



The following Motions and Documents were considered by the GFC Academic Planning Committee at its Wednesday, September 21, 2022 meeting:

Agenda Title: **Proposal to establish the University of Alberta Research Chairs program in the Faculty of Engineering.**

CARRIED MOTION:

THAT the GFC Academic Planning Committee approve with delegated authority from GFC the establishment of the University of Alberta Engineering Research Chairs program for implementation beginning October 1, 2022.

FINAL Item 5 ([Revised October 18, 2022](#))

REVISED FINAL Item No. 5
**Governance Executive Summary
Action Item**

Agenda Title	Proposal to establish the University of Alberta Engineering Research Chairs program in the Faculty of Engineering.
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Motion

<p>THAT the GFC Academic Planning Committee approve the establishment of the University of Alberta Engineering Research Chairs program for implementation beginning October 1, 2022, with a full review occurring by September 30, 2032.</p>
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Item

Action Requested	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation
Proposed by	Simaan AbouRizk, Interim Dean, Faculty of Engineering
Presenter(s)	<ul style="list-style-type: none"> • Simaan AbouRizk, Interim Dean, Faculty of Engineering • Anastasia Elias, Associate Dean (Research Strategy), Faculty of Engineering

Details

Office of Administrative Responsibility	Provost and Vice-President (Academic)
The Purpose of the Proposal is <i>(please be specific)</i>	<p>The proposal is before the committee because the Faculty of Engineering is seeking to establish the University of Alberta Engineering Research Chairs program, which aims to:</p> <ul style="list-style-type: none"> • Increase the retention of faculty within the Faculty of Engineering that are committed to engaging in large-scale collaborative research partnerships with private and/or public sector partners as well as communities; • Enhance the recruitment of outstanding scholars to the Faculty of Engineering, including practices to increase the representation of members of historically underrepresented groups; • Improve the quality, capacity, and relevance of the Faculty of Engineering’s research outputs to our communities of practice; and • Support the ethical engagement of and partnerships with Indigenous nations and communities through interdisciplinary projects that create real change towards goals in the University of Alberta’s Indigenous Strategic Plan.



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<p>Executive Summary <i>(outline the specific item – and remember your audience)</i></p>	<p>The Natural Sciences and Engineering Research Council of Canada (NSERC)’s Industrial Research Chair (IRC) Program has provided a unique collaborative framework for developing long-standing relationships with industry. The IRC Program has resulted in “numerous mutually beneficial collaborations” between the Faculty of Engineering at the University of Alberta and various public, private, and not-for-profit sector organizations in Canada.</p> <p>As of September 2, 2019, the IRC Program is no longer accepting new applications or renewals. The Faculty of Engineering at the University of Alberta had the largest number of IRCs of any other university in Canada; the cessation of this program represents a notable loss to the Faculty of Engineering.</p> <p>In an effort to promote the creation of new, and the maintenance of existing collaborative partnerships, the Faculty of Engineering is proposing the development of the University of Alberta Engineering Research Chairs (UAERC) Program.</p> <p>Funding for the program will be provided through:</p> <ul style="list-style-type: none"> ● Industrial contributions of collaborating partners in UAERC-related projects; ● Engineering endowments (at the discretion of the Dean of Engineering); and/or ● Other research chair programs, such as the Canada Research Chairs program (i.e., the Faculty’s Operating Budget related to those chairs), should the candidate hold multiple titles. <p>The UAERC program is designed to be scalable, with the number of UAERCs awarded yearly based on the availability of funding (up to a maximum number of UAERCs). This approach will ensure the quality and the financial sustainability of the program.</p> <p>The UAERC program will issue regular (e.g., semi-annual March and September) Calls for Applications. Additional Calls for Applications for recruitment or retention purposes may be initiated by the Dean of Engineering through the UAERC-RC as opportunities warrant. The program is anticipated to continue in perpetuity, with a full review of the program occurring by September 30, 2032.</p> <p>The UAERC Review Committee (UAERC-RC) is expected to be established by October 2022. Calls for applications for the 2023 competition are expected to be issued by the UAERC-RC in Fall 2022. The UAERC-RC will meet to review applications and provide recommendations to the Dean of Engineering in Fall 2022, with the appointment of the first-round of UAERCs expected in early 2023.</p> <p>The number of UEARCs awarded during each competition will not exceed the predefined maximum number of UEARCs.</p>
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Supplementary Notes and context	<i>At the request of the Chair and members of APC, the final motion package was revised to indicate the correct name "University of Alberta Engineering Research Chairs" throughout the Summary and Terms of Reference. In addition, as requested by members of APC, new section summarizing partner organization criteria was added on page 7.</i>
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Engagement and Routing (Include meeting dates)

Consultation and Stakeholder Participation (parties who have seen the proposal and in what capacity) <For information on the protocol see the Governance Resources section Student Participation Protocol>	<i>Those who are actively participating:</i> <ul style="list-style-type: none"> • Faculty of Engineering
	<i>Those who have been consulted:</i> <ul style="list-style-type: none"> • Interim Dean, College of Natural and Applied Sciences • Provost and Vice-President (Academic) • Vice-President (Research and Innovation) • Department Chairs within the Faculty of Engineering • Executive Coordinating Committee of Engineering • Faculty of Engineering academics
	<i>Those who have been informed:</i> <ul style="list-style-type: none"> • Engineering Faculty Council
Approval Route (Governance) (including meeting dates)	Academic Planning Committee, September 7, 2022, for final approval.

Strategic Alignment

Alignment with <i>For the Public Good</i>	<p>Objective 18: <i>Seek, build, strengthen, and sustain partnerships with local, national, or international research agencies, governments, government ministries and agencies, universities, Indigenous communities, libraries, not-for-profits, industry, business, and community organizations.</i></p> <p>The UARC program will incentivize researchers to engage with industry, governmental agencies, and other community organizations to form mutually-beneficial partnerships with the Faculty of Engineering's larger communities of practice.</p> <p>Objective 11: <i>Advance the University of Alberta's reputation for research excellence by pursuing fundamental and original questions and ideas, pushing the frontiers of knowledge, inspiring creative experimentation, driving innovation, and advancing society.</i></p> <p>The UARC program aims to encourage and champion the achievements of faculty members that demonstrate significant promise or excellence in the domain of collaborative research.</p> <p>Additionally, due to its focus on the development of deliverables of interest to our broader community, implementation of the UARC program is expected to enhance translational activity and entrepreneurship.</p>
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	<p>Objective 22: <i>Secure and steward financial resources to sustain, enhance, promote, and facilitate the university's core mission and strategic goals.</i></p> <p>The UARC program will incentivize researchers to seek and secure financial support for research projects from industrial partners and other external organizations, in turn enhancing and facilitating the pursuit of strategic research goals and objectives of researchers, the Faculty of Engineering, and the University of Alberta more broadly.</p>			
<p>Alignment with <i>Braiding Past, Present and Future: University of Alberta's Indigenous Strategic Plan</i></p>	<p>In-Powering the Present Strand</p> <p>Goal 8.0: <i>Indigenous students: Recruitment, retention, and completion</i></p> <p>The UAERC program is committed and well-suited to supporting the development of partnerships between researchers and Indigenous communities in an ethical and informed manner, in turn expanding the number of research partnerships with Indigenous communities. Development of such partnerships are expected to increase awareness of university research within those communities and to create new Indigenous community-focused research opportunities—all while helping to achieve the secondary goal of making engineering graduate studies more attractive to Indigenous undergraduate students.</p> <p>Imagining the Future Strand</p> <p>Goal 12.0: <i>Ethical research with Indigenous nations, peoples, and lands</i></p> <p>The UAERC program aims to ensure that researchers working with Indigenous communities do so following principles of reciprocity and shared authority while recognizing, respecting, and valuing the knowledge, perspectives, and resources of Indigenous partners when defining and undertaking research.</p> <p>Goal 15.0: <i>Indigenous community engagement: Research and teaching</i></p> <p>The UAERC program will acknowledge and provide resources to support cultural learning and relationship building for UAERCs and members of their research team who engage in Indigenous-centered research.</p>			
<p>Alignment with Core Risk Area</p>	<p>Please note below the specific institutional risk(s) this proposal is addressing.</p> <table border="0" data-bbox="570 1556 1541 1766"> <tr> <td data-bbox="570 1556 1089 1766"> <input type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure </td> <td data-bbox="1089 1556 1541 1766"> <input type="checkbox"/> Relationship with Stakeholders <input type="checkbox"/> Reputation <input checked="" type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success </td> </tr> </table>		<input type="checkbox"/> Enrolment Management <input checked="" type="checkbox"/> Faculty and Staff <input type="checkbox"/> Funding and Resource Management <input type="checkbox"/> IT Services, Software and Hardware <input type="checkbox"/> Leadership and Change <input type="checkbox"/> Physical Infrastructure	<input type="checkbox"/> Relationship with Stakeholders <input type="checkbox"/> Reputation <input checked="" type="checkbox"/> Research Enterprise <input type="checkbox"/> Safety <input type="checkbox"/> Student Success
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<p>Legislative Compliance and jurisdiction</p>	<p>APC Terms of Reference 4.2(a)</p>			

Attachments (each to be numbered 1 - <->)

1. UAERC – Terms of Reference



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Prepared by: Simaan AbouRizk, Interim Dean of Engineering, abourizk@ualberta.ca

University of Alberta Engineering Research Chairs

Terms of Reference

September 28, 2022

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well-defined and must be sufficient to achieve the proposed objectives. A considerable portion of the budget must be allocated to the salaries of trainees.

7. Equity, Diversity, Inclusion, and Decolonization (EDID)

Contribution of the research program towards the University of Alberta's mission of "cultivat[ing] a community that recognizes equity and diversity as fundamental to achieving inclusive excellence in learning, teaching, research, service, and community engagement"⁸ must be demonstrated. Challenges in the candidate's field limiting the pursuit of this mission must be identified and described, and tangible practices aimed at overcoming these challenges must be detailed. The consideration of sex, gender, race, culture, and diversity in the research design of the study must be explored, and means of mitigating the impact of differential effects of biased innovations on any population must be addressed.

The Faculty of Engineering acknowledges the importance of building partnerships with Indigenous nations or communities in an ethical manner with principles of reciprocity and response. For projects involving partnerships with Indigenous nations or communities and with organizations that partner or provide services to Indigenous peoples, the reciprocal benefits and shared authority as well as contribution to the goals in the University of Alberta's Indigenous Strategic Plan must be tangible and clear. Contributions to the three primary areas of this plan must be clearly defined, including:

- A commitment to learning about Indigenous history, culture, and anti-Indigenous racism and using appropriate cultural protocols for connecting with Indigenous community members, including Elders and Knowledge Keepers.
- Specific practices for increasing attraction, recruitment, and retention of highly-qualified personnel who are Indigenous peoples to these projects as staff and students.
- A commitment to using co-creation approaches in research processes and protocols with Indigenous communities and Knowledge Keepers, and using the guidance of OCAP (Ownership, Control, Access, and Possession of data) and CARE (Collective benefit, Authority to Control, Responsibility, and Ethics) principles.

⁸ EDI Scoping Group. 2019. *Strategic Plan for Equity, Diversity, and Inclusivity*. University of Alberta: Edmonton, Canada.

Application Procedure

The UAERC program will issue regular (e.g., semi-annual March and September) Calls for Applications. Additional Calls for Applications for recruitment or retention purposes may be initiated by the Dean of Engineering through the UAERC-RC as opportunities warrant. The program is anticipated to continue in perpetuity, with a full review of the program occurring by September 30, 2032.

Applications will be reviewed by the UAERC-RC. Applications and letters of recommendation must be submitted:

- By the competition deadline outlined in a Call for Applications and
- Within 6-months of the Tri-Agency grant (or UAERC-RC-approved equivalent) being approved^{9,10}.

Required Application Documents

1. Applicant Profile Form

Complete the Applicant Profile Form. Provide the name and type of UAERC applied for and propose a title that adheres to UAERC's formatting.

See Program Implementation for details.

To the Applicant Profile Form, attach the following:

- A summary of the candidate's reputation, experience, and research competence and how these match the requirements of the UAERC program.
(Maximum 1 single-spaced page)
- A workload plan developed in consultation with the applicant's Department Chair.
(Maximum ½ single-spaced page)
- **For Existing IRCs (or Renewal Applications):** A summary of the impact that the Chairholder has had on the research capacity of the university; the Chairholder's contributions to teaching, student supervision, services, and EDID while holding the position; and how the new knowledge created during the Chairholder's previous term has translated into benefits for industry, the university, and Canada.
(Maximum 1 single-spaced page)

⁹Candidates may submit applications for a UAERC while the Tri-Agency program grant (or UAERC-RC approved equivalent) is under review at the applicable granting agency. If a UAERC is awarded, the appointment will be made contingent on approval of the research grant by the granting agency and will begin only when the research grant commences at the Research Services Office.

¹⁰ During the first round of UAERC submissions, Tri-Agency program grants (or UAERC-RC-approved equivalents) that have been approved within the last 18 months will be accepted.

2. NSERC Partnership Research Grant (or equivalent)

Attach a copy of the candidate's full Tri-Agency application (or UAERC-RC approved equivalent).

3. Letters of Recommendation

Complete the Expert Referee Form. Provide the names and contact information of three expert referees. Experts must be:

- External to the University of Alberta and the sponsoring organizations, and a minimum of one letter must come from an expert outside of Canada;
- At arm's length from the applicant; and
- Able to attest to the stature and scientific reputation of the applicant.

Detailed information on how to submit letters of recommendation will be communicated to faculty members.

4. UAERC Plan

Submit a plan (supplementing the Tri-Agency application or approved equivalent) describing:

- I. Anticipated long-term benefits to the university resulting from the proposed research program, including how the research program is expected to expand the university's research capacity; forge new academic, industrial, and/or community partnerships; and increase knowledge translation to industry and/or our broader communities.
(Maximum 2 single-spaced pages)
- II. Contributions to teaching, student supervision, and services while holding the position, including (and not limited to): establishing industrial mentorship opportunities for students with industry professionals; fostering frequent interactions between students and diverse industry and/or community personnel (e.g., networking events, research progress meetings, site visits); assisting with the development of industrially-relevant or community-based content for undergraduate and/or graduate courses (e.g., case studies, problem sets; design projects); recruiting engaging guest lecturers and/or speakers for undergraduate and/or graduate courses.
(Maximum 2 single-spaced pages)
- III. Expected contributions to EDID resulting from the appointment and/or implementation of the research program, including (and not limited to): promoting diverse research teams (i.e., trainees, co-investigators, and/or co-authors); establishing open, transparent, supportive, equitable, diverse, and inclusive training environments; partnering with organizations with demonstrable commitments to EDID practices; participating in training and mentorship programs that provide opportunities for trainees from traditionally underrepresented or other equity-deserving groups; engaging in community outreach programs; developing tangible practices or programs expected to enhance EDID at the university and/or within the broader community. For projects with or in Indigenous communities or related organizations, a clear alignment with the three primary areas in the Indigenous Strategic Plan is required.
(Maximum 2 single-spaced pages)

- IV.** For projects involving partnerships with Indigenous nations and communities or organizations that provide services to Indigenous nations or communities, the steps taken to build partnerships with Indigenous nations or communities, including the request of additional funds to support:
- Elder and Knowledge Keeper honorariums;
 - Learning of UAERC and highly-qualified personnel, including that of the history of Indigenous peoples in Canada, the resiliency of Indigenous peoples, and the intergenerational trauma; and/or
 - The application of [CARE](#) and [OCAP](#) principles in their research.

(Required for projects involving Indigenous partnerships¹¹; max. 1 single-spaced page)

- V.** Any other matters to be considered by the UAERC-RC.
(Optional; maximum 2 single-spaced pages)

5. Progress Report

For renewals and current IRCs only.

Candidates that are current IRCs or that are applying for a renewal of their UAERC must submit an up-to-date progress report as part of their application.

¹¹Projects that include partnerships with Indigenous nations and communities or organizations that provide services to Indigenous nations or communities

Reporting

UAERCs will submit progress reports after 24 and 48 months of any term, which will be reviewed by the UAERC-RC. A progress report template will be provided to Chairholders.

For Chairholders intending to renew, an updated progress report must be submitted with the renewal application.

The progress report will include a description of the Chairholder's:

- Research progress by comparing the proposed research deliverables (e.g., Proposal Section of application) with actual outcomes;
- Achieved benefits to the University of Alberta, with specific reference to those proposed in Section I of the UAERC Plan;
- Contributions to teaching, student supervision, and services, with specific reference to those proposed in Section II of the UAERC Plan; and
- Contributions to equity, diversity, inclusion, and decolonization, with specific reference to those proposed in Sections III and IV of the UAERC Plan.

Continued support is contingent upon favorable reviews of the progress of the UAERC's research program and the continuation of the research grant upon which the UAERC was awarded.

Renewals

Applications for renewal of the UAERC will be reviewed by the UAERC-RC.

Renewal applications will include a(n):

- Up-to-date progress report;
- Complete set of Required Application Documents (detailed in *Required Application Documents section*); and
- Tri-Agency program grant application (or UAERC-RC-approved equivalent) subject to the criteria outlined in the Eligibility section.

Concurrent Awards

Tier 1 and Tier 2 Canada Research Chairs (CRC) should not normally hold a UAERC. Exceptions may be made, but the honorarium in such cases will be drawn from the CRC only.

Other endowed chairs may concurrently hold a UAERC with no impact to their honorarium, provided this adheres to the terms of the other concurrently-held research chairs.

Administration Particulars

Sources of Honorariums

1. The honorarium of the UAERC is to be charged to:
 - a. The industrial contributions of the collaborating partner(s);
 - b. Engineering Endowments at the discretion of the Dean of Engineering; and/or
 - c. The Canada Research Chairs program (i.e., the Faculty's Operating Budget), should the candidate hold both titles, with any residual coming from Engineering Endowments to achieve the total honorarium.

Termination

2. The UAERC will terminate if the:
 - a. Tri-Agency program grant (or UAERC-RC-approved equivalent) upon which the UAERC was appointed is terminated;
 - b. UAERC is no longer holding a position at the University of Alberta; or
 - c. The UAERC's program does not progress according to the approved UAERC Plan, as determined by the UAERC-RC.

UAERC Review Committee

3. The UAERC Review Committee (UAERC-RC) will:
 - a. Prepare a set of Merit Indicators upon which the UAERC candidates will be evaluated;
 - b. Review and evaluate UAERC applications, progress reports, and renewals and provide recommendations to the Dean of Engineering; and
 - c. Routinely review and recommend changes to the Terms of Reference, Merit Indicators, and Progress Report Template of the UAERC Program to the Dean of Engineering to ensure documents remain current and relevant over time. Should changes be required, the UAERC-RC will communicate such changes to the Faculty of Engineering professoriate within 3 months of the application deadline.
4. The standing committee of the UAERC-RC will be appointed by the Dean of Engineering and will consist of 6 members including:
 - a. The Associate Dean (Research Strategy) as the UAERC-RC Chair;

- b. Three faculty members from the Faculty of Engineering that currently hold or have previously held IRCs or CRCs (or equivalent), to be recommended by the UAERC-RC Chair following consultation with the Executive Engineering Coordinating Committee (ECC: a subset of our Engineering Faculty Council);
 - c. An independent faculty member from any of the other two faculties in CNAS who currently holds or has previously held an IRC, CRC, or equivalent; and
 - d. An independent faculty member from an external institution who currently holds or has previously held an IRC, CRC, or equivalent. The faculty member must be at arm's length from the candidates under consideration.
5. All standing committee members will complete the [Bias in Peer Review](#) module and the Online Status of Women Canada's [GBA+ Training Course](#).
 6. Standing committee members should be diverse and include representation from traditionally underrepresented and other equity-deserving groups and from all four Departments within the Faculty of Engineering.

Role of Departments

1. Support may be provided to the Departments within the Faculty of Engineering to compensate for any teaching release provided to UAERCs.
2. Department Chairs will:
 - a. Be notified by the applicant of their intention to submit an application and
 - b. Assist with the development of the applicant's workload plan.