

Office of the Vice-Provost and Associate Vice-President (Academic)

memorandum

- DATE: May 30, 2024
- TO: Senate
- FROM: Dr. David Hornsby, Vice-Provost and Associate Vice-President (Academic), and Chair, Senate Quality Assurance and Planning Committee
- RE: Creation of the Institute for Data Science

Background

The Faculty of Science is proposing the creation of the Institute for Data Science (IDS). The IDS is currently is an ad hoc unit with its administration housed in the School of Computer Science. With the creation of an undergraduate program in Data Science, a formal status to the IDS within the Faculty of Science is being proposed

Process

Following approval and support of the proposal by the Dean, approval is provided by the Vice-Presidents' Academic and Research Council (VPARC), Faculty Board, the Senate Quality Assurance and Planning Committee (SQAPC) and Senate before being recommended to the Board of Governors.

Recommendation to Approve the creation of a school

SQAPC Motion May 23, 2024: THAT SQAPC recommends to Senate the approval of the creation of the Institute of Data Science as presented.

Senate Motion June 7, 2024

THAT Senate recommends to the Board of Governors the approval of the creation of the Institute of Data Science as presented.

Change in Governance - the Institute for Data Science and Bachelors of Data Science

MEMORANDUM

To: Dr. David Hornsby, Vice-Provost Associate Vice-President (Academic)

From: Dr. Ethan Hermer, Professional Programs Officer, Office of the Dean of Science Dr. Michel Barbeau, Program Co-Lead, Director, School of Computer Science; Interim Director, Institute for Data Science; Faculty of Science Dr. Robert Burk, Program Co-Lead, Director, School of Mathematics and Statistics, Faculty of Science Dr. Jeffrey Smirle, Director, External Affairs, Office of the Dean of Science

CC: Dr. Maria DeRosa, Dean, Faculty of Science Dr. Julia Wallace, Associate Dean (Undergraduate Affairs), Faculty of Science Dr. Hashmat Khan, Associate Vice-President (Academic Programs and Strategic Initiatives) Christina Noja, Director, Office of Academic Programs and Strategic Initiatives Dr. Robyn Green, Program Officer, Office of Academic Programs and Strategic Initiatives Dr. Lizzie Yan, Program Assessment Specialist, Office of Academic Programs and Strategic Initiatives

Date: May 28, 2024

Subject: Change in Governance - the Institute for Data Science and Bachelors of Data Science.

Description of change

The Institute for Data Science (IDS) currently is an ad hoc unit with its administration housed in the School of Computer Science (SCS).

With the creation of an undergraduate program in Data Science, we propose a formal status to the IDS within the Faculty of Science. The IDS will have a Director, appointed by the Dean of the Faculty of Science. The new undergraduate program in Data Science will be led by the Director of the IDS.

Impact on Other Programs

The IDS will leave the SCS and will be a distinct unit with the Faculty of Science. The newly proposed governance documents for the Institute for Data Science and the Bachelors of

Data Science are attached as Appendices A and B. The Collaborative Masters in Data Science and the Data Science, Analytics, and Artificial Intelligence Masters and PhD will be housed under IDS. For information on the governance of the graduate programs and collaborative specialization please refer to the FGPA program governance document submitted to and approved by Senate on May 3, 2024.

<u>Resources</u>

The new IDS will be housed in the Faculty of Science. Faculty members who are a part of the current IDS can be cross-appointed to the IDS and new data science faculty members will be housed within the new IDS. The current resources allocated to current units will remain the same. As indicated in the Executive Summary for the new Undergraduate program in Data Science, submitted to VPARC on January 10, 2024, we are adding an institute administrator to assist in the administration of the IDS, an undergraduate advisor to support the new undergraduate program in Data Science. The IDS requires space to house the administrative support for students, staff, and faculty. Additional space will be allocated in year three for incoming faculty members.

Appendix A: Institute for Data Science Board

C. Governance

The Institute for Data Science is housed within the Faculty of Science. The Institute is administrated by the Director of the Institute for Data Science, with the support of the Institute for Data Science Board (IDSB) that consists of all faculty members of the IDS and external representatives from member units of the undergraduate and graduate Data Science programs. The IDSB discusses and forwards program changes to SCAP.

The IDS Director is appointed by the Dean of the Faculty of Science through consultation with the IDS faculty members. The IDS Director is chosen from the IDS faculty, or faculty from units providing an Undergraduate Data Science Concentration. The Director will be cross-appointed to IDS. The Director's term is three years.

The responsibilities of the IDS Director are as follows:

- Chair the IDSB
- Organize student orientations.
- Oversee IDS faculty appointment.
- Conduct industry outreach.
- Present the Collaborative Masters in Data Science program at Data Day.
- Hire contract instructors for DATA 5000, DATA 5001, and DATA 5002.
- Approve curriculum changes (CourseLeaf modifications) for the Bachelor of Data Science.
- Assign committee representatives (e.g., SCAP representative).
- Oversee operations of the Collaborative Masters in Data Science and the Data Science, Analytics, and Artificial Intelligence Masters and PhD.

The department administrator provides administrative support to the IDS Director.

Appendix B: The Undergraduate Data Science Program

C. Governance

The Bachelors of Data Science and its Concentrations are housed in the Institute for Data Science (IDS), within the Faculty of Science. The program is administrated by the Chair of the Undergraduate Data Science Curriculum Committee (UDSCC). The UDSCC includes at least two IDS faculty members. Lab coordinators can attend the UDSCC in an advisory role. The UDSCC meets three times a year, typically once per term, or as needed, based on requirements.

The Chair of the UDSCC is appointed by the Director of the IDS in consultation with the UDSCC for a two-year term. The Chair of the UDSCC can be appointed from the IDS faculty, or faculty from units providing an Undergraduate Data Science Concentration.

The responsibilities of the Chair of the UDSCC are as follows:

- Organize student orientations.
- Conduct industry outreach.
- Present the Undergraduate Data Science program at Data Day.
- Appoint an undergraduate co-op advisor.

The responsibilities of the UDSCC are as follows:

- Review the program to ensure it meets its learning outcomes.
- Develop new curriculum based on recommendations from IDS faculty members, an eventual external advisory committee, and new university policies.
- Maintain the forms, documents, procedures, and guidelines associated with the Honours projects and theses.

The undergraduate co-op advisor identifies and liaises with external stakeholders to ensure the smooth operation of the co-op program. They organize marking of co-op reports authored by students upon completion of work terms.

The undergraduate advisor provides administrative support to the UDSCC.