McMaster University | Engineering
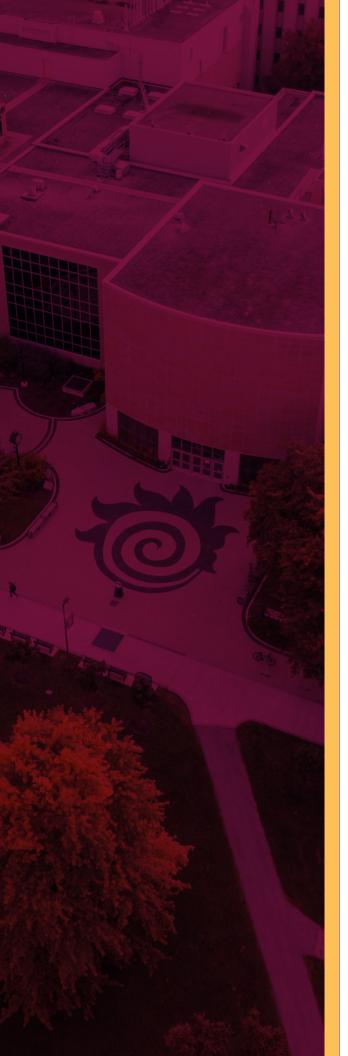
# Engineering a Brighter Future

## A FIVE-YEAR STRATEGIC PLAN: 2024–2029

# Our Vision

Leaders in advancing engineering for global change

# Our Mission

Empowering agile, dynamic, and globally-conscious engineers to collaborate and create a brighter future.

# Values

## Purpose-driven

We solve pressing issues through research and teaching, empowering future leaders with skills for meaningful careers. We think beyond conventional boundaries to drive influential advancements in engineering.

## Respect and Belonging

We find shared purpose by embracing unique perspectives and breaking barriers to address systemic inequalities in engineering. We build each other up in the spirit of collaboration and community.

## Reflective

We are committed to continuous improvement through reflection. Our self-awareness enhances collaboration and ensures alignment with individual and collective goals.

## Resilient

We know that even the best laid plans often require agility. As innovative risk-takers, we adapt to a changing world. We are undeterred by failure and committed to success.

## Integrated and Relevant

Working in interdisciplinary teams, we understand the big picture. We know that social, environmental, and economic factors must be considered alongside a lifecycle perspective that has sustainability and ethical engineering at its core.

## Optimistic

We effect change with curiosity, shared purpose, and hope. Our aspirations are inspired by the desire to engineer positive change in society and the world.

# Priorities

**1.**

# A Complete Student Experience

OUR STUDENT-CENTRIC APPROACH PLACES LEARNERS
AT THE CORE OF EVERYTHING WE DO.

1a ▪ Make continuous improvements to the undergraduate curriculum and experiences through pedagogical research and a focus on outcomes and industry alignment.

1b ▪ Create a world-class graduate experience, from admissions to post-graduation, by providing comprehensive support services and resources for professional and academic growth.

1c ▪ Foster the success, well-being, and advancement of all members of the engineering community through support, resources, and funding.

1d ▪ Ensure career readiness through intentional and early engagement, purposeful reflection surrounding co-op and other experiential learning opportunities, as well as increased integration with industry and alumni.
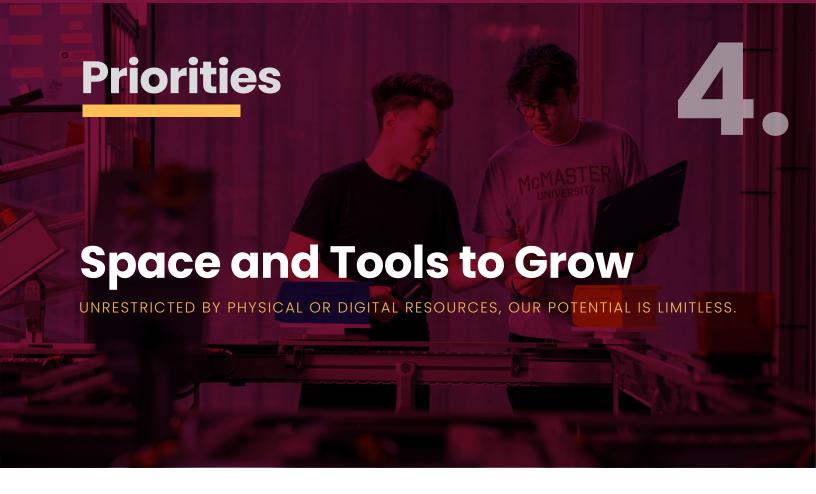
# Priorities

# Amplified Research Impact

OUR INNOVATIVE SOLUTIONS, IDEAS, AND PRODUCTS EFFECT POSITIVE CHANGE.

**2a** ■ Drive impactful research and innovation to address UN Sustainable Development Goals, focusing on Bio-innovation, Energy and the Environment, Mobility, and Advanced Manufacturing, while staying nimble to adapt to changing priorities.

**2b** ■ Be a leader in the digital revolution of engineering, with expertise in data analytics, AI, automation, smart systems, and sensor technologies, and the integration of these into all aspects of our lives.

**2c** ■ Develop a comprehensive support system that empowers faculty research by expanding resources to acquire and execute on funding, fostering industry partnerships through showcases, and facilitating the preparation of substantial grant applications.

**2d** ■ Support start-ups led by students and faculty, enabling technology transfer and commercialization, while facilitating access to funding opportunities and resources for early-stage start-ups.

**2e** ■ Enhance research capacity and alignment with local and national priorities by strategically increasing research funding and stakeholder partnerships.

# Priorities

# Extended Influence, Partnerships, and Reach

WE DELIBERATELY CULTIVATE MUTUALLY BENEFICIAL PARTNERSHIPS THAT STRENGTHEN OUR NETWORK.

3a ▪ Enhance the visibility and prominence of core research facilities to support cutting-edge research and facilitate interdisciplinary collaborations that attract industry partners.

3b ▪ Apply an equity lens in all aspects of decision-making, hiring, program development, and community initiatives to address systemic barriers, foster inclusivity, and elevate our performance.

3c ▪ Create a tightly integrated partnership framework, ensuring seamless collaboration and coordination between co-op employers, alumni networks, community partners and research partners, and development offices.

3d ▪ Benchmark, incentivize, and expand global mobility opportunities for students and faculty.

# Space and Tools to Grow

UNRESTRICTED BY PHYSICAL OR DIGITAL RESOURCES, OUR POTENTIAL IS LIMITLESS.

**4a** ■ Maximize on existing spaces and resources to accommodate our evolving needs while initiating design and construction on a new building.

**4b** ■ Enhance and expand space for student experiential learning.

**4c** ■ Optimize our physical office spaces and hybrid work models with the needs of our existing and future occupants.

**4d** ■ Optimize resource sharing and invest in technology to elevate our administrative, teaching, and research operations.

**4e** ■ Build systems that track and measure performance, enhance data acumen, deliver projects on time and within budget, and stay ahead of emerging trends.