

2018

FACULTY OF MATHEMATICS

Strategic Plan

UNIVERSITY OF
WATERLOO





Table of Contents

Dean's Message / pg 3
Faculty Vision, Mission, and Values / pg 5
Executive Summary / pg 6
People / pg 8
Undergraduate Studies / pg 10
Graduate Studies / pg 12
Research, Creativity, and Innovation / pg 14
Outreach / pg 16
Our Path to Tomorrow / pg 18
The Faculty of Mathematics Today / pg 20
Mathematics Strategic Planning Committee / pg 21



The talent of our people, the quality of our education, and the depth of our research have earned the University of Waterloo a global reputation in mathematics, statistics, and computer science. We will build on these to embrace the challenges of today and the opportunities of the future.



A stylized, handwritten signature in black ink.

STEPHEN M. WATT
DEAN, FACULTY OF MATHEMATICS



Dean's Message

Mathematics and computer science lie at the heart of our modern technological society, giving the choice of direction for the Faculty of Mathematics the potential for far-reaching impact in Canada and globally. How we determine this direction is the purpose of the Faculty of Mathematics Strategic Plan.

The Faculty's previous strategic plan, covering the years 2012-2017, identified key areas to further develop as a world leader in mathematics and computer science, and the Faculty has accomplished much over those years. At the same time, the world has changed around us, from applications such as the rise of deep learning to basic results such as advances on the twin primes conjecture. Accordingly, as our last plan was coming to its conclusion, I initiated a process to begin the next cycle.

Over the past year, the Mathematics Strategic Planning Committee has undertaken broad internal and external consultation, collected and consolidated input from a range of sources, and has debated, drafted, and reviewed materials leading to the present Strategic Plan. In this plan, we focus on the direction of the greater metropolitan of mathematics rather than the particulars of individual units.

The plan articulates our vision of being a world leader in mathematics, statistics, and computer science.

It lays out our key priorities of people, of undergraduate studies, of graduate studies, of research, creativity and innovation, and of outreach that will help us fulfill our mission and respect our values.

This plan sets out specific goals, and within each it lays out particular objectives. To achieve these objectives key actions are identified. These actions are expressed at a high level, recognizing that the operational decisions shall be guided by implementation groups over the life of the plan.

The talent of our people, the quality of our education, and the depth of our research have earned the University of Waterloo a global reputation in mathematics, statistics, and computer science. To grow this reputation, and for our University and for Canada to secure their place in an increasingly mathematical world, we rely on our people to use their creativity in ways that will scale for the benefit of society and to realize our academic ambitions.

I thank the members of the Mathematics Strategic Planning Committee for producing the plan before you, and I look forward to working with all members of the Faculty to realize our goals.



Faculty Vision, Mission, Values, and Key Priorities

The Faculty of Mathematics Strategic Plan 2018 was developed to support the Faculty in the fulfillment of our mission while upholding our values. From the foundation provided by our mission and values, the plan articulates goals and objectives that will move the Faculty forward in pursuit of our vision.

Our **vision** is to be:

- › A world leader in mathematics, statistics, and computer science.

The **mission** of the Faculty of Mathematics at the University of Waterloo is to:

- › Conduct research that has worldwide impact and recognition;
- › Provide learning opportunities of unmatched breadth and depth;
- › Produce graduates that are in worldwide demand; and
- › Increase awareness of, and excellence in, mathematics, statistics, and computer science nationally and globally.

The **values** that guide our decisions, strategies and actions are:

- › Excellence
- › Leadership and Impact
- › Creativity and Innovation
- › Engagement and Integrity

Our goals and objectives are centred on our **key priorities**:

- › People
- › Undergraduate Studies
- › Graduate Studies
- › Research, Creativity, and Innovation
- › Outreach

Executive Summary

Universities today exist in a changing world. Waterloo's Faculty of Mathematics faces a rapid and accelerating pace of change that brings both opportunity and uncertainty. With increased ease of international collaboration comes increased competition – for faculty members, students, and constrained resources – from around the globe. The critical importance and transformative possibilities of the mathematical, computational, and statistical sciences are reflected in increasing demand for the programs we deliver, the people we develop, and the ideas, innovations, and solutions we create.

The University of Waterloo is unique in North America in having a Faculty of Mathematics as a top-level academic division. The Faculty is in an enviable position, with a truly global reputation that recognizes the calibre and diversity of our academic offerings and research areas. The teaching and research activities of the Faculty cover mathematics in an inclusive sense, incorporating pure mathematics and applied mathematics, computer science, combinatorics and optimization, statistics and actuarial science, mathematics of business and finance, education in mathematics and computing, and a wide range of interdisciplinary topics. These activities take place within departments covering the areas of mathematics and statistics and a school of computer science, complemented by a range of research institutes and centres in areas including artificial intelligence, cybersecurity and privacy, risk management, and quantum computing.

Throughout this strategic plan, we refer to this broad range of activity as “mathematics, statistics, and computer science,” or simply as “mathematics.”

It is in this context that the Faculty of Mathematics has undertaken a strategic planning exercise to review our past, examine our present, and invest in our future. **The Faculty of Mathematics Strategic Plan 2018 results from broad consultation with stakeholders and advisors.** Over 450 students, faculty, staff, alumni, and employers contributed to the plan's development. This planning process determined the Faculty's objectives while also enabling informed contributions to the University of Waterloo strategic plan. Through the University's Bridge to 2020 exercise, we will assess how our plan can best support our University's ambitions.

The plan articulates our priorities, provides a context for decision-making, and describes our path forward at a high level. It is not a prescription but a touchstone, intended to serve as a guide for our leadership – and indeed for all members of our community – as we pursue our shared vision to be a world leader. It will support the Faculty of Mathematics in effectively deploying our resources and in maximizing financial opportunities in support of our strategic priorities. It will also lead to action. Following adoption of the plan, representative working groups will develop implementation plans and success indicators for each key priority. These living documents will move our strategic intent into practice across the Faculty.

The Faculty of Mathematics' vision is to be a world leader in mathematics, statistics, and computer science.

From the foundation provided by our mission and values, the plan aims to move the Faculty forward in pursuit of this vision through focused attention on five goals. Specifically, the plan aims to provide:

- › A positive and inviting environment for outstanding people to work, study, and research.
- › World-leading undergraduate programs and initiatives for students of the highest calibre.
- › A first-rate graduate program that develops future academic and industry leaders.
- › World-leading fundamental, applied, and interdisciplinary research.
- › Globally pre-eminent mathematics, computer science, and statistics outreach.

Focused, strategic action in our key priority areas will drive success in reaching our goals. Centred on the key priorities defined during the planning process (people; undergraduate studies; graduate studies; research, creativity, and innovation; and outreach), the plan's objectives and strategic actions will generate new initiatives and refine existing practices to achieve our vision.

People are at the core of everything we do, and we need committed, successful people to achieve our vision. We must prioritize recruiting and retaining outstanding people. Of equal importance, we must provide an inclusive and supportive environment where students, staff, and faculty flourish. The plan sets out objectives to:

- › Attract and retain people of high potential and accomplishment.
- › Foster student, staff, and faculty wellbeing.

Undergraduate studies are a cornerstone of our excellence. Leading universities, employers, and prospective students around the world recognize our excellent undergraduate programs and students. To maintain and even advance the standing of our undergraduate programs, we shall pursue objectives to:

- › Recruit exceptional students from across Canada and around the world.
- › Provide an enriching, supportive, and progressive learning environment, including experiential and online education.

Breadth of academic offerings and unique programs characterize graduate studies in the Faculty of Mathematics. We shall seize opportunities to build on these strengths to increase the prominence, impact, and scale of our graduate programs. To that end, we have established objectives to:

- › Expand and enhance the graduate program, recruiting exceptional students from across Canada and around the world.
- › Prepare students to make substantial contributions as leaders in their chosen careers.

The research, creativity, and innovation strategic priority is also rich with opportunity for the Faculty of Mathematics. We are home to renowned researchers exploring a wide range of areas and ideas. We shall leverage our existing excellence and breadth to increase the Faculty's impact in research and innovation. The plan includes objectives to:

- › Increase the prominence and impact of Faculty of Mathematics research.
- › Demonstrate international leadership in key areas of strength, driven by faculty research interests and informed by emerging opportunities.
- › Foster and support intensified industrial collaboration, innovation, and knowledge transfer.

For decades, our outreach programs have distinguished Waterloo's Faculty of Mathematics. Moving forward, our commitment to outreach will continue to be a differentiator for Waterloo. We shall pursue objectives to:

- › Cultivate broad public awareness and appreciation of mathematics, computer science, and statistics.
- › Expand the positive impact of outreach to diversified audiences and new communities.

The Faculty of Mathematics Strategic Plan 2018 will move the Faculty forward on the global stage. Built on the perspectives, insights, and advice of engaged stakeholders and trusted advisors, it positions the Faculty to overcome challenges and to seize opportunities in pursuit of our vision to be a world leader in mathematics, statistics, and computer science.

People

People are at the very foundation of everything we do in the Faculty of Mathematics. The accomplishments of our students, staff, faculty, and alumni drive our excellent reputation. To achieve our vision, we must put people first. We must attract and nurture the right people, in the right environment.

We shall prioritize recruiting to attract top undergraduate and graduate students, faculty and staff, even as other top global institutions are also courting them. Proactive recruitment will expand the ranks of accomplished faculty and staff members and increase diversity across the Faculty.

We shall also promote the retention of excellent people who are already part of the Faculty, through support and recognition. Fulfillment means more than success in educational, research, and career endeavours; it also means wellness, connectedness, and engagement for all members of our Faculty. We shall provide an inclusive and supportive environment where all people can thrive, with avenues for academic and professional success, personal wellbeing, and community involvement.





GOAL

A positive
and inviting
environment
for outstanding
people to work,
study, and research

OBJECTIVE 1

Attract and retain people of high potential and accomplishment.

To achieve this objective, we shall:

- › Proactively recruit a diversity of stellar candidates, including global research leaders.
- › Retain excellent faculty and staff by recognizing high performance.
- › Support the ongoing career development of our employees.
- › Grow faculty and staff complements strategically in support of research, graduate, undergraduate, and outreach excellence.

OBJECTIVE 2

Foster student, staff, and faculty wellbeing.

To achieve this objective, we shall:

- › Identify and support student, staff, and faculty wellbeing needs specific to the Faculty of Mathematics.
- › Commit to the ongoing development of the Faculty of Mathematics as an inclusive community.

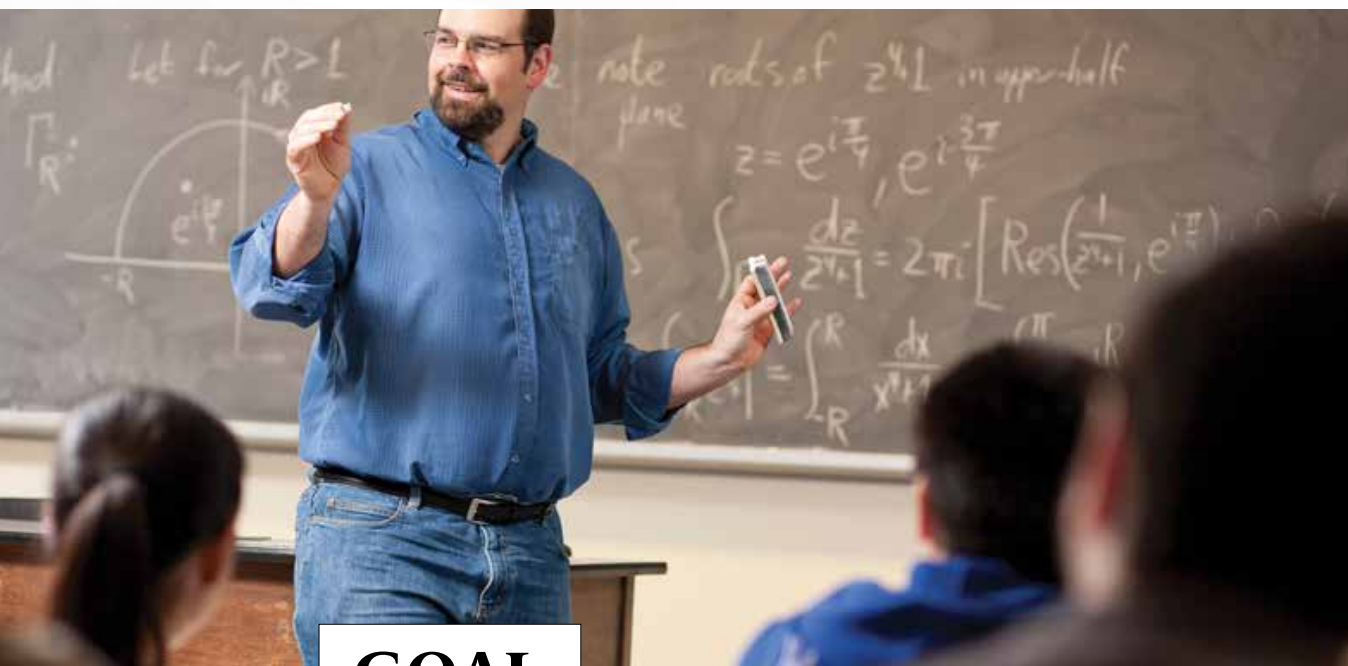
Undergraduate Studies

Waterloo's Faculty of Mathematics is globally recognized for our undergraduate students and programs. Leading institutions around the world consider our alumni desirable prospective graduate students, our renowned co-operative education program helps to develop in-demand employees, and the opportunity to teach such strong students attracts faculty to Waterloo.

We must enhance recruitment efforts to continue to attract diverse cohorts of outstanding students and refine admissions processes to help discern the strongest candidates from an increasingly exceptional pool. We attract undergraduate students of the highest calibre, and we must provide an academic environment of commensurate quality. We must recognize our students' excellence and respond with opportunities for challenge, support, and exploration to build on their diverse individual strengths. This extends beyond the academic environment into overall wellbeing, as outlined under the People key priority of this plan.

In a world where change is a constant and the pace of change is rapid, it is vital that we do not simply react to change, but that we prepare our students for a changing future. While a fundamental education can help prepare students to adapt to unforeseen changes, the way we deliver that education also matters. We must identify and embrace progressive ways to teach, assess our students, and leverage our existing strengths in experiential and online education.





GOAL

World-leading undergraduate programs and initiatives for students of the highest calibre

OBJECTIVE 3

Recruit exceptional students from across Canada and around the world.

To achieve this objective, we shall:

- › Strategically diversify our domestic and international recruitment pools.
- › Refine the admissions process to best identify the strongest candidates from our large pool of highly qualified applicants.
- › Develop targeted strategies to increase the number of women and members of other underrepresented groups in our undergraduate community.
- › Enhance recruitment and confirmation efforts targeted at elite prospective undergraduate students.

OBJECTIVE 4

Provide an enriching, supportive, and progressive learning environment, including experiential and online education.

To achieve this objective, we shall:

- › Commit to and reward teaching excellence.
- › Embrace new teaching approaches that best meet the diverse needs of our students.
- › Advance our high-quality online learning opportunities for undergraduate students.
- › Maintain leadership in experiential education through innovations in our co-op program and expansion of experiential approaches in the classroom where appropriate.

Graduate Studies

Graduate students choose Waterloo for our reputation, breadth of academic offerings, unique programs, and excellent researchers. Demand for our programs from students across Canada and around the world continues to increase.

Our graduate program offers opportunities for increased scale, prominence, and impact. This plan sets out to seize that opportunity. Faculty growth will increase supervisory capacity. Strategic research initiatives will create new training opportunities. Targeted recruitment strategies and competitive funding will bolster our ability to compete for a rich pool of exceptional graduate students.

We shall create more high-quality academic, supervisory, and training opportunities to help students achieve their individual goals – whether in academia, the private sector, or government. We shall stimulate their potential, producing graduates who will lead in their chosen fields and drive advancements in the mathematical, statistical, and computational sciences. We shall attend to not only their academic and professional success, but also their personal wellbeing, as outlined in the People key priority.





GOAL

A first-rate
graduate program
that develops future
academic and
industry leaders

OBJECTIVE 5

Expand and enhance the graduate program, recruiting exceptional students from across Canada and around the world.

To achieve this objective, we shall:

- › Introduce new graduate programs in selected areas.
- › Increase the prominence, reputation, and calibre of our graduate program and our extensive range of research opportunities.
- › Intensify efforts to attract a diverse community of excellent students.
- › Provide graduate students an internationally competitive level of financial support.

OBJECTIVE 6

Prepare students to make substantial contributions as leaders in their chosen careers.

To achieve this objective, we shall:

- › Ensure excellence in graduate training and supervision to develop the academic leaders of the future.
- › Expand opportunities to prepare inclined students for successful careers in the public and private sectors.
- › Foster an environment that promotes strength in research for students and supervisors.

Research, Creativity, and Innovation

The entire spectrum of research – from fundamental to applied, disciplinary to interdisciplinary, traditional to emerging – is needed to understand the foundations of mathematics and of the world today, to identify and solve global challenges, and to drive Canada's prosperity.

Waterloo's Faculty of Mathematics is widely recognized for our breadth of expertise and diversity of interests. We are home to world-renowned researchers who explore a full range of areas and ideas. These include applied areas such as data science, optimization, and geophysical fluid dynamics; foundational problems in areas such as number theory, combinatorics, mathematical physics, and statistical inference; and cutting-edge technologies like human-computer interaction and quantum computing. Further opportunities are emerging in areas like artificial intelligence, financial technology, and cybersecurity. We shall continue to capitalize on existing areas of strength while considering and entering emerging areas judiciously.

We are uniquely positioned to leverage our breadth, scale, and existing excellence to further advance our research program on the global stage. For that to occur, we must support, recognize, and promote the excellent work of our researchers. To advance in today's constrained funding environment, we must proactively identify new opportunities, pursue new collaborations, and further build our capacity.





GOAL

World-leading
fundamental,
applied, and
interdisciplinary
research

OBJECTIVE 7

Increase the prominence and impact of Faculty of Mathematics research.

To achieve this objective, we shall:

- › Encourage, recognize, and reward research excellence.
- › Invest in improvements to the research environment.
- › Leverage our scale and breadth to seize opportunities at the conjunction of our many areas of expertise.

OBJECTIVE 8

Demonstrate international leadership in key areas of strength, driven by faculty research interests and informed by emerging opportunities.

To achieve this objective, we shall:

- › Establish and host world-class research centres and institutes that attract global leaders and contribute at the forefront of their disciplines.
- › Build a Faculty-wide strategy to proactively identify strengths that align with emerging research areas and respond to societal needs.

OBJECTIVE 9

Foster and support intensified industrial collaboration, innovation, and knowledge transfer.

To achieve this objective, we shall:

- › Develop more substantial engagement opportunities with new and existing industry partners.
- › Support the translation of our high-quality research to benefit society, Canada, and the world.
- › Foster entrepreneurship and innovation among inclined students and faculty members.

Outreach

Mathematics features in nearly every aspect of our everyday life. The need to understand and appreciate the impact of mathematics, statistics, and computer science extends far beyond those who will choose to pursue studies in these disciplines. Mathematical acumen is critical to the future of our world, both for society's infrastructure and individual careers.

As we deploy outreach programs and engage the interest of people from our local communities and around the world, we also capture the imagination of the mathematics, computer science, and statistics students of the future. Many students report that their first experience with the Faculty of Mathematics occurred through contests, workshops, or school visits co-ordinated by our Centre for Education in Mathematics and Computing (CEMC).

Moving forward, our commitment to outreach will continue to be a differentiator for Waterloo as we reach out in new ways and to new audiences. We shall seize opportunities to expand appreciation for mathematics, statistics, and computer science more broadly and to meet the needs of underserved groups such as indigenous teachers and those in remote communities.





GOAL

Globally pre-eminent mathematics, computer science, and statistics outreach

OBJECTIVE 10

Cultivate broad public awareness and appreciation of mathematics, computer science, and statistics.

To achieve this objective, we shall:

- › Engage our local community and global audiences through interesting and inspiring opportunities to learn more about mathematics, statistics, and computer science.
- › Raise awareness among policy-makers and the media about the contributions our disciplines make to society.

OBJECTIVE 11

Expand the positive impact of outreach to diversified audiences and new communities.

To achieve this objective, we shall:

- › Support teachers, including proactively engaging indigenous teachers and those in remote communities.
- › Increase the scope of outreach activities through expanded online resources and new partnerships.

Our Path to Tomorrow

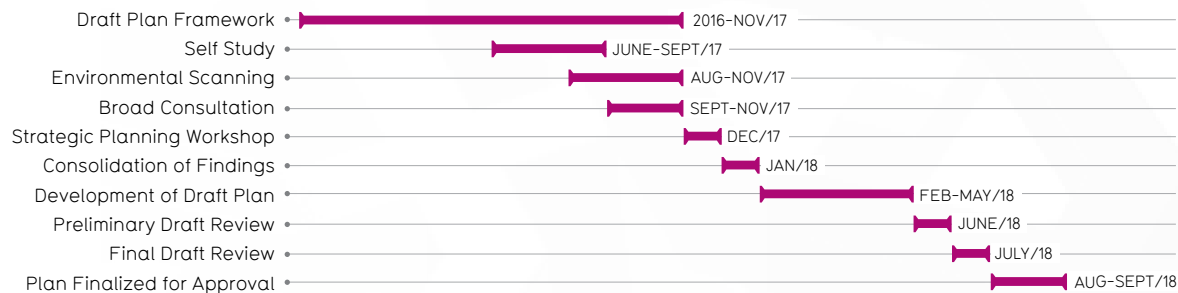
Representation and consultation were vital components of the strategic planning process. At a 2016 meeting, the Dean's Advisory Council (DAC) reviewed the 2012-2017 Strategic Plan framework and considered how it might guide our next planning process. Informed by that conversation, Dean of Mathematics Stephen M. Watt struck the Mathematics Strategic Planning Committee (MSPC), including the leaders of all academic and administrative units (see page 21), and launched a Faculty strategic planning exercise in June, 2017.

MSPC reviewed accomplishments and outstanding objectives from the 2012-2017 Strategic Plan, considered a robust dataset, and undertook a review of the Faculty's mission, vision, values, and key priorities. These guiding principles were tested and revised further in consultation with stakeholders throughout fall 2017. The resulting framework acted as a foundation and a touchstone for our planning efforts and decisions.

Fall 2017 was dedicated to consultation. Using an online survey, focus groups, and individual interviews we engaged hundreds of students, faculty, staff, alumni, co-op employers, and global academic leaders ([see Appendix B](#)). These advisors helped us inventory our strengths, identify opportunities, and understand our institutional, provincial, national, and global contexts. A workshop in December brought together representatives from across the Faculty ([see Appendix C](#)). Informed by the report of consultation findings and their individual experiences and expertise, participants distilled the ideas that formed the plan's earliest content.

MSPC built the Faculty of Mathematics Strategic Plan 2018 on the insights of these stakeholders and advisors. Draft goals, objectives, and strategic actions were developed, reviewed, prioritized, and refined. The preliminary draft plan was shared with a group of reviewers ([see Appendix D](#)) for their detailed feedback. A final draft, reflecting reviewer feedback, was made available to all faculty and staff for their comment. The final plan, refined based on faculty and staff responses, was approved by Mathematics Faculty Council on Tuesday, September 18.

Figure 1: Faculty of Mathematics Strategic Plan 2018 Process Timeline



Integration with the University Strategic Plan

Our planning process also set out to enable informed contributions to the University of Waterloo strategic plan. University President and Vice-Chancellor Feridun Hamdullahpur launched the *Bridge to 2020* exercise in January, 2018 to develop a new University strategic plan for 2020-2025. MSPC has engaged with and contributed to the *Bridge to 2020* process via the Dean and other faculty representatives. Findings from our planning process were shared with the University and insights from the University's process were considered in our plan development. Moving forward, our plan will continue to inform Faculty contributions to the ongoing *Bridge to 2020* exercise as we seek to identify synergies and areas of alignment between the two plans.

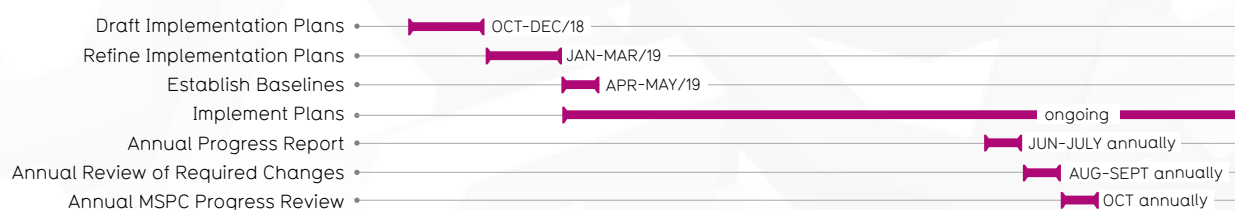
Implementation

Following adoption of the Faculty of Mathematics Strategic Plan 2018, Plan Implementation Working Groups will be struck to develop the implementation plan for each Key Priority. Each group will be led by the member(s) of MSPC most closely aligned to the Key Priority ([see Appendix E](#)), and will include faculty, staff, and students as appropriate. MSPC will continue to meet two to three times annually throughout the plan period to provide oversight of the implementation process and to provide related advice to the Dean.

Plan Implementation Working Groups will meet regularly in the months following the strategic plan's adoption to generate and refine ideas that will move the Faculty forward on each of its strategic objectives. Members will collaborate to develop implementation details for those ideas, incorporating success measures and resource requirements for each. MSPC will meet to review the draft implementation plans and to provide feedback to the working groups through their Chairs. Timing of the annual plan implementation cycle will align with the Faculty's budget planning processes, ensuring that resource allocation to support the ideas in our implementation plans is considered in a timely fashion.

The resulting implementation plans will be living documents. Using the established success measures, working groups will track progress on the implementation plans and formally review them annually with MSPC. This annual review will not only track our progress, but will also be an occasion to consider potential changes that may be required to capitalize on new opportunities or address unforeseen challenges.

Figure 2: Faculty of Mathematics Plan Implementation and Review Cycle Timeline



The Faculty of Mathematics Today

The University of Waterloo's Faculty of Mathematics has great breadth and depth across all areas of mathematics, statistics, and computer science. Waterloo's standing and exceptional reputation for mathematics is built on the quality and many achievements of the Faculty's teachers, researchers, alumni, and students. With more than 8,300 graduate and undergraduate students, 250 full-time professors, and 500 courses, the Faculty is a powerhouse of discovery underpinning the innovation economy of the future.

The Faculty of Mathematics is committed to making important contributions to undergraduate and graduate teaching, research and innovation across the full range of our academic departments, research centres and institutes. Outstanding students are drawn to our Faculty from across Canada and around the world. Our undergraduate teams regularly place high in the North American Putnam Mathematics Competition, and in the worldwide ACM computer programming competition.

The Faculty continues to innovate with new programs to prepare students for the changing world, while remaining active in outreach and enrichment programs to promote mathematics and computer science in elementary and secondary schools in Canada and around the world.

Numbers represent the baseline data from our planning exercise in 2017.

ALUMNI

37,671

ACADEMIC UNITS

Applied Mathematics / Combinatorics and Optimization /
Pure Mathematics / Statistics and Actuarial Science /
David R. Cheriton School of Computer Science

FACULTY

252

STAFF

127

UNDERGRADUATE
STUDENTS

7,360

GRADUATE
STUDENTS

999

POSTDOCTORAL
FELLOWS 69

Mathematics Strategic Planning Committee

TITLE	NAME
Dean of Mathematics	Stephen M. Watt
Vice Dean (from January, 2018)	Kevin Hare
Associate Dean, Undergraduate Admissions and Outreach (to June, 2018) (from July, 2018)	Serge D'Alessio Troy Vasiga
Associate Dean, Computing (to June, 2017) (from July, 2017)	Marek Stastna Stephen Vavasis
Associate Dean, Cooperative Education (to June, 2017) (from July, 2017)	Barry Ferguson Lori Case
Associate Dean, Graduate Studies (to June, 2017) (from July, 2017)	Srinivasan Keshav Christiane Lemieux
Associate Dean, Research	Raouf Boutaba
Associate Dean, Undergraduate Studies (to June, 2017) (from July, 2017)	Steve Furino Francis Poulin
Chair, Applied Mathematics	Siv Sivaloganathan
Chair, Combinatorics and Optimization	Jochen Koenemann
Director, David R. Cheriton School of Computer Science (to June, 2018) Acting Director (from July, 2018)	Mark Giesbrecht Dan Brown
Chair, Pure Mathematics (to June, 2018) (from July, 2018)	Kathryn Hare David McKinnon
Chair, Statistics and Actuarial Science	Stefan Steiner
Director, CEMC (to June, 2017 and from July, 2018) Acting Director (July, 2017 – June, 2018)	Ian VanderBurgh J.P. Prettì
Director, Computational Mathematics (to December, 2017) (from January, 2018)	Kevin Hare Jeff Orchard
Director, Mathematics Business and Accounting Programs	Ilham Akhundov
Mathematics Teaching Fellow	Brian Forrest
Executive Officer	Jack Rehder
Director, Advancement (to August, 2017) (from September, 2017)	Ingrid Town Candace Harrington
Director, Communications and Research Alliances (to September, 2017)	Amy Aldous
Director, Strategic Communications (from October, 2017)	Jodi Szimanski
Faculty Financial Officer	Udaya Wettasinghe
Director, Planning	Martha Foulds

UNIVERSITY OF
WATERLOO



The background image used in this document, a 3D rendering of a two-layer geometric pattern based on a paper Professor Craig Kaplan wrote in 2017, demonstrates the creative nature of mathematics research.

TO LEARN MORE, CONTACT: DEAN OF MATHEMATICS OFFICE, PLANNING
519-888-4567, EXT. 38358

math.planning@uwaterloo.ca

uwaterloo.ca/math/strategic-plan