

## Job Description

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<b>Job Title:</b>	Research Analysis and Proposal Development Officer
<b>Department:</b>	Dean of Engineering Office
<b>Reports To:</b>	Director, Strategic Research
<b>Jobs Reporting:</b>	None
<b>Salary Grade:</b>	USG 10
<b>Effective Date:</b>	May 2019

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### **Primary Purpose**

Reporting to the Director of Strategic Research (DSR), the Research Analysis and Proposal Development Officer (RAPDO) will be responsible for developing, implementing and managing a range of services for analyzing and reporting research activity, productivity and impact within the Faculty of Engineering. They will maintain a database of Engineering research activity and funding, and will develop models, analyses and communication material as required in support of major funding applications. The RAPDO will also assist with the preparation of research proposals of strategic importance to the Faculty – drafting and editing submission material, and coordinating input and review from stakeholders across campus. Working closely with staff in Engineering Computing, the Library, the Office of Research, and Institutional Analysis and Planning, the RA will contribute significantly towards the core functions of the Engineering Research Office, and will directly support Faculty's decision making and strategic planning.

### **Key Accountabilities**

#### **Data gathering, analysis and insight development**

- Develop and maintain a sustainable and accessible repository of information regarding the Faculty of Engineering's research strengths, outputs, funding and impacts; commercialization activity; and entrepreneurship activity.
- Maintain a strong knowledge base of current international, national, and provincial funding opportunities and grant programs.
- Maintain a strong knowledge base of international university rankings and research metrics, and provide advice to the ADR and DSR as to the Faculty's standing and performance.
- Acquires and makes available, as necessary, relevant research-related data required for reporting on the performance of the Faculty's major research programs.
- Collaborate with other groups on campus (e.g., Library, IAP) to provide bibliometrics, altmetrics and funding data to FoE departments, groups, centres and institutes to assist them in measuring and tracking research performance and impact.
- Identify and communicate any limitations of the data to avoid misinterpretation of the results.
- As required, prepare and provide in-person presentations and interpretations of research data analysis results.
- Investigate, recommend, and implement innovative, enhanced methods of reporting research impact.
- Identify opportunities for improvement in current data gathering processes within the Engineering Research Office, and implement improved procedures in coordination with other groups on campus.

#### **Strategic proposal preparation**

- Develop large-scale research proposals for a variety of funding agents, in support of the Faculty's strategic priorities.
- Work closely with stakeholders across the Faculty of Engineering and beyond to gather proposal material, and act as a project manager to ensure key content is provided and deadlines are met.
- Write compelling proposal material, including background preparation, fact-checking, and the translation of technical research information into accurate text that is understandable, readable, and appropriate to the audience.
- Draft additional material as required, including technical reports, support letters, budgets, promotional material, presentation material and/or web copy.
- Review proposal material for structure, grammar, style and persuasiveness.
- Act as an expert source of information and advice regarding funding agent priorities, guidelines, deadlines, review procedures, selection committee membership, etc.
- Liaise with funding agents and with supporting units on campus.

### **Major grant competition support**

- Provide support as required within the Faculty for high-profile and mission-critical funding programs, including Canada Research Chairs, Canada Foundation for Innovation, Ontario Research Fund, and other key international, federal and provincial research programs.
- Work closely and collaboratively with Office of Research, the Library, IAP, Engineering Computing and others to obtain and deliver qualitative and quantitative information in support of major funding applications.
- Assist with developing and updating program-specific support materials to guide researchers through proposal preparation.
- Assist with establishing and monitoring procedures and timelines for preparation and submission of proposals to meet university and agency guidelines.
- As required, verify budget calculations and projections, and adherence to university and agency requirements; fact-checking.

### **Strategic planning, evaluation and accountability**

- Develop reports and analysis of the existing research strengths of the Faculty's departments and schools, and the development potential of these research areas with respect to emerging national and international priorities.
- Gather and maintain data on the participation of underrepresented groups within the Engineering research community, in support of the Faculty's strategic EDI objectives.
- Develop new procedures and metrics to capture the Faculty's expertise and successes with respect to innovation, entrepreneurship and intellectual property development, working alongside the DSR and the Director of Engineering Research.
- Leverage institutional tools for research evaluation and bibliometric analysis to inform and support specific strategic research goals, as required.
- Represent the Faculty of Engineering on University committees and working groups related to research data. When necessary and appropriate, act as the DSR's designated delegate.
- Provide qualitative and quantitative data and analysis for inclusion within the Faculty's Strategic Plan and within annual progress reports.

*\*All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

### Required Qualifications

#### **Education**

- Bachelor's degree in a STEM field.
- Engineering, Statistics, or Computer Science background would be ideal.

#### **Experience**

- Experience in a research-driven academic environment; experience with academic funding programs in Canada and Ontario would be beneficial.
- Experience developing research communications material, in particular grant proposals and reports.
- Experience working with large and complex data sets.
- Experience with project management.
- Experience in using data to provide quantitatively and qualitatively support for a business and/or academic initiative.

#### **Knowledge/Skills/Abilities**

- Superior oral and written communication skills.
- The ability to write short copy, long copy, and research presentation material for broad audiences (technical reviewers and lay audiences)
- Well-developed editorial skills, including experience in copy editing.
- Excellent research skills; must be able to compile and integrate relevant information (both qualitative and statistical) from a broad range of sources to strengthen proposals and reports.
- Data management, manipulation, interpretation and analysis skills.
- Working knowledge of a variety of reporting and data management and visualization tools (e.g., Sharepoint, Excel, MS SQL Server, MS Access, Tableau).
- Strong organizational and analytical skills.
- Ability to work both independently and as a member of a team.
- Ability to think creatively and show initiative to solve problems and improve working procedures
- Strong technical communication skills, able to draft clear concise reports and translate data into actionable information.
- Strong interpersonal skills, with the ability to build effective relationships with key collaborators across campus.

### Nature and Scope

- **Contacts:** Within the Faculty of Engineering, the Research Analyst works closely alongside the Engineering Research Office team. He/she provides reports for the SDR, ADR, Dean, Associate Deans, Department Chairs, School Directors, and Centre and Institute Directors. He/she routinely collaborates with contacts in the Office of Research, the Library, IAP and Engineering Computing.
- **Level of Responsibility:** The Research Analyst is responsible for developing and communicating comprehensive, accurately interpreted metrics of research activity within the Faculty of Engineering, and for maintaining and growing the Faculty's repository of information regarding its research activity.
- **Decision-Making Authority:** Routinely makes decisions regarding the most effective means of operationalizing research data analysis initiatives, including allocation of resources, collaboration, work flow, consultation, and other key accountabilities.
- **Physical and Sensory Demands:** Minimal, typical for an administrative office-based position.
- **Working Environment:** Typical academic office environment; regular working hours, with some evening/weekend work required; minimal exposure to disagreeable conditions in the workplace.