into five departments: Biological Sciences, Chemistry and Biochemistry, Geography and the Environment, Mathematics, and Physics and Astronomy.

### Mission, Values, Impact

We instill in our students knowledge and understanding of science and mathematics through experiential education and excellence in research.

To carry out our mission successfully, we are focused on the following:

- Building pathways that ensure equitable access to high-quality science and math education
- Increasing opportunities for undergraduate research and hands-on experiential learning
- Strengthening support for graduate students to ensure their success and quality of life
- Fostering opportunities for productive interactions that result in interdisciplinary collaborations in research and teaching
- Elevating instruction in key areas to prepare students for future careers in STEM
- Cultivating world-class faculty and staff to advance research development and educational innovation
- Empowering all students to use critical thinking to ethically and skillfully address real-world problems

Upon this foundation, we will serve as a catalyst to increase understanding of natural and mathematical sciences and graduate informed citizens who will continue to steward future generations into a sustainable world.



# PREAMBLE

This strategic plan from the University of Denver's College of Natural Sciences and Mathematics is aligned with DU IMPACT 2025, affirming DU's mission to promote learning by engaging with students in advancing scholarly inquiry, cultivating critical and creative thought and generating knowledge. Our specific identity rests firmly with the notions of academic rigor and integrity and fundamental exploration of the ever-complex physical world.

## Preparing responsible thought leaders

Our team of teacher-scholars and staff seek to deliver the best academic experience to DU students. As vested mentors, we secure bright professional futures for our students and, at the same time, we empower them with the fundamental tools needed to become enlightened citizens and leaders within a growing global community.

Our students are immersed into a wonderful journey of research and experiential learning, which help develop skills of dealing with the *new* and the *unexplored*. These skills are critical in preparing them for the future, where the workforce is responding to yet-undiscovered knowledge and technology. It is in our DNA to experiment with hands-on projects and research.

It is our deeply held belief that research and other forms of experiential learning are the most effective forms of science and math education. It is not surprising to see the number of local, national and world leaders who are scientists and mathematicians. Our scholars learn to dissect challenges, identify solutions and move forward. They learn to be tenacious in the face of adversity.

## Discovery starts here

Great universities do not simply transmit knowledge; they create knowledge. Basic research is inherent to the function and purpose of national universities — it is a critically important foundation for the technological progress of tomorrow, and it is existentially important for the nation and humankind. We aspire to lead DU in achieving the next level of prominence and national visibility as we steadily progress research and scholarship toward a Carnegie classification of R1.

## What does public good mean to us?

Our faculty and staff are dedicated to training an informed citizenry, who know how to apply scientific method and firmly base their critical decisions on the analysis of facts, whether working in research, government or law. In this most fundamental way, **teaching and advancing science and mathematics is public good**. Our students will lead the ever-changing world and preside over the great transition into a new energy economy, into advances in healthcare and into quantum computing. It is our promise to fully prepare them for the future.

## Future-focused

The College of Natural Sciences and Mathematics is passionately invested in advancing basic research to impact the future of health, the future of work, and to understand the impact of global change. These areas of focus constitute the most significant global challenges, and we are laying the foundation for practical solutions.

We aim to become a “go-to” knowledge hub. For example, when biomedical translational researchers need answers to fundamental questions about protein interactions, they will seek our expertise. Our molecular and cellular biophysics program is an excellent example of a dynamic and vibrant intersect between academic instruction and innovative research that will have both short- and long-term impact on the future of healthcare and medicine.

Additionally, before coders code, they must master algorithmic logic and understand formal mathematics. Our classrooms and labs are foundations for work in these areas and more, with the potential to influence future directions of fields like geographic information science, environmental sustainability, materials science and quantum information, to name a few.

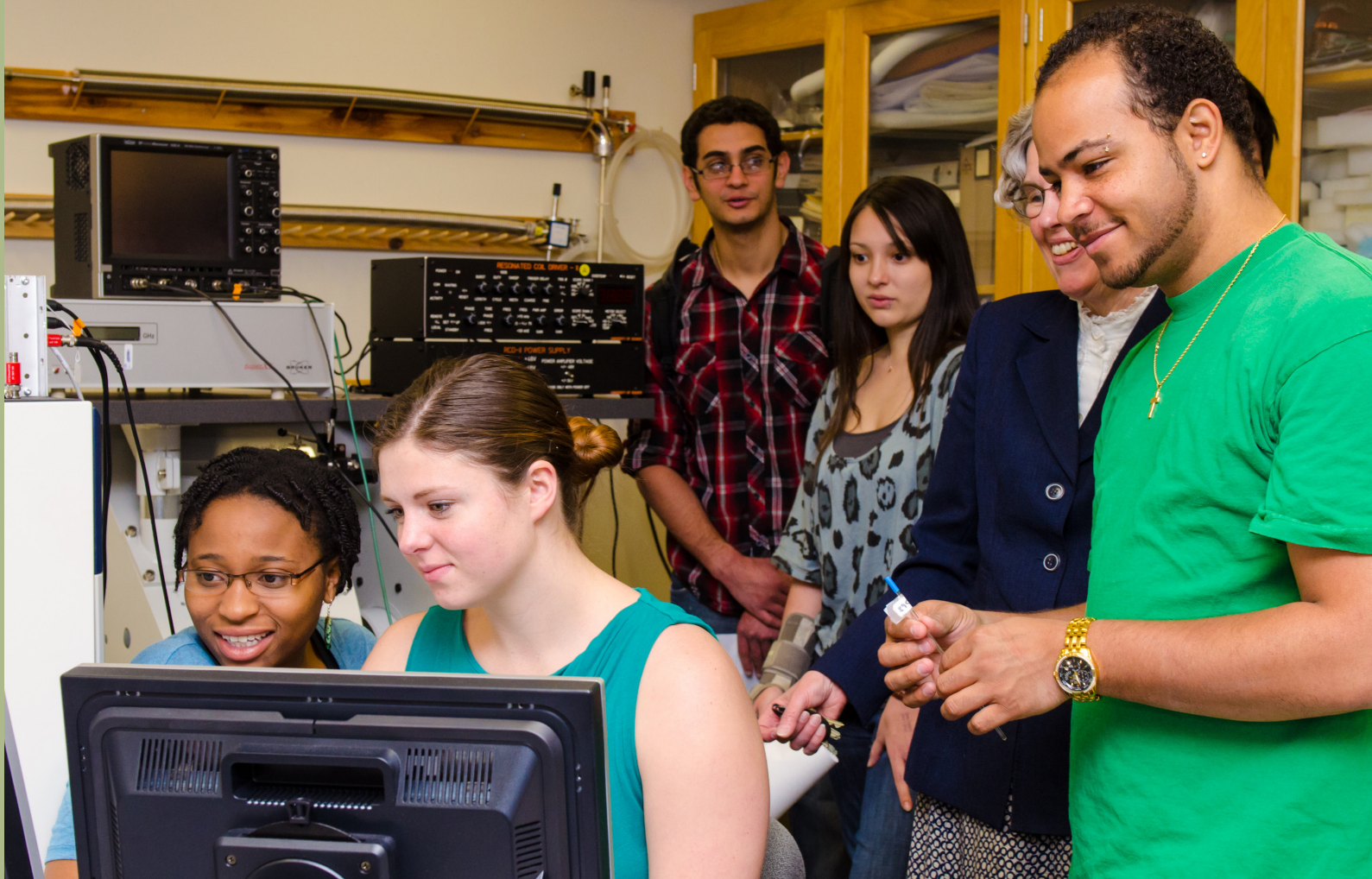
Our five-year plan targets growth in these and several other key areas of curriculum to best serve our students and our greater research community.

## Building a strong community

Big things happen in a big tent. The College of Natural Sciences and Mathematics is committed to cultivating a big, inclusive community by breaking down the barriers that have led to historic underrepresentation of populations in STEM based on gender, race or cultural and socio-economical backgrounds. The job of breaking down barriers starts with building pipelines for equitable access to high-quality science and math education.

We have already begun the work, as evidenced in the success of the Equity in STEM (E-STEM) program for undergraduates. But further pipeline development is necessary, including a focus on increasing female and underrepresented minority participation and leadership in STEM. We envision expanded academic STEM mentoring programs for undergraduates from historically underrepresented populations. In addition, new recruitment and retention initiatives aim to build a more diverse community of outstanding faculty and graduate students.

Inclusive excellence is embedded in the foundation of our work. It permeates all that we aspire to do.



# EMBODYING EXCELLENCE

Serving as a catalyst for advancing research and scholarship, we are building a community of diverse players and perspectives. Equitable access to knowledge is paramount to our success, and it is the foundation upon which we build academic excellence.



## Academic Excellence

Practical experience is the hallmark of an academic journey in science and math at DU. In the College of Natural Sciences and Mathematics, we deliver experiential learning and research in classrooms, labs and in the field. Our community is built upon equal access to top researchers and educators as well as collaborative work with mentors and peers.

### Excellence in Teaching

Our overall success is contingent on providing outstanding science and math education for both majors and non-majors alike. We take this seriously, and our faculty work closely with DU's Office of Teaching and Learning to develop coursework that successfully implements project-based learning opportunities. Participatory experiences, whether taking place in the classroom, lab or in the field, require our students to develop the skills necessary to move from textbook knowledge to application.

In this way, we are preparing the next generation to call upon their scientific skill set for any challenge they face, professional or otherwise, as they enter the workforce and tackle real-world issues. Experiential learning also builds an environment of teamwork, one of the most sought-after skills in professional settings. We work

to ensure the best student-focused teaching practices coupled with hands-on experiences, both of which are crucial to a dynamic education.

### Excellence in Research

Basic research is inherent to the function and purpose of universities. Industry produces applied solutions, but basic knowledge is almost exclusively developed by institutions of higher education. Think back to the materials science research on semiconductors that occurred over half a century ago. Today, thanks to that fundamental work, the number of worldwide mobile phone users is expected to approach five billion by the end of the year, and, artificial intelligence is helping doctors diagnose rare diseases with more accuracy.

With science, medicine and technology progressing at an unprecedented rate, we are preparing students for new jobs that will exist in ten to twenty years but are as-yet unknown.

How do we prepare students for the unknown?

We utilize research as the most sophisticated training tool for navigating the unpredictable. Students working side-by-side with expert faculty mentors will leave DU with the skills necessary to enter a new and rapidly-evolving job market.

## Equity and Inclusivity

The state of our academic excellence rests upon our ability to build an inclusive community. Labs and classrooms are environments that lead to accelerated discovery, providing group settings that bring together people from various backgrounds to tackle problem solving as a team. This is fundamental; this is what we do. Ensuring equitable and inclusive participation in our community is of the utmost importance as we strive to excel further in teaching and research discovery.

In the College of Natural Sciences and Mathematics, we understand the complex challenges of building a more diverse and equitable community. We recognize the history of underrepresentation of perspectives from populations in the US who have faced socio-economical, political, racial, gender-based and cultural barriers to a great education. We are dedicated to increasing the representation and success of key diverse perspectives in our classrooms and labs, as instructors and students.

The initiatives outlined in this plan will lay further foundation as we passionately work toward a more inclusive and equitable community. Equitable access to opportunities in science and math for all students will open pipelines for historically underrepresented populations to become leaders in their field. We will proactively work to deconstruct the misconception that STEM is exclusive by creating new financial aid opportunities, building mentorship programs and committing to equitable merit-based opportunities for all. In this way we will open doors for future generations to change the face of medicine, technology and the delivery of knowledge to the global community.



# STRATEGIC INITIATIVES

Our objectives for value-driven change are rooted in our mission statement. We are focused on building inclusive and academic excellence through new initiatives that enhance our ability to deliver on our key actionable goals.



*Securing the future of health and the future of work and addressing global change through basic research and innovative education*



## Build pathways that ensure equitable access to high-quality science and math education

Our faculty and staff are dedicated to making a big difference in the community through STEM education as evidenced by the success of events like Math Counts, the National Geographic State Geo Bee and open house nights at the Chamberlin Observatory. We seek new ways to deliver knowledge and provide mentors and advising support to all of our students and especially historically underserved groups at DU and in the greater Denver community. We will be intentional in growing key programs that are currently poised for rapid expansion after outstanding success as seed or pilot projects.

## Bolster the future of E-STEM as a model of inclusive excellence

E-STEM (Equity in Science, Technology, Engineering and Math) is a partnership between the College of Natural Sciences and Mathematics, the Ritchie School of Engineering and Computer Science and the Center for Multicultural Excellence. This grant-funded program creates pathways to academic success for students from historically underrepresented groups in the fields of science, math and engineering.

The E-STEM program has proven to be highly successful. The 2018 cohort is performing above the general student body average GPA in Calculus I. The cohort model provides a network of support, encouragement and accountability in an intentional and purposeful way.

Growth of the E-STEM program will continue with full support of the College.

## Establish new Academic Excellence Workshops

Academic Excellence Workshops have made a major difference in the success of our E-STEM cohorts. This model will be adopted and expanded by various disciplines across the College of Natural Sciences and Mathematics.

New Academic Excellence Workshops will expand opportunities for team-building and peer-to-peer accountability. This type of community support improves student success both in the classroom and in their overall lives as students and scholars at DU.

## Create opportunity with a new Science & Math Community Impact Fund

In support of faculty, staff and student efforts to have a real impact on our local, regional and global community, we will establish a Science and Math Community Impact Fund to provide a platform to sustain and grow faculty-led community outreach programs including new and existing partnerships with local K-12 schools, regional academic competitions and bees, sponsored guest speakers for community talks, service-oriented field trips, and middle- and high-school outreach programs in biology, chemistry, geography, math and physics.

### — stewardship —

- (i) Double the number of natural sciences and mathematics students in E-STEM yearly cohorts, while creating individualized retention and success plans.
- (ii) Expand Academic Excellence Workshops into at least three disciplines, while aspiring to grow this number to support all first-year majors courses.
- (iii) Attain sustainable funding to support current and future community outreach activities.



## Increase opportunities for undergraduate research and hands-on experiential learning

Experiential learning and participation in research are the hallmarks of an academic journey in science and math at DU. Continued and sustainable growth of opportunities for research and hands-on experiential learning is necessary as we prepare our undergraduates with practical knowledge and scientific proficiency, essential tools for their future success.

## Expand experiential, hands-on coursework in all areas

Our ultimate goal is to offer each of our students hands-on experiences to best prepare them for real-world application of their degree. To implement this goal, we will expand experiential learning opportunities by redesigning coursework, introducing project-based labs, and pioneering other new pathways to research for all of our students across the College.

We will also place a strong emphasis on improvement of our instructional labs, and we are committed to regular evaluations and upgrades.

## Grow summer research experience opportunities

Summer research experiences funded by our departments as well as the University of Denver and other federal and foundational grants are of paramount importance to our enterprise. We are committed to expanding undergraduate research experience opportunities for all of our students by prioritizing fundraising efforts to support new summer research positions.

In this way, we will grow an all-inclusive summer research community with a strong emphasis on mentoring and professional training.

## Lead DU's Global Masters Scholars program growth

Our College is already leading DU's Global Masters Scholars initiative in internationalization, but there is room for growth. The success of the biological sciences Global Masters Scholars program has created a pathway for other departments to create similar academic programs. Geography has recently launched their first partnership program, sending students to Lund University in Sweden in fall 2019.

A new degree program partnership with University of Western Australia also has the potential to serve all natural science and mathematics students. We will continue to foster program development and launch DU's junior scientific investigators into the international arena where they will gain new experiences and unique perspectives.

### — stewardship —

- (i) Provide students with increased experiential learning opportunities.
- (ii) Steadily increase the number of majors engaged in undergraduate research projects and internships.
- (iii) Support expansion of new strategic partnerships with prestigious institutions across the globe and increase the number of students participating in the Global Master Scholars program.



## Strengthen support for graduate students to ensure their success and quality of life

Our graduate students play a vital role in both research and instruction within the College of Natural Sciences and Mathematics. Graduate assistants are devoted lab instructors, mentors and supervisors on undergraduate research projects, and they are partners in faculty research projects. A strong graduate program brings vibrancy to the community, both in research and teaching.

As we build on our research successes, we will intensify our recruitment efforts to attract stellar graduate students and increase our support on campus to ensure they experience success in all facets of their lives at DU.



## Establish new scholarships to attract top graduate candidates and grow diversity

Each department will establish a new fund to provide a scholarship to aid recruitment efforts targeting top graduate student assistants from historically underrepresented populations in STEM.

This scholarship will be offered in the first year in addition to tuition and a graduate-student stipend.

Additionally, we will work to establish new funding to increase scholarship opportunities for all graduate students.

These measures will improve our overall ability to compete for top graduate student candidates.

## Support comprehensive professional training and growth for all graduate students

Presenting research to colleagues is a crucial aspect of preparing graduate students for their careers. We will provide increased support for graduate students for travel and research presentation opportunities, writing and communication proficiency and development of other career-building skills that will lead them to success.

We will be a strong voice on campus advocating for increased financial support for graduate students, and we will prioritize new philanthropically-funded scholarships for outstanding candidates in our fundraising efforts.

## Facilitate formation of a Natural Sciences & Mathematics Graduate Student Council

A survey conducted by the dean's office in 2019 identified interest in and a need for a Natural Sciences and Mathematics Graduate Student Council.

This council, composed of at least one representative from each department or program, will work with the associate dean to determine and carry out duties in support of our graduate students.

### — stewardship —

- (i) Attract and retain top graduate students by offering stackable scholarships in addition to teaching and research assistantships, especially for populations traditionally underrepresented in sciences and math.
- (ii) Attain sustainable funding to support and prepare graduate students for their future professional careers.
- (iii) Provide assistance and support to help establish a Natural Sciences and Mathematics Graduate Student Council.



## Foster opportunities for productive interactions that result in interdisciplinary collaborations in research and teaching

To best serve our students, our faculty, our extended DU family and our global community, we must strive to create opportunities for collaborative and interdisciplinary cross-talk that results in innovative progress.

The molecular and cellular biophysics program is an instructive example of the power of collaboration, securing significant external funding to grow novel research endeavors and build a robust and competitive doctoral program. We aspire to grow our interdepartmental collaborations by creating new opportunities for our students and faculty to meet and share ideas and research.

## Establish new institutes & centers of collaborative excellence

We will establish new centers of collaborative excellence in the College of Natural Sciences and Mathematics to advance interdisciplinary cross-talk and new discoveries.

The molecular and cellular biophysics program has grown substantially since its inception in 2008. To promote further success and expansion of biophysics research and education at DU, we will formally establish a new Biophysics Institute.

We are also home to a number of exciting collaborative initiatives in the areas of computer-aided mathematics, quantum materials and information, science and math pedagogical research and practices, global change, urban sustainability and geospatial data analysis.

As these dynamic clusters mature, we anticipate new centers to rapidly and organically emerge within the next five years.

## Establish a Natural Sciences & Mathematics student research symposium

A new symposium focused on natural sciences and mathematics research will bring together undergraduate and graduate student researchers to (i) empower students to learn and practice presentation and communication skills, (ii) foster conversation that may lead to cross-disciplinary collaboration and (iii) showcase natural sciences and mathematics research to the campus and our extended community.

The office of the dean will coordinate efforts between departments to facilitate the new college-wide student-centered symposium in the near future.

### — stewardship —

- (i) Increase philanthropic support to found and sustain new centers and institutes.
- (ii) Dedicate resources to coordinate a student research symposium.



## Cultivate world-class faculty and staff to advance research and educational innovation

Fundamentally, the College of Natural Sciences and Mathematics is a place where we create and disseminate knowledge. To succeed, we need to attract and serve top faculty and staff — they are the foundation of all that we do and all that we will be capable of doing in the future.

As DU moves toward recognition as an R1-classified institution, we will be at the forefront of research and academic excellence on campus while preserving our commitment to outstanding undergraduate education. We will ramp up support for faculty efforts in publishing, recruiting top students and providing new opportunities for productive postdoctoral fellows.

## Fund incentives to recruit and retain outstanding faculty

We need to increase the number of faculty and postdoctoral positions across the College. To attract top faculty, we must be able to make competitive job offers. We will seek new endowments to increase our ability to hire the best candidates with an emphasis on increasing the number of faculty from historically underrepresented populations in STEM.

In addition, rotating endowed chair positions have proven to be effective in supporting productive and exceptional faculty. We will actively pursue expansion of these and similar opportunities across all departments.

## Grow research activities to support faculty and university strategic interests

Our collective expertise is crucial to university efforts to expand activity in biomedical and biochemical research, big data, environmental sustainability, quantum information and artificial intelligence.

To nourish our faculty and provide new and exciting opportunities on campus, we will improve our core instrumentation facilities.

We will continue to look for novel ways to expand our support for new and innovative research within the fields of biology, biophysics, chemistry, biochemistry, geography, environmental science, mathematics, physics and astronomy.

## Develop innovative best practices for teaching science and math

We are home to a great faculty of teacher-scholars. We will foster our faculty's professional development through support of research and development of best teaching practices.

Our faculty is providing a bridge across campus for professors interested in adding project-based learning components to existing coursework. We will support these efforts by any means possible. For instance, we intend to establish a Center for Innovative Teaching in Science and Mathematics which will identify and facilitate faculty professional development while setting the bar for academic standards of excellence.

## — stewardship —

- (i) Increase start-up packages, compensation and other support to attract and retain best faculty.
- (ii) Increase philanthropic support for rotating endowed chairs for mid-career faculty.
- (iii) Develop state-of-the-art infrastructure and instrumentation facilities to ensure success in research and scholarship.
- (iv) Increase support for faculty professional development, including support for development of innovative teaching practices and scholarship.
- (v) Establish the Center for Innovative Teaching in Science and Mathematics.



## Elevate instruction in key areas to prepare students for future careers in STEM

As we usher in the unknown future of work, we are guided by certain undisputable trends such as the growing need for educated healthcare professionals. The College of Natural Sciences and Mathematics is the key player on campus when it comes to biomedical research and health education. For example, our pre-health program is flourishing, serving over 500 undergraduate students on campus and engaging with alumni, community partnerships and other Colorado-based academic institutions.

Big data, artificial intelligence, quantum information and other central themes within the future of work are emerging and we will prepare our students to navigate these new opportunities

## Introduce new degree program options for undergraduate students

By expanding curriculum in key areas, we will prepare students to meet the growing job-market demand for a scientifically- and technologically-savvy workforce.

To ensure relevant and dynamic academic-program growth, we will establish new undergraduate degrees including:

- a bachelor's of science (BS) in mathematics for foundations of artificial intelligence;
- a bachelor's of science (BS) in geographic information science;
- a minor in quantum information science;
- and a minor in health science systems with a possibility of introducing a new health major in the future.

## Broadly integrate scientific literacy into the curriculum

Undergraduate courses will help prepare students majoring in natural sciences and mathematics with refined skills in the areas of scientific literacy, communication and presentation.

In today's world, we see a growing need for scientifically-literate students as leaders in law, policy and government. We believe it is important for our scientists to ethically and skillfully present information to the general public to drive discovery and understanding forward in a complex, globally-minded world.

## Identify new professional science master's programs

We will continue to expand the successful professional science master's (PSM) in biomedical sciences degree program, and we will explore new PSM programs in:

- quantum information science in the Department of Physics and Astronomy;
- biotechnology in the Department of Chemistry and Biochemistry;
- and statistics in the Department of Mathematics.

### — stewardship —

- (i) Open three or more new undergraduate degrees/minors across the College.
- (ii) Re-envision coursework to expand integration of scientific literacy components.
- (iii) Explore at least three new Professional Science Masters programs across the College.



## Empower all DU students to use critical thinking to ethically and skillfully address real-world problems

In order to ensure the best education for all students, we are dedicated to bolstering strong science and math general education requirements for non-science majors at DU.



## Invest in a robust science and math education for all students at the University of Denver

### Natural Sciences

For the development of a well-informed public, natural sciences departments will deliver a science curriculum where students will build a sound understanding of basic scientific tenants which will then be used to discuss and examine the complex problems generated by today's world. Students will be able to connect their learning not only to their other academic courses, but also to their lives and the broader world. The science component of general education will build necessary skills valued and sought after by all employers. These skills include teamwork, analytical and complex problems solving, technical communications skills and a willingness to learn new and challenging information.

### Mathematics

An understanding of how the world works is increasingly guided by mathematical principles and means. We strive to provide each student with an appreciation of how mathematical principles — analytical, computational and statistical — are at play in the world around them. This is essential because many of the best career opportunities require a solid understanding of mathematics.

The Department of Mathematics will emphasize the value of a math education for all students — future leaders of industry and government and future policymakers.

### — stewardship —

- (i) Provide professional development opportunities to support faculty as they innovate curricula centered on science and math literacy for students who have decided to major outside of science and mathematics.
- (ii) Students across campus will be provided with experiential learning opportunities in our general education curricula which will foster both communication and personal skills essential for success in any career choice.

# IMPACT 2025

The strategic initiatives outlined in this five-year plan from the College of Natural Sciences and Mathematics are aligned with the University of Denver's **IMPACT 2025**. Our plan targets specific objectives for expansion in direct support of the impact model initiatives outlined below, and we are unequivocally dedicated to growth in all four transformative directions and to ongoing improvement in areas such as staff support, alumni outreach and public educational programming.

## **Bolster the future of E-STEM as a model of inclusive excellence**

*Four / SI 2: A Community of Diversity, Equity and Inclusive Excellence*

## **Establish new Academic Excellence Workshops**

*One / SI 2: Enhancing and Expanding our Learning Environment*

## **Create opportunity with a new Science & Math Impact Fund**

*Three / SI 1: Collaboration for the Public Good*

*Three / SI 2: DU as an Anchor Institution*

## **Expand experiential, hands-on coursework in all areas**

*One / SI 2: Enhancing and Expanding our Learning Environment*

## **Grow summer research experience opportunities**

*One / SI 2: Enhancing and Expanding our Learning Environment*

*Two / SI 6: Project for Innovation, Entrepreneurship and Technology*

## **Lead DU's Global Masters Scholars program growth**

*Two / SI 3: International Impact*

Establish new scholarships to attract top graduate candidates and grow diversity

*One / SI 1: Financial Support for Students*

*Four / SI 2: A Community of Diversity, Equity and Inclusive Excellence*

Support comprehensive professional training and growth for all graduate students

*One / SI 5: Preparing for Careers and Lives of Purpose*

Facilitate formation of a Natural Sciences & Mathematics Graduate Student Council

*Two / SI 2: Supporting Research, Scholarship and Creative Expression*

Establish new institutes & centers of collaborative excellence

*Two / SI 2: Supporting Research, Scholarship and Creative Expression*

Establish a Natural Sciences & Mathematics student research symposium

*One / SI 4: Learning, Living and Leading in Community*

Fund incentives to recruit and retain an outstanding faculty

*Two / SI 1: Faculty Talent, Excellence and Diversity Initiative*

Grow research activities to support faculty and university strategic interests

*Two / SI 2: Supporting Research, Scholarship and Creative Expression*

*Four / SI 3: Sustainable DU*

Develop innovative best practices for teaching science and math

*One / SI 2: Enhancing and Expanding our Learning Environment*

*Four / SI 1: Advance and Celebrate One DU!*

Introduce new degree program options for undergraduate students

*One / SI 2: Enhancing and Expanding our Learning Environment*

*One / SI 5: Preparing for Careers and Lives of Purpose*

Broadly integrate scientific literacy into the curriculum

*One / SI 2: Enhancing and Expanding our Learning Environment*

*One / SI 5: Preparing for Careers and Lives of Purpose*

Identify new professional science master's programs

*One / SI 2: Enhancing and Expanding our Learning Environment*

*One / SI 5: Preparing for Careers and Lives of Purpose*

Invest in a robust science and math education for all students at the University of Denver

*Three / SI 1: Collaboration for the Public Good*



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