Toronto Metropolitan University

Faculty of Engineering & Architectural Science

Strategic Research Plan (2025-2029)

Faculty of Engineering & Architectural Science

Contents

1. Overview **2**
- 1.1 Faculty of Engineering & Architectural Science 2
- 1.2 Guiding Principles 3

2. Research Themes and Areas of Strategic Importance **4**
- 2.1 Energy & Environment 5
- 2.2 Design & Simulation 5
- 2.3 Advanced Manufacturing & Materials 6
- 2.4 Data Analytics & Artificial Intelligence 6
- 2.5 Biotechnology & Health Systems 7
- 2.6 Transportation & the Built Environment 7
- 2.7 Robotics & Control Systems 8
- 2.8 Information & Communication Technology 8
- 2.9 Cross-Cutting Areas of Research 9
- 2.10 Aspirational Research Areas 9

3. Implementation of the Strategic Research Plan **10**
- 3.1 FEAS Research Centres and Innovation Zones 10
- 3.2 FEAS Connections and Partnerships 11
- 3.3 EDIA 11
- 3.4 SRC Resources 12
- 3.5 Knowledge Mobilization 12

4. Ensuring Success **13**
- 4.1 Research Funding 13
- 4.2 FEAS Connections and Partnerships 13
- 4.3 SRC Output 14
- 4.4 Researcher Recognition 14

Appendices **15**

1. Overview

1.1 Faculty of Engineering & Architectural Science

Toronto Metropolitan University (TMU) is a leader in Scholarly, Research and Creative (SRC) activity and innovation. Located in downtown Toronto, one of the world's most diverse and innovative cities and on the territory of the Anishinaabeg, Haudenosaunee, the Wendat Peoples and the Mississaugas of the Credit, TMU builds on this vibrant energy to be a center for knowledge, research and innovation, collaboration and change. Researchers at the Faculty of Engineering & Architectural Science (FEAS) have a significant role in this.

FEAS is one of the eight faculties at TMU and is home to more than 5,000 undergraduate students in its six departments, over 1,000 graduate students (Masters and Ph.D.), 45 postdoctoral researchers, 165 faculty, and over 60 staff members. Within FEAS, SRC activities are multidisciplinary, extending beyond the traditional realms of academia to catalyze transformative change. Through relationship-building and collaboration, from grassroots initiatives to multi-institutional international endeavours, our researchers and their teams and partners contribute meaningfully to the advancement of inquiry, discovery, knowledge, and creative works within our community and on a national and global scale.

The FEAS SRP was developed in parallel with, and integrates with, TMU's SRP. Building on the framework provided by TMU's SRP (2025-2030), the 2025-2029 FEAS SRP establishes priorities and goals for the faculty to contribute to TMU's vision to become a hub for world-leading researchers working to solve complex real-world problems. The themes of the FEAS SRP were crafted to directly contribute to TMU's strategic research priorities, including: Health & Wellbeing, Transformative Technology, Resilient Inclusive Communities, Climate Environment & Mobility, Future of Work, and Arts, Culture & Creativity. FEAS researchers are well represented in these themes and boldly contribute to advancing research through groundbreaking discoveries, innovation and creativity that benefit the Canadian and the global community.

The FEAS SRP clearly articulates our Faculty's Research Themes and areas of strategic importance. These illustrate FEAS strengths, diversity in SRC activities, and the embodiment of the principles of equity, diversity, inclusion and accessibility (EDIA). FEAS researchers are shaping the future of engineering and architectural innovation and training the next generation of researchers and innovators to contribute to sustainability, today and looking ahead to the future. The SRP provides direction to coordinate the SRC activities of FEAS departments, centres, zones, labs, and individual faculty members. This focus will support more impactful discoveries, create evidence-based solutions to societal problems, and enable real-world transformation. The SRP serves as an instrument to inform current and future resource planning and resource allocation. While the timeline is five years, this SRP is a living document aiming to reflect the ongoing scholarly activities and adjust to the dynamic SRC landscape while identifying opportunities to support and enhance these activities.

1.2 Guiding Principles

The 2025-2029 FEAS SRP Research Themes stem from the research and creative excellence of our faculty members and are based on essential foundational principles. These principles help anchor the strategic research plan and are:

Excellence

- Support of cross-disciplinary, multi-disciplinary, and interdisciplinary research
- Cultivation of partnerships, both within and beyond the University
- Generation of scientific discovery
- Creation of knowledge

Community-Engaged Focus

- Multi-disciplinary collaboration that enriches the intellectual and artistic landscape
- Research outcomes with practical applications that enrich communities
- Equity, diversity, inclusion, and accessibility as guiding principles in research design and implementation (supported by the Dimensions Faculty Lead)

International Focus

- Engaging with global issues, challenges, and opportunities
- Building global strategic partnerships to deal with global problems
- Maximizing impact of our research toward a sustainable world for future generations

2. Research Themes and Areas of Strategic Importance

The outlined research themes best represent the SRC activities of FEAS faculty members. They were selected to highlight the multi-disciplinary and collaborative work, independent of department or discipline, that FEAS members are focused on today and in the future. These themes complement and intersect each other, reflecting the interconnection between different research focus areas within the faculty (Figure 1). FEAS research themes are aligned with TMU's Strategic Research Plan 2025-2030 and illustrate the enhanced opportunities for external SRC collaborations and partnerships and demonstrated impact in Canada and throughout the world.

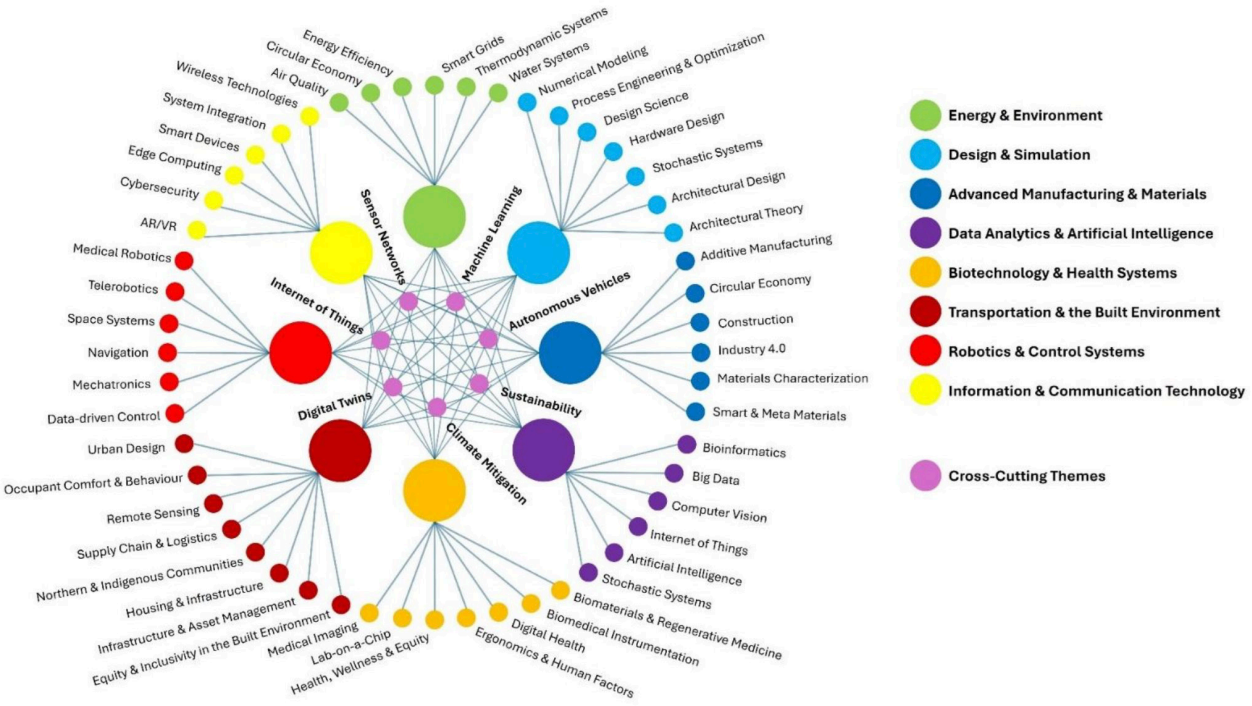

Figure 1: Research Themes and Areas of Strategic Importance

2.1 Energy & Environment

Energy and environmental research within FEAS engages with energy production, consumption, environmental stewardship, and their intersections. It involves investigating ways to provide reliable and affordable energy while minimizing negative environmental and social impacts, promoting resilience, and ensuring long-term sustainability. FEAS researchers are dedicated to exploring ways to meet current and future energy needs by developing innovative technologies and strategies to reduce reliance on fossil fuels, minimize combustion pollutants, promote the efficient use of resources and integration of renewable energy sources into existing energy infrastructure, investigate sustainable ways in building our environment, evaluate the feasibility and scalability of renewable energy projects, develop green water/wastewater management. These innovations span across multiple sectors, from aerospace technology, water and building energy systems, agriculture to sustainable transportation. Example SRC areas within the Energy & Environment theme include:

- Air Quality
- Circular Economy
- Energy Efficiency
- Smart Grids
- Thermodynamic Systems
- Water Systems

2.2 Design & Simulation

In modern engineering and architecture, design and simulation are the key elements of developing any new technology, infrastructure, or creative initiative. The faculty's focus on design and simulation underscores our commitment to pioneering research that bridges theoretical concepts with practical applications. Design encompasses both creative and systematic processes to develop solutions to complex problems, while simulation provides powerful computational tools to model, analyze, and predict the behavior and performance of these systems under various conditions. The areas of application span from architecture and building science to aerospace, automotive, health, and energy systems. By leveraging state-of-the-art simulation technologies and fostering a collaborative research environment, we aim to push the boundaries of engineering and architectural innovation to address the challenges of tomorrow with precision and confidence. Example SRC areas within the Design & Simulation theme include:

- Architectural Design
- Architectural Theory & History
- Design Science & Engineering
- Electronic & Computer Hardware Design
- Numerical Modelling
- Stochastic Systems
- Process Engineering & Optimization

2.3 Advanced Manufacturing & Materials

In the forefront of modern engineering, advanced manufacturing represents a paradigm shift towards more efficient, precise, sustainable, and innovative production processes. Within FEAS, advanced manufacturing encompasses techniques such as additive manufacturing, robotics, and artificial intelligence. These technologies enable the creation of complex, high-performance products with unparalleled accuracy and customization. By integrating advanced materials, automation, and data-driven decision-making, our research aims to revolutionize the manufacturing landscape, foster sustainable practices and enhance competitiveness. Our faculty are continually advancing their work in advanced materials and manufacturing processes in the healthcare, aerospace, electronics, and automotive sectors. Example SRC areas within the Advanced Manufacturing & Materials theme include:

- Additive Manufacturing
- Circular Economy
- Construction
- Industry 4.0
- Material Characterization
- Smart & Meta Materials

2.4 Data Analytics & Artificial Intelligence

In today's rapidly evolving technological landscape, data analytics and artificial intelligence (AI) stand at the forefront of research and innovation, offering transformative potential across diverse disciplines. As integral components of our faculty's research, these technologies provide powerful tools for advancing knowledge, learning, and the driving force behind impactful societal change. Data analytics enables the examination and interpretation of vast datasets, uncovering hidden patterns and generating actionable insights to inform evidence-based decision-making. Meanwhile, AI brings forth capabilities such as machine learning and predictive modeling to revolutionize fields of healthcare, cybersecurity, aerospace, architectural design, and engineering. Example SRC areas within the Data Analytics & Artificial Intelligence theme include:

- Big Data
- Bioinformatics
- Computer Vision
- Artificial Intelligence
- Internet of Things
- Stochastic Systems

2.5 Biotechnology & Health Systems

Biotechnology and health systems stand at the intersection of engineering and life sciences, offering transformative potential to improve human health and well-being. Research in this area aims to harness engineering principles to innovate in medical diagnostics, treatment, and healthcare delivery. Biotechnology involves the manipulation of biological systems for the development of new drugs, therapies, and medical devices, while health systems engineering applies systematic approaches to optimize the efficiency, effectiveness, and quality of healthcare services. FEAS researchers endeavor to explore advancements in areas such as biomaterials, biomedical imaging, bioinformatics, and telemedicine. By fostering collaboration with medical institutions, industry partners, and regulatory bodies, we aim to drive breakthroughs that address critical health challenges, improve patient outcomes, and ensure equitable access to novel healthcare solutions. Example SRC areas within the Biotechnology & Health Systems theme include:

- Biomaterials & Regenerative Medicine
- Biomedical Instrumentation
- Digital Health
- Ergonomics & Human Factors
- Health, Wellness & Equity
- Lab-on-a-Chip
- Medical Imaging

2.6 Transportation & the Built Environment

Transportation and the built environment are critical pillars of modern society, shaping the way people live, work, and interact. Work within FEAS, addresses the pressing need for sustainable, efficient, and resilient infrastructure systems. By integrating new technologies such as smart transportation systems, autonomous vehicles, and advanced materials, our research aims to revolutionize urban and rural mobility, reduce environmental impact, and enhance the quality of life. The built environment encompasses the design, construction, and management of buildings, roads, bridges, and public spaces, ensuring they meet the demands of growing populations and evolving urban and indigenous landscapes. Through interdisciplinary collaboration and innovative research, we seek to develop solutions that promote safety, accessibility, and sustainability in transportation and infrastructure. Our commitment to this field not only drives technological advancement but also prepares our students to lead in creating the future of connected and sustainable communities. Example SRC areas within the Transportation & the Built Environment include:

- Equity & Inclusivity in the Built Environment
- Infrastructure & Asset Management
- Housing & Infrastructure
- Northern & Indigenous Communities
- Occupant Comfort & Behaviour
- Remote Sensing
- Supply Chain & Logistics
- Urban Design

2.7 Robotics & Control Systems

Robotics and control systems represent the cutting edge of engineering innovation, driving advancements that are transforming industries and improving quality of life. As a fundamental component within many research areas, work in this theme focuses on the design, development, and implementation of intelligent robotic systems, sophisticated control mechanisms and mechatronics. Robotics involves the creation of automated systems and machines capable of performing complex tasks with precision, adaptability, and efficiency. Control systems are integral to ensuring these systems operate reliably and effectively, employing advanced algorithms and real-time data processing to manage behaviour. Within FEAS, our researchers aim to push the boundaries of what is possible in areas of autonomous vehicles, industrial automation, medical robotics, and beyond. By fostering a collaborative research environment and leveraging interdisciplinary expertise, we seek to develop groundbreaking technologies that address critical societal challenges, enhance productivity, and spur economic growth. Example SRC areas within the Robotics & Control Systems theme include:

- Data-driven Control
- Mechatronics
- Medical Robotics
- Navigation and Space Systems
- Telerobotics

2.8 Information & Communication Technology

Information and Communication Technology forms the backbone of our interconnected world, enabling seamless communication, data exchange, and access to information across the globe. As a fundamental focus with our faculty's SRP, information and communication technology encompass the development and application of novel innovations in telecommunications, networking, cybersecurity, and data management. Our research aims to push the boundaries of digital innovation by exploring advancements in areas of Internet of Things (IoT), artificial intelligence, wireless technologies, and smart devices. By addressing challenges related to data security, network efficiency, and digital inclusion, we strive to create robust, scalable, and secure communication infrastructures. This commitment to ICT not only enhances the quality of life by improving access to information and services but also drives economic growth and fosters global connectivity. Example SRC areas within the Information & Communications Technology theme include:

- AR/VR
- Cybersecurity
- Edge Computing
- Smart Devices
- System Integration
- Wireless Technologies
- Telerobotics

2.9 Cross-Cutting Areas of Research

In the FEAS' SRP, cross-cutting areas of research are pivotal to advancing interdisciplinary innovation and addressing complex global challenges. These areas, which include sustainability, digital transformation, artificial intelligence, and system modeling, serve as cohesive threads that weave together diverse areas of expertise, fostering collaboration across various engineering and architectural science disciplines. By embedding these cross-cutting areas into our research agenda, we aim to cultivate synergies that amplify the impact of our work, enabling us to develop holistic solutions that are technically sound and socially relevant. This approach not only enriches the depth and breadth of our faculty's research but also ensures that we are proactively addressing the broader societal, environmental, and economic dimensions of engineering and architectural challenges. Example cross-cutting areas of research include:

- Sustainability
- Autonomous Vehicles and UAVs
- Climate Change Mitigation and Adaptation
- Digital Twins
- IoT
- Machine Learning
- Sensor Networks

2.10 Aspirational Research Areas

As part of the FEAS SRP, we are committed to exploring new, aspirational areas of research where our current expertise is limited but the potential for groundbreaking innovation is immense. These areas include quantum computing, nanotechnology, sustainable aviation, and space operations. By investing in these forward-looking fields, we seek to build interdisciplinary teams, foster collaborations, and attract top talent to develop the necessary expertise. This bold approach not only positions our faculty to lead in emerging technologies and creative industries but also prepares our students to become pioneers in these cutting-edge areas, driving innovation and societal progress for the future.

3. Implementation of the Strategic Research Plan

3.1 FEAS Research Centres and Innovation Zones

The research of FEAS' faculty is supported by Research Centers and Innovation Zones that provide state-of-the-art infrastructure that accelerate the continuation and growth of our research programs. These facilities align with the TMU and FEAS investments in our strategic research priorities.

Faculty-based Research Centres that support SRC activities are:

The Centre for Advancing Engineering, Research and Innovation in Aerospace (AERIAS). AERIAS is a hub for innovation and excellence dedicated to advancing the frontiers of aerospace science and engineering. The centre is committed to pioneering research in aerodynamics, propulsion systems, materials science, and space exploration technologies. By fostering interdisciplinary collaboration and leveraging state-of-the-art facilities, it aims to develop innovative solutions that address the evolving challenges within the aerospace industry. Located at Downsview Innovation Park, AERIAS is a member of the Downsview Aerospace Innovation and Research (DAIR) hub. Taking advantage of the growing R&D hub, AERIAS provides opportunities for students and faculty to develop working relationships with local industry and other academic partners, provides research space and access to shared research and testing facilities, and is a venue for workshops and conferences on developing technology. Themes supported by this research centre include Energy & Environment, Transportation and the Built Environment, Design & Simulation, Data Analytics & Artificial Intelligence, Robotics & Control Systems, Information & Communication Technology.

Centre for Urban Energy (CUE). CUE is focused on delivering novel, tangible, sustainable and affordable solutions to the pressing energy problems of today and tomorrow. CUE combines the perspectives of engineering, science, environment, business, social science, public policy, law and infrastructure management, and brings together industry, government and top researchers in Canada and abroad to undertake collaborative, multi-disciplinary research on the issues facing large cities today. Research at the centre is focused on climate change, conservation, demand management, efficiency, electric vehicles, microgrids, electricity planning, net-zero buildings, policy and regulation, renewables, smart grids, storage, and transmission and distribution. Themes supported by this research centre include Energy & Environment, Design & Simulation, Data Analytics & Artificial Intelligence.

The Institute for Biomedical Engineering, Science and Technology (iBEST). iBEST is a partnership between Toronto Metropolitan University and Unity Health Toronto that brings together university engineering and science strengths with the hospital's biomedical research and clinical expertise to translate research concepts into testable health-care solutions. Located within St. Michael's Hospital, iBEST's access to biomedical, technological and clinical expertise allows its members and partners to identify challenges and rapidly pilot, modify and introduce biomedical discoveries and inventions to improve health. Themes supported by this research centre include Biotechnology & Health Systems, Advanced Manufacturing & Materials, Data Analytics & Artificial Intelligence, Robotics & Control Systems.

The FEAS Innovation Zones that help drive SRC activity are:

The Biomedical Zone (BMZ) helps early-stage health technology companies to validate their need-based solutions directly in the hospital setting with clinicians, business experts, and innovative thinkers. Through the Biomedical Zone, startups are able to rapidly iterate their technology, refine their business model, and demonstrate clinical value. This zone is supported by research conducted within the Biotechnology & Health Systems theme.

The Clean Energy Zone (CEZ) is an incubator focused on clean, sustainable energy innovations including electric vehicles, renewable energy, energy storage and distribution, microgrids and net-zero city building. It brings researchers, students and industry partners together to commercialize sustainable solutions that address societal needs and provide real environmental, social and economic impact. This zone is supported by research conducted within the Energy & Environment theme.

The Innovation Boost Zone (IBZ) is a leading hub for technological innovation which is rising to the opportunity to support our nation's most promising entrepreneurs. The zone invests time and resources into the ideas that will impact not just markets but society. Programming through the zone is dedicated to providing entrepreneurs with a collaborative, educational, and supportive environment where they don't only learn to succeed but find it rewarding through their social impact. This zone is supported by research conducted within all SRC themes of the faculty.

3.2 FEAS Connections and Partnerships

The work of FEAS faculty members intersects with that of other faculty members not only within FEAS but also with other faculties, departments, and schools at TMU. Similarly, our connections to external partners (industry, government, and not-for-profits) help drive curiosity and innovation with the aim of also remaining relevant to the needs of industry and society at large. These collaborative and interdisciplinary networks strengthen research activity and through the FEAS' SRP, we will reinforce these connections with all FEAS partners to enhance our research portfolio and deliver solutions that can be rapidly implemented by our partners. While current national and international collaborations with several agencies, government, academic institutions and industry speak to the multidisciplinary research in FEAS, we are also looking to strengthen and expand these partnerships through Canadian and International funding programs.

3.3 EDIA

FEAS faculty members incorporate equity, diversity, inclusion, and accessibility (EDIA) in their research programs. Through the TMU Dimensions program, our FEAS EDIA Representative is continuously engaging with researchers to build capacity to design and conduct SRC activities in the most equitable, inclusive, and accessible ways possible. From equitable recruitment and evaluation, promotion of inclusive management practices, provision of accessible research facilities, and the promotion of equity in community-based research, we are advancing these principles in all of our SRC activities. Recognizing the need to continuously improve and deliberately cultivate an inclusive and equitable research environment, FEAS is committed to continuing to engage in learning, listening, and capacity-building activities to more fully incorporate EDIA principles in the SRC activities and programs.

3.4 SRC Resources

The FEAS Research & Innovation Office (RiO) offers support to FEAS researchers with proposal facilitation, research training, partnerships, and financial matters. FEAS RiO connects researchers not only with internal units at TMU, but it also outreaches to external organizations at the aim of collaborating in research activity. FEAS RiO also liaisons with OVPRI in the process of negotiating and signing research-related agreements, reviewing proposals, and organizing research-related events. The Research Accounts Support Officers (RASOs) support FEAS through processing paperwork related to new hires of personnel, travel claims and other research expense claims.

RiO administers the Dean's Research Fund (DRF) which supports FEAS faculty through a variety of funding programs for bridge funding, conference travel support, undergraduate summer research support, internal conference organization support, and strategic matching for competitive proposals. These internal funding programs support FEAS research by improving the success of external grant competitions and offering opportunities for our trainees.

FEAS manages over 100,000 ft2 of space for investigator research labs, research centres and innovation zones. While our current space portfolio is adequate for FEAS' needs, effective research space management is another critical component of our faculty's SRP to ensure facilities are optimized to support innovation and collaboration. Through the recently adopted FEAS Space Management Guidelines and the Faculty Space Management Committee (in 2023), we provide a systematic approach to allocating and maintaining laboratory spaces while prioritizing flexibility and adaptability to accommodate the evolving needs of our diverse research portfolio. These guidelines emphasize the creation of shared, multidisciplinary environments that foster collaboration across different domains, as well as the integration of advanced technologies and sustainable practices in their operation. Through this robust management framework, we aim to maximize the utilization of our research facilities, support the dynamic nature of scientific and creative inquiry, and provide our researchers with the resources they need to excel. This strategic focus on efficient research space management not only enhances productivity and innovation but also reinforces our commitment to fostering a vibrant and collaborative research culture.

3.5 Knowledge Mobilization

Knowledge mobilization and community engagement are cornerstone elements of the FEAS' SRP, aimed at ensuring that our research and creative efforts have a tangible and meaningful impact on society. By actively translating research findings into practical applications, policies, and technologies, we seek to bridge the gap between academia and the broader community. Our strategy includes fostering partnerships with industry, government, non-profit organizations, and local communities to co-create, share, communicate, and disseminate solutions and knowledge that address real-world challenges. Through public lectures, workshops, and collaborative projects, we aim to disseminate knowledge widely and engage diverse stakeholders in meaningful dialogue. Additionally, we are committed to incorporating community input into our SRC priorities and processes, ensuring that the work from FEAS investigators is aligned with the needs and aspirations of the people it serves. This focus on knowledge mobilization and community engagement serves to enhance the relevance and impact of our SRC activities and strengthens the role of our faculty as a catalyst for positive societal change.

4. Ensuring Success

Measuring success is a vital component to ensure that this SRP effectively advances our mission and generates meaningful impact. The evaluation of success involves a comprehensive set of metrics that encompass both qualitative and quantitative indicators, such as research output, grant funding, collaborations and partnerships, and community engagement. We will also prioritize the individual success of our faculty by tracking career progression, awards, and recognitions. Regular feedback from all stakeholders, including academic and industry partners as well as community members, will provide valuable insight into the relevance and effectiveness of the SRC activities conducted at FEAS. Through this framework, we will ensure continuous improvement and sustained excellence in our research and creative activities, ultimately contributing to the advancement of knowledge and societal progress.

4.1 Research Funding

Research funding success indicators include the total amount of research funding secured, the number of funded projects, and the rate of funding proposal acceptance. We will also evaluate the alignment of funded projects with our strategic priorities (as defined by this SRP) and their potential to drive innovation and address societal challenges. Through the analysis of trends in research funding acquisition, we will be able to identify strengths and areas for improvement in our grant application processes and bolster the culture of research within the faculty. In addition, the ability to attract significant research funding serves as a testament to our faculty's expertise, innovation, and relevance in their respective fields, enhancing our reputation and positioning us as leaders in cutting-edge research. This focus on research funding not only ensures the sustainability and growth of our research programs but will also enable and attract and retain top-tier research talent.

4.2 Collaborations and Partnerships

Success in the area of collaborations and partners will be gauged by the number and quality of collaborative projects with other academic institutions, industry leaders, government agencies, and community organizations. Key indicators include the establishment of joint research initiatives, co-authored publications, and the successful technology and knowledge transfer to external partners. We will also assess the impact of these collaborations on enhancing our research capabilities, driving innovation, and addressing complex global challenges. By prioritizing and measuring the success of collaborations and partnerships, we will aim to create a dynamic and interconnected SRC ecosystem that amplifies our faculty's strengths, enhances resource sharing, and maximizes the societal and economic impact of our SRC endeavors.

4.3 SRC Output

Key metrics for evaluating research output include the quantity and quality of peer-reviewed publications, conference presentations, and dissemination of creative activities. We assess the impact of our research by tracking citation indices and the influence of our work on industry practices and public policy. Additionally, we will consider the interdisciplinary reach of our SRC activities as evidenced by collaborations across academic units and with external partners to facilitate technology transfer and knowledge mobilization. We will continue to focus our SRC activities to understand the needs of communities around us and to collaboratively work with them to help develop solutions. We will disseminate new knowledge through different means and venues, such as: open access publications, exhibitions open to different/external audiences, testimonial and impact statements from external partners, and technology transfer to industrial partners and local start-up ventures. Through this approach, we will be able to identify trends and address gaps in our SRC performance. This focus on research output not only highlights the productivity and excellence of our faculty but also strengthens our reputation in the academic and professional communities. Ultimately, a robust evaluation of research output will support our mission to lead innovation and to contribute to valuable solutions to the pressing challenges of our time. Collected quantitative and qualitative data will be used to track current trends as well as establish a baseline for future FEAS SRPs.

4.4 Researcher Recognition

Evaluating researcher recognition will include tracking prestigious awards, honors, and fellowships received from professional societies and academic institutions, as well as invitations to speak at high-profile conferences and serve on editorial boards or advisory panels. We will also track the frequency and context of citations of our researchers' work, highlighting their influence and impact within their academic communities and partner engagement. Additionally, the number of leadership positions held by our faculty in professional organizations reflects their stature and expertise within their respective fields. By recognizing and promoting the achievements of our researchers, we will aim to foster a culture of excellence, attract top-tier talent, and enhance our faculty's reputation as leaders in engineering and architectural research and innovation. This focus on researcher recognition not only validates individual accomplishments but also reinforces our collective commitment to advancing the frontiers of knowledge and addressing global challenges.

Appendices

Appendix A: Principles of the SRP Development Process

Founded within the TMU's SRP and in line with the broader vision of the University, the FEAS SRP development was guided by the following principles:

Inclusion
All FEAS faculty members were provided with the opportunity to identify strategic themes and activities, ensuring that a diverse range of perspectives were included in the creation of this document.

Transparency
A Steering Committee representing each department, along with Dimensions, Graduate Student, and Postdoctoral representatives, met throughout the creation of the SRP with all decisions clearly documented and communicated to members.

Excellence
To identify areas of strength based on impact, funding, contribution to Highly Qualified Personnel (HQP) training, collaborations and partnerships, innovation, national / international reputation, depth and excellence of research.

Appendix B: 2025-2029 FEAS SRP Steering Committee

- Dr. Stephen Waldman, Associate Dean Research and External Partnerships (Chair)
- Dr. Jenn McArthur, FEAS EDIA Representative
- Dr. Bala Venkatesh, Electrical, Computer, and Biomedical Engineering
- Dr. Ali Tavallaei, Electrical, Computer, and Biomedical Engineering
- Dr. Darko Joksimovic, Civil Engineering
- Dr. June Komisar, Architectural Science
- Dr. Helen Stopps, Architectural Science
- Dr. Habiba Bougherara, Mechanical, Industrial, and Mechatronics Engineering
- Dr. Mucahit Cevik, Mechanical, Industrial, and Mechatronics Engineering
- Dr. Guangjun Liu, Aerospace Engineering
- Dr. Emre Karataş, Aerospace Engineering
- Dr. Dae Kun Hwang, Chemical Engineering
- Dr. ChungHyuk Lee, Chemical Engineering
- Dr. Mohsen Nazemi, Post-Doctoral Fellow, Civil Engineering
- Ms. Shereen Al Tamimi, PhD Candidate, Industrial Engineering