



**FOR
RECOMMENDATION**

PUBLIC

OPEN SESSION

TO: Planning & Budget Committee

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DATE: April 27, 2026 for May 6, 2026

AGENDA ITEM: 4

ITEM IDENTIFICATION:

Capital Project: Report of the Project Planning Committee for the Department of Computer Science at Schwartz Reisman Innovation Campus - West –**Project Scope and Sources of Funding**

JURISDICTIONAL INFORMATION:

Pursuant to section 4.2.3. of the Committee's terms of Reference, "...the Committee considers reports of project planning committees and recommends to the Academic Board approval in principle of projects (i.e. space plan, site, overall cost and sources of funds) with a capital cost as specified in the 'Policy on Capital Planning and Capital Projects.'"

The "Policy on Capital Planning and Capital Projects" provides that capital projects with costs "The Policy on Capital Planning and Capital Projects" provides that capital projects with costs between \$10 million and \$50 million (Approval Level 2) on the St. George campus, will first be considered by the Planning & Budget Committee, which shall recommend approval to Academic Board. Such projects will be confirmed by the Executive Committee of the Governing Council on the recommendation of the Academic Board [Section 3(b)(ii)(1)(a)].

GOVERNANCE PATH:

A. Project Planning Report

- 1. Planning & Budget [for recommendation] (May 6, 2026)**
2. Academic Board [For approval] (May 28, 2026)

3. Executive Committee [for confirmation] (June 15, 2026)

B. Execution of the Project:

1. Business Board [For approval] (June 18, 2026)

PREVIOUS ACTION TAKEN:

No previous action in governance.

HIGHLIGHTS:

Previous Administrative Actions

At the September 17, 2024 meeting of the Capital Project and Space Allocation (CaPS) Executive Committee, the project U of T Department of Computer Science at Schwartz Reisman Innovation Campus (DCS at SRIC) was brought forward to approve the Terms of Reference (TOR), and to formally strike the Project Planning Committee (PPC).

At the January 14, 2026 meeting of the Capital Project and Space Allocation (CaPS) Executive Committee, consultant fees were approved to engage consultants to initiate design services to the end of construction services.

Project Plan

Schwartz Reisman West, phase 1 of Schwartz Reisman Innovation Campus (SRIC), was designed to bring together the University's leading artificial intelligence scientists and biomedical experts, its world-class entrepreneurship network, and the country's largest concentration of student- and faculty-led startups. In 2023, the Faculty of Arts & Science became aware of an opportunity for leased occupancy of the 3rd and 4th floors of the building, and the Artificial Intelligence (AI) research cluster within Department of Computer Science (DCS) was identified as a possible match for the space.

As of June 2024, the Faculty has entered into a formal lease agreement for use of the 3rd and 4th floors of the building.

This project will bring together the core AI research groups within DCS in a new, engaging environment that will foster positive interactions between the internal DCS community (faculty, staff and graduate students) and the broader AI community within the SRIC building itself. The vision for the new space includes academic and staff offices, graduate work space, and dry research labs. The dry research labs include an optics and sensor lab, acoustic and digitization facilities, and an interdisciplinary AI laboratory. The Vector Institute has generously offered to

dedicate a sizable number of graduate student hoteling desks to DCS AI students. This offer is critical to the success of this project, as there is insufficient space on the 3rd and 4th floors to accommodate all DCS AI graduate students.

The existing DCS AI faculty complement is 30, with 226 graduate students, currently located in dated facilities at the Pratt Building – with some additional space in Bahen. The Department anticipates a continuing growth trajectory, which will include positions within the AI group. The space program 1588 NASM reflects anticipated growth in faculty and graduate student numbers.

The 3rd (16,687.63 sqft, 1,550.33 gsm) and 4th (20,837.39 sqft, 1,935.86gsm) floors are currently shelled spaces, with infrastructural systems in place as part of the base building construction. The current schedule sees construction starting as early as July/August 2026, with occupancy following approximately one year later. This project has worked closely with the University's Real Estate group throughout the implementation process.

Space Program

The project has undergone a series of Project Planning Committee (PPC) meetings since the approval of the Terms of Reference (TOR) and have established the Project Planning Report (PPR) which highlight major goals of this project such as:

- This project will bring together the core AI research groups within DCS in a new, engaging environment that will foster positive interactions between the internal DCS community (faculty, staff and graduate students) and the broader AI community within the SRIC building itself.
- The existing DCS AI faculty complement is 29, with 212 graduate students, currently located in dated facilities at the Pratt Building – with some additional space in Bahen. The Department anticipates a continuing growth trajectory, which will include positions within the AI group. The space program 1498 NASM reflects anticipated growth in faculty and graduate student numbers.
- The space is intended to be modern, light-filled and welcoming, with ease of access across the two floors. Research space should be highly functional and collaborative, making use of core spaces for equipment sharing. Both floors should be designed to be as flexible as possible, allowing for adaptability driven by research change and growth. Faculty will need to meet with undergraduate students at this location, so ensuring an appropriate waiting area to manage this group is critical.
- An energy charter has been prepared for this renovation to align it with broader University sustainability targets.

- All interior spaces and interior signage comply with the University’s new Facility Accessibility Design Standard, dated June 9, 2023. This standard incorporates the belief in universal design that recognizes the broad diversity of people who use facilities.
- The AI research group requires faculty offices (473 nasm), research laboratories and support spaces (328 nasm), research office/project space (17 nasm), graduate student space (250 nasm), and office support space (520 nasm), along with lounge and interaction spaces for a total of 1,588 nasm. The majority of the lab-related research will take place in a large shared lab, with the exclusion of the Sensing lab, which has requirements that mandate it be standalone.
- The AI research group is leaving 1433 NASM of space in the Pratt and Bahen buildings. The total amount of space planned for the 3rd and 4th floors of the SRIC building is 1498 NASM.

Schedule

The proposed schedule for the project is as follows:

- | | |
|---|-------------------------------------|
| • Cycle 5 CaPS Executive for Full Governance | April 10, 2026 |
| • Executive Committee/Governing Council meeting | June 25, 2026 |
| • Letter of Award issuance | June, 2026 |
| • Tendering | June, 2026 |
| • Site Mobilization | July, 2026 |
| • Construction | July, 2026 – July, 2027 (12 months) |
| • Occupancy | August, 2027 |

This schedule assumes all municipal approvals may be achieved within the timelines.

FINANCIAL IMPLICATIONS:

Discussion of overall costs and sources of funds can be found in the “In Camera” document for this project.

RECOMMENDATION:

Be It Recommended:

THAT the project scope of the Department of Computer Science at Schwartz Reisman Innovation Campus - West, as identified in the “Report of the Project Planning Committee for Department of Computer Science at Schwartz Reisman Innovation Campus - West”, dated March 27, 2026, be approved in principle; and

THAT the project totaling 3,486 gross square metres (gsm), 1,588 net assignable square metres (nasm) to be funded through: Faculty of Arts & Science: Future Major Capital Projects Reserves 107944.

DOCUMENTATION PROVIDED:

- Report of the Project Planning Committee for Department of Computer Science at Schwartz Reisman Innovation Campus - West, dated March 27, 2026

UNIVERSITY OF TORONTO
March 27, 2026

Report of the Project Planning Committee for
**Department of Computer Science at Schwartz Reisman Innovation
Campus - West**

I.Executive Summary

Schwartz Reisman West, phase 1 of Schwartz Reisman Innovation Campus (SRIC), was designed to bring together the University's leading artificial intelligence scientists and biomedical experts, its world-class entrepreneurship network, and the country's largest concentration of student- and faculty-led startups. In 2023, the Faculty of Arts & Science became aware of an opportunity for leased occupancy of the 3rd and 4th floors of the building, and the Artificial Intelligence (AI) research cluster within Department of Computer Science (DCS) was identified as a possible match for the space.

As of June 2024, the Faculty has entered into a formal lease agreement with the University's Real Estate group for the 3rd and 4th floors of the building.

This project will bring together the core AI research groups within DCS in a new, engaging environment that will foster positive interactions between the internal DCS community (faculty, staff and graduate students) and the broader AI community within the SRIC building itself. The vision for the new space includes academic and staff offices, graduate work space, and dry research labs. The dry research labs include an optics and sensor lab, acoustic and digitization facilities, and an interdisciplinary AI laboratory. The Vector Institute has generously offered to dedicate a sizable number of graduate student hoteling desks to DCS AI students. This offer is critical to the success of this project, as there is insufficient space on the 3rd and 4th floors to accommodate all DCS AI graduate students.

The existing DCS AI faculty complement is 30, with an additional visiting faculty member, with 226 graduate students, currently located in dated facilities at the Pratt Building – with some additional space in Bahen. The Department anticipates a continuing growth trajectory, which will include positions within the AI group. The space program of 1588 NASM reflects anticipated growth in faculty and graduate student numbers.

The 3rd and 4th floors are currently shelled spaces, with infrastructural systems in place as part of the base building construction. Architect selection for the fit-out followed CaPS Executive Committee approval in January 2025, with Zeidler Architecture being the chosen proponent. The current schedule sees construction starting in June 2026, with occupancy following approximately one year later. This project has worked closely with the University's Real Estate group during the design process and will continue to do so throughout construction.

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II. Project Background

a) Membership

Stephen Wright (Committee Co-Chair) Professor, Vice-Dean Research and Infrastructure, Faculty of Arts and Science
Eyal de Lara, (Committee Co-Chair) Professor, Chair, Department of Computer Science
Sven Dickinson, Professor, Department of Computer Science
Rahul Krishnan, Assistant Professor, Department of Computer Science
Igor Gilitschenski, Assistant Professor, Department of Computer Science
Joseph Raghubar, Facilities Coordinator, Department of Computer Science
Greg Yantz, Director of Administration, Department of Computer Science
John Di Marco, Director of Information Technology, Department of Computer Science
Jonas Guan, graduate student, Department of Computer Science
Julia Watson, graduate student, Department of Computer Science
Mary Lyne Chief Administrative Officer, Faculty of Arts & Science
Lucy Chung, Director of Infrastructure Planning, Faculty of Arts & Science
Lisa Neidrauer, Senior Planner, Infrastructure Planning, Faculty of Arts & Science
Shannon O'Reilly, Manager, Interior Design, Infrastructure Planning, Faculty of Arts & Science
Costas Catsaros, Director, Project Development & Controls, UPDC
Jacquanline Lui, Senior Manager, Project Development & Controls, UPDC
Amanda Araujo Hillerman, Project Manager, Project Management, UPDC
Terry Leventos, Senior Manager, Infrastructure Planning, Facilities and Services
Jordan Breccia, Planner, University Planning, UPDC
Patrick Brennan, Senior Manager, Commercial Property Management, Facilities and Services
Lionel Cooper, SRIC, Commercial Property Manager, Facilities and Services

b) Terms of Reference

1. Make recommendations for a detailed space program, functional plan and project scope for the relocation of the AI-related faculty and research into new facilities: dry labs, meeting, interaction and office space. Confirm and formalize space assignments for graduate students in the Vector Institute.
2. Identify the space program as it is related to the Department's academic plans; taking into account the impact of approved and proposed program enhancements that are reflected in increasing faculty, student and staff complement.
3. Articulate the role of the expansion in this location as part of future departmental planning.
4. Demonstrate that the proposed space program is consistent with the Council of Ontario Universities (COU) space standards and University of Toronto space standards.
5. Determine a functional layout of the space required.
6. Determine the secondary effects of the project, including the future use of existing space.
7. Identify departmental operational requirements within SRIC, and plan for an Operations Committee/partnership with Facilities and Services / Real Estate Partnerships.
8. Identify all equipment, AV, and moveable furnishings necessary to the project and their related costs.

9. Identify all data, networking and communication requirements and their related costs.
10. Identify all security, occupational health and safety and accessibility requirements and their related costs.
11. Identify specific sustainability goals and energy targets for this project. Recommendations for goals that meet operational aspirations should also be cost effective and incorporate proven best practices.
12. Determine a total project cost (TPC) Class A estimate for the capital project, including costs associated with secondary effects, infrastructure and projected increase to the annual operating cost.
13. Identify all sources of funding for capital operating costs.
14. Report by end of March 2026.

c) Governance Path

2024-5 CaPS Executive Cycle 4: Approval of Consultant Fees

2025-6 CaPS Executive Cycle 5: Approval of full TPC

d) Project Planning Committee (PPC) Consultation Summary

Two graduate students are members of the Project Planning Committee and were invited to attend all meetings and site tours. Faculty members of the Committee met with the broader research community to solicit feedback on the planning and decision-making process.

e) Background Information

Schwartz Reisman West, phase 1 of Schwartz Reisman Innovation Campus (SRIC), opened in 2023, at 108 College Street, site of the former Best Building. Located in the heart of Toronto's Discovery District, the building was designed to bring together the University's leading artificial intelligence scientists and biomedical experts, its world-class entrepreneurship network, and the country's largest concentration of student- and faculty-led startups. It is already home to the Vector Institute (Vector), an independent, not-for-profit corporation dedicated to research in the field of artificial intelligence (AI), excelling in machine and deep learning. Numerous Department of Computer Science (DCS) faculty have appointments here. In 2023, the Faculty of Arts & Science became aware of an opportunity for leased occupancy of the 3rd and 4th floors of the building.

The Artificial Intelligence research cluster within DCS was identified as a possible match for the space. The existing DCS AI faculty complement is 29, with 212 graduate students, currently located in dated facilities at the Pratt Building – with some additional space in Bahen. Given the explosive growth in AI, and its broad impact across the university research mission, both faculty and graduate student growth is anticipated.

AI research at UofT has flourished in the last decade and has impacted multiple areas outside of computer science, ranging from chemistry to biology, physics, and medicine. A key enabler in these

interdisciplinary collaborations has been the availability of collaborative research spaces where close work and interaction can occur, which has been the case primarily on the downtown campus. AI has shown a tremendous impact on robotics research worldwide, especially regarding the intersection of robotics with computer vision, natural language processing, and machine learning. It has also shown significant uptake from industry, with humanoid and manipulation robotics companies showing extremely fast progress.

At UofT, however, close collaborations between DCS AI faculty and students (all based downtown) and robotics faculty (all based at UTM) have been severely hindered by the lack of a collaborative space downtown, where researchers can conduct interdisciplinary work in embodied AI, and where visitors and industry partners can easily visit to see demos of their research.

Early pre-planning work confirmed that space needs could be well accommodated on the two floors. Zeidler Architecture has developed the design based on earlier test fits. The design for the new space includes academic and staff offices, graduate work space, and dry research labs. The dry research labs include significant shared space, optics and sensor, acoustic and digitization facilities, and an interdisciplinary AI laboratory. The Vector Institute has generously offered to dedicate a sizable number of graduate student hoteling desks to DCS AI students. This offer is critical to the success of this project, as there is insufficient space on the 3rd and 4th floors to accommodate all DCS AI graduate students.

The Faculty has entered into a formal lease agreement with the University's Real Estate group as of June 2024 for the 3rd and 4th floors of the building. The lease assumes occupancy as of August 1, 2025, and ends on July 31, 2035, unless renewed at that time. The design process has moved forward in an expedited manner to ensure design and construction can begin as quickly as possible. The project will be tendered in May, 2026, with construction expected to begin in July, 2026.

f) Existing Space

Existing space

With considerable growth over the last ten years, the Department of Computer Science currently occupies 8,413 NASM in four buildings on the St. George campus (Bahen Centre for Information Technology, D.L. Pratt Building, Gerstein Science Information Centre, Sandford Fleming Building). MScAC has 575 NASM allocated at 700 University and shares 700 NASM of meeting, class and lounge/event space with the Department of Statistical Sciences MFI program for a total departmental NASM of 9,688sm.

Within the overall departmental space envelope, the AI research group primarily occupies 1,085 NASM in the Pratt Building, with some researchers occupying an additional 196 NASM of lab/office space in the Bahen Building. The Pratt spaces in particular, are outdated.

Pratt Existing Space

Subcategory	Description	Room Area m2	Room Count
3.1	Research Lab Space	280.65	7
3.2	Research Lab Support Space	2.31	1

4.1	Academic Offices	349.15	21
4.2	Research Office/Project Space	88.48	6
4.3	Graduate Student Office	205.12	6
4.5	Office Support Space	159.17	9
Total		1084.88	50

Bahen Existing Space

Subcategory	Description	Room Area m2	Room Count
3.1	Research Lab Space	82.80	2
4.1	Academic Offices	72.69	5
4.3	Graduate Student Office	40.63	4
Total		196.12	11

Occupant profile

The Artificial Intelligence research cluster within DCS was chosen to relocate to the SRIC West. Artificial Intelligence is a subdiscipline of computer science that seeks to develop computer systems that can reason, perceive, communicate, learn, and navigate and manipulate the world like a human can. The Artificial Intelligence research cluster within DCS has historically been one of the strongest in the world. The research undertaken by DCS's Artificial Intelligence faculty spans a number of AI subdisciplines including knowledge representation and reasoning, computer vision and computational imaging, computational linguistics and natural language processing, machine learning, robotics, and computational health. The AI group has very strong ties to the Vector Institute, bringing the group into the same building as Vector will thus co-locate the university's strongest AI group with one of the world's leading AI institutes.

The existing DCS AI faculty complement that will move to the SRIC building is 29, with 212 graduate students. Two faculty members have chosen to keep their existing labs at Bahen and will not be relocating to the SRIC facility.

	FTE
Faculty	30
Research Appointments (post docs)	6

Graduate Students	226
Administrative Staff	4

III. Project Description

a) Vision Statement

This project will bring together the core AI research groups within DCS in a new, engaging environment that will foster positive interactions between the internal DCS community (faculty, staff and graduate students) and the broader AI community within the SRIC building itself.

The space will be modern, light-filled and welcoming, with ease of access across the two floors. Research space will be highly functional and collaborative, making use of core spaces for equipment sharing. Both floors have been designed to be as flexible as possible, allowing for adaptability driven by research change and growth. Faculty will need to meet with undergraduate students at this location, so steps have been taken to ensure there appropriate waiting area for this group.

b) Statement of Academic Plan

The Department of Computer Science (DCS) was formally established at the University of Toronto in 1964 and was one of the first such departments in Canada. Since its early days, DCS has been a world leader in the computer science community, and it has significantly broadened and diversified over the years. DCS refers both to the Department of Computer Science within the Faculty of Arts & Science (A&S) on the St. George campus, which is responsible for undergraduate programs, and to the graduate Department of Computer Science that comprises computer science faculty from all three campuses of U of T. It is Canada's top CS department and is consistently ranked one of the top CS departments in the world.

Recent years have seen a significant growth in the number of tenure stream faculty with budgetary appointments in Computer Science (from 32 in 2014 to 56 in 2021, in the St. George department, and from 42 to 74 in the graduate department across the three campuses). Along with this growth in numbers has come a broadening of the type of research we do, including a sizable increase in joint appointments and deep engagement in interdisciplinary programs at the undergraduate and graduate levels.

The Department anticipates a continuing growth trajectory, which will include positions within the AI group. There are currently nine approved tenure track searches within the department as a whole, and three teaching stream searches. The space program reflects anticipated growth in faculty and graduate student numbers.

c) Space Requirements, Program and Functional Plan

Space Requirements

The AI research group requires faculty offices, graduate student work space, hard research labs, staff work and offices space, along with a complement of meeting, lounge and interaction spaces. The space program below reflects that private offices are placed inbound, but with access to natural light. The majority of the lab-related research will take place in a large shared lab, with the exclusion of the Sensing lab, which has requirements that mandate it be standalone.

Space Program

The AI research group is leaving 1433 NASM of space in the Pratt and Bahen buildings. The total amount of space planned for the 3rd and 4th floors of the SRIC building is 1588 NASM. The following is an analysis of their existing space using COU's standards.

COU Category Code / Description	Existing Inventory	Input Measure	COU Space Factor	COU Generated	(+/-)	I/G ⁷	Notes
	nasm	FTE, WSCH	nasm	nasm	nasm		
3.0 Research Laboratory Space	366	60.00	10.00	600	-234	61%	
4.1 - Academic Offices	377	27.00	12.00	324	53	116%	1
4.2 - Research Office / Project Space	108	6.00	12.00	72	36	150%	2
4.3 - Graduate Student Space	271	106.00	3.00	318	-47	85%	
4.4 - Department Administration & Support Staff Offices	0	4.00	12.00	48	-48	0%	
4.5 - Office Support Space	159	762.00	0.25	191	-31	84%	
COU Generated Space Subtotal	1,281			1,553	-271	83%	
TOTAL	1,281			1,553	-271	83%	

Notes: 1. Offices are on average larger than the 12 nasm in the COU standards. AI occupies single offices that are on average 16 nasm. 2. Adjustment made to research office and project space is based on the University's planning practice of 6 nasm for Research Offices

A space program of 1588 NASM is proposed and is listed below in tabular form.

Category	Room	Proposed No.	Proposed Size (NASM)	Proposed: Area (NASM)
3.1 / 3.2 – Research Laboratories & Support Space	Lab	1	175	175
	Computational Imaging Lab	1	121	121
	Research Computer Room	2	13	26
	Lan Room	1	6	6
4.1 – Academic Offices	Faculty offices (Levels 3+4)	40	11	440
	Offices (Level 3)	3	11	33
4.2 - Research Office / Project Space	Workroom	1	18	18
4.3 - Graduate Student Space	Grad student workstations 59 (Level 4) 66 (Level 3)	125	2	250
4.5 - Office Support Space	Reception and Waiting Area	1	15	15
	Mailroom/Print/Copy	1	16	16
	Print/Copy (level 4)	1	3	3
	Print/Copy (level 3)	1	4	4
	Social Lounge + Kitchen	1	194	194
	Lounge (Level 3)	1	29	29
	Coffee station (Level 3)	1	4	4

	Meeting Room - 4 seats	2	13	25
	Meeting Room - 5 seats	7	11	77
	Meeting room - 20 seats	2	53	106
	Phone booth rooms (Level 4)	3	4.5 - 3.2 (varies)	12
	Phone booth rooms (Level 3)	4	4.5 - 3.2 (varies)	15
	Storage (level 3)	1	20	20

Total 1588

Space Program Elements

A 121 NASM **Computational Imaging Lab** will not be part of a shared space. It requires blackout conditions to facilitate research using imaging, optical experiments, and lasers. The lab requires a partitioning system (or laser curtains) so that the space can be sectioned into different areas (e.g., one area with student workstations, separate areas with their own optical table and corresponding workstation)

Each area must be light tight, so that lighting can be controlled independently (e.g., one section is in complete darkness, another section has lights on). One region of the lab will be designated as a class 4 laser room: it should be partitioned off with controlled access (lockable door) and laser safety sign outside entryway.

Within the overall area of Shared Research Lab, the **Machine Learning** space will be dedicated to computational research on embodied AI focusing on developing learning algorithms for humanoid robotics. Activities will primarily involve software development, machine learning experiments, and data analysis, with no immediate need for specialized robotics hardware due to the abstraction via APIs. An open-plan layout is preferred to foster collaboration and ease of communication among team members. The space will have visual connectivity to adjacent research areas and easy access to shared facilities like meeting rooms and communal spaces. The space can enable the humanoid robot to walk to the kitchen, access the dishwasher, load dishes at the end of the day and run the dishwasher (as a very simple grounded example) that is actionable and potentially useful for the space itself.

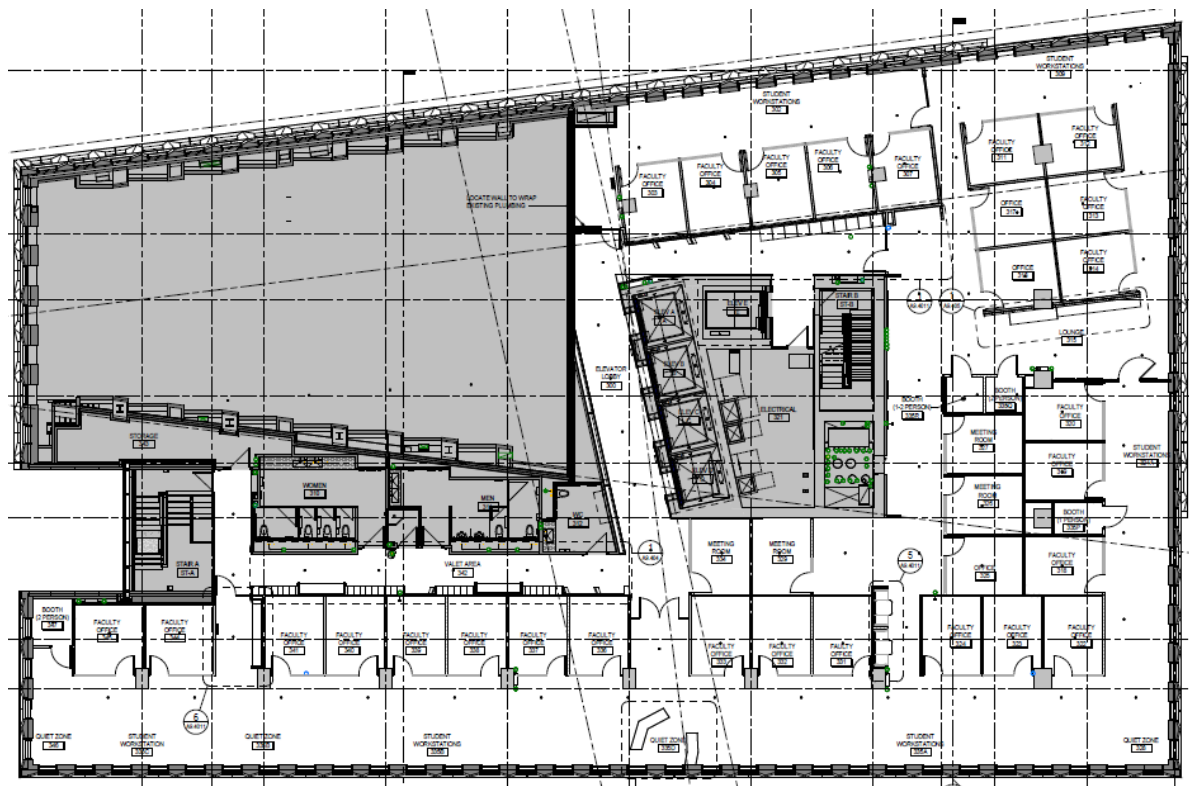
Within the overall area of Shared Research Lab, a **Robotics** collaborative space will include small-scale experimentation and demonstrations only for AI + manipulation-focused collaborative research. AI has shown a tremendous impact on robotics research worldwide, especially regarding the intersection of robotics with computer vision, natural language processing, and machine learning. Under this overall space umbrella, sub-spaces for specific experimentation will accommodate experimentation for Continuum Robotics (30 NASM), Surgical Robotics (20 NASM), Robot Learning and Manipulation (60 NASM). Specific robotic equipment is anticipated for this space and is detailed in the Room Data Sheet.

Within the overall area of Shared Research Lab, a **Computational Linguistics** lab will focus on speech recognition, and language processing.

Two 20-seat **Meeting Rooms** will accommodate faculty, student and staff meetings. These rooms are contiguous, with the provision to combine into one 40-seat conference room. Moveable partitions are specified for operation and will as soundproof as possible. The far west wall of the meeting rooms will open up to the lounge beyond to provide additional capacity. 5-seat **Meeting Rooms** will accommodate smaller groups. All meeting rooms should be provisioned with AV and smart screens.

Graduate Workstations will primarily occupy the areas on the perimeter of the floorplate, ensuring natural light can penetrate into the building for all occupants. Workstations will be of similar size and quality as those on the Vector floor, to ensure an equitable work environment for all graduate students.

3rd Floor



13



Non-Assignable Spaces

Included in the building project are non-assignable elements that are not specifically described in the Space Program, but for the most part, are already in place as part of the base building.

Non-assignable spaces include: elevators, corridors, stairs, electrical and telecommunications closets, caretaking closets, washrooms, mechanical rooms and shafts, etc. These aspects of the building program are not included in the above summary of assigned spaces.

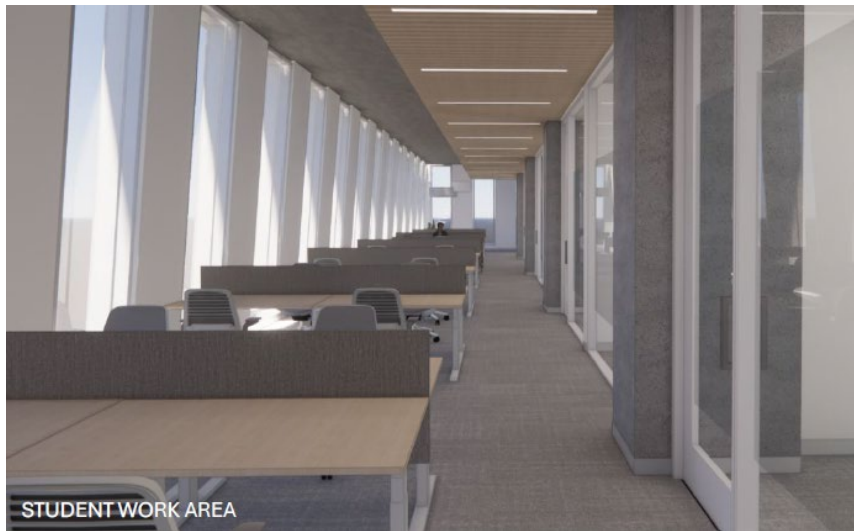
d) Building Considerations

Standards of construction

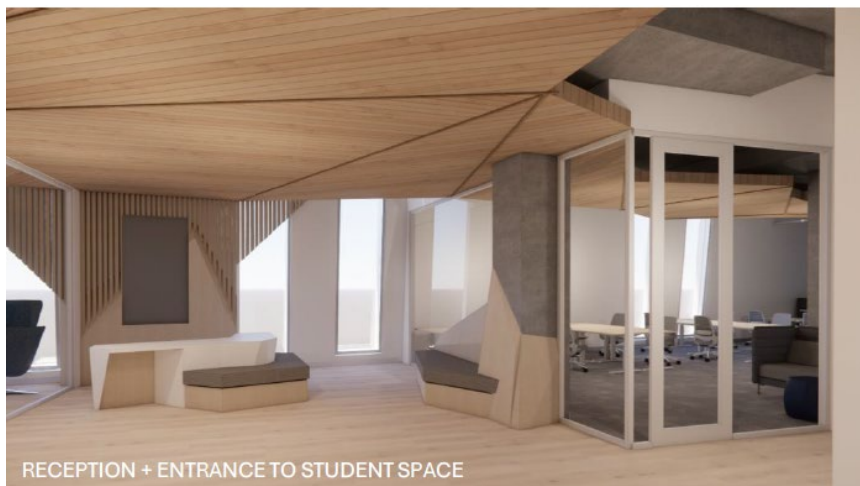
The interior fit-out of the 3rd and 4th floors of the Schwartz Reisman Innovation Campus will match the quality of other floors in the building. There is significant use of wood, which will add warmth to the spaces. Colour is used judiciously throughout to add interest and vibrancy. All materials are of a high quality, and durable for daily use.



MULTI-PURPOSE MEETING ROOM + LOUNGE



STUDENT WORK AREA



RECEPTION + ENTRANCE TO STUDENT SPACE



Building characteristics and massing

The building has 250,000 square feet over 13 storeys. It is of reinforced concrete construction, with floor loading designed to typical office environments. Floor framing is designed to conform to the latest design requirements related to appreciable floor vibration characteristics. The exterior façade consists of polished precast concrete with a terrazzo finish and high-performance glass and aluminium punched windows.

Floor-to-floor height on both the 3rd and 4th floors is 3.81m. The 3rd floor is a crossover floor, meaning in the event of a fire alarm, the exit stairwell doors would automatically unlock. Those building occupants who can't take a direct route down the east stairwell (ie: in the case of fire at the bottom of the stairwell) would cross over to the west stairwell through the 3rd floor.

Elevators

There are four passenger elevators, with centre-opening doors. Two of the passenger cabs, Elevator A & B, will travel from Level 1 to Level 13 and the other two cabs, Elevators C & D, will service P1 to Level 13, serving all floor levels.

There one service elevator, serving floors P1 Loading Dock Level to Level 14 (Penthouse).

The passenger elevators are controlled via Destination Dispatch software. Passenger destination is pre-selected when summoning the elevator. This functions in conjunction with the base building access control system.

Sustainability design and energy conservation

Integration of environmentally sustainable principles into buildings, landscapes and transportation options, has been a high priority in discussions with both campus and neighbouring communities.

A Project Energy Charter was prepared for this project and is included as Appendix 2.

ASHRAE provides Standards for all components within buildings – HVAC, windows, lighting, modeling, envelope, ventilation and reviewed by industry experts. It allows for prescriptive and performance based

compliance paths to meet the minimum energy use. Toronto Green Standards (TGS), OBC** and LEED use ASHRAE 90.1 to define their energy efficiency standards.

Energy modeling coupled with Life Cycle Cost Analyses will serve as tools throughout the design phases to evaluate design options and make appropriate choices that support the University of Toronto's pursuit of sustainable reduced energy use and lower carbon footprint with long-term built space comfort.

At each design phase model submission, the *Project Consultant Team* submitted the energy model with EUI's to test the energy performance for alignment with U of T Policy and standards. Please see Appendix 2 for UofT's Energy Modeling Guidelines.

Accessibility

All interior spaces and interior signage complies with the University's new Facility Accessibility Design Standard, dated June 9, 2023. This standard incorporates the belief in universal design that recognizes the broad diversity of people who use facilities. Universal design is defined as "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." This standard reflects minimum dimensional criteria required for adult persons. Prior to the design stage of a project, special consideration should be given to the function of the facility and the patrons who will use it.

Particular attention was paid to kitchenettes, reception areas, and other gathering spaces. At each stage of design, the project was reviewed by Facilities & Services to ensure that the design standard is being met.

The Facility Accessibility Design Standard can be found here: <https://www.fs.utoronto.ca/wp-content/uploads/2023/06/Facility-Accessibility-Design-Standard.pdf>

Personal safety and security

The building is equipped with two security desks: one at the main entrance on College Street; the other at the servicing dock. Elevators operate on a fob-access only. Occupants of other floors do not have to the 3rd and 4th floors, and DCS occupants will not have access to other floors. The exceptions are the 7th and 10th floors which have lounge and casual meeting spaces available to all building tenants when not being used by Campus Events.

The building's normal business hours are Monday to Friday 7am -6pm for perimeter access doors. Fob access is required at all other times. All persons entering the building except during normal business hours will be required to have active FOB's. If required, a work permit can be arranged for people that require access and will be kept by Security at or near the security front desk or the person can be picked up in the lobby by a staff person. The Landlord may prevent any person from so entering unless that person has a key or fob access to the elevator and/or premises to which the individual seeks entrance and a pass in a form approved by the Landlord. Any persons found in the building except during normal business hours without such key and fob may be subject to surveillance by the Landlord's employees and/or agents and may be required to leave the building. Tenants will be responsible for securing their premises and, if required, for locking interior offices when leaving the building.

DCS faculty and graduate students will require access outside of normal working hours, so fob access will be provided to them. A detailed operational agreement between the Department and the SRIC Property

Management will be developed for each floor to ensure that accessibility, security, and functional objectives are all met simultaneously.

All occupants, including tenants, employees, contractors, visitors, and any other persons present within the building, must comply with all rules, regulations, instructions and directives issued by the building's security personnel and Landlord. This includes, but is not limited to, instructions related to safety, emergency procedures, access control, and property protection.

Signage, donor recognition

Interior signage was a required element of the detailed project design for wayfinding purposes. Should there be a future requirement for donor recognition, its accommodation could be appropriately integrated within the 3rd and 4th floors. Digital directory in the lobby and other floor is also available to display wayfinding location.

Mechanical/ Electrical and Data

Please refer to the Schwartz Reisman Innovation Campus Tenant Design Manual for more detailed information on the base building systems.

Mechanical

Cooling Systems

The central chilled water plant has two centrifugal chillers, one heat reclaim chiller, two cooling towers, and primary and secondary pumps have been provided for the building. The chillers provide approximately 60% of the cooling load for the facility. The cooling system consists of a primary and a secondary distribution loop. Both the primary and the secondary loops (low and high temperature chilled water loops) will be variable volume to maximize energy efficiency.

The chiller plant generates 5.6°C (42°F) chilled water and distribute it to the air handling units, fan coil units and heat exchangers. Three variable volume primary pumps are used to circulate chilled water through the chillers.

Heat Reclaim Chiller

Two variable volume primary chilled water pumps circulate chilled water through the heat reclaim chiller. The heat reclaim chiller is controlled based on the heating demand for the facility. When heating is required, the heat reclaim chiller shall be enabled. The chilled water produced by the heat reclaim chiller will be connected into the chilled water return piping, upstream of the centrifugal chillers.

The heat recovered by the heat reclaim chiller is used to offset the building's heating demand. Once the heating demand for the facility decreases, the use of the heat reclaim chiller is reduced. At this point, cooling is provided by either the centrifugal chillers or by using the outside air free cooling heat exchanger in conjunction with the cooling towers or a combination of the two.

Radiant floor heating and cooling

Radiant floor heating and cooling is provided on each floor, and is divided into two main loops, a North-East loop, and a South-West loop. Each loop is able to provide either heating or cooling depending on the exposure load requirements – heating requests take precedence over cooling requests.

To provide as much flexibility for future tenant fit outs the radiant floor, manifolds have been installed in the ceiling space below the floor they serve. (E.g., Manifold in the level 2 ceiling space serves the radiant floor zone on level 3.)

Each zone has been provided with independent temperature control via a control valve at the radiant manifold. The control valve will be controlled by a space temperature sensor. Spaces that are open to one another may have multiple radiant zones connected to a single space temperature sensor.

Fan powered cooling boxes and chilled beams

The fan powered cooling boxes and chilled beams are served by the chilled water – high temperature loop which will provide sensible cooling capabilities. The chilled water – high temperature distribution loop is the main source of chilled water for tenant use on each floor.

Cooling towers

Two 365 ton induced draft cooling towers complete with variable frequency drives for capacity control will be located on the roof. They will be used to reject heat to atmosphere in the summer and provide free cooling in the winter.

Heating Systems

The heating plant includes a central hot water heating plant complete with three high efficiency condensing boilers and variable volume pumps.

Boilers

The operating plant consists of three 3,600 MBH high efficiency condensing boilers. Each boiler is sized to provide 50% of the heating load for the facility. If one boiler fails, the remaining two boilers will be able to meet the heating load for the building. The condensing boilers are located on level 14 within the Mechanical Room (1401).

The condensing boilers work in conjunction with the heat reclaim chiller to meet the heating loads of the building. When there is an internal cooling load in the building the heat reclaim chiller will be the lead source of heat. If the heat reclaim chiller is unable to meet the heating load for the building the condensing boilers shall provide additional heat as required.

The heat reclaim chiller is controlled based on the heating demand for the facility. When heating is required, the heat reclaim chiller shall be enabled. The hot water produced by the heat reclaim chiller is connected into the hot water return piping, upstream of the condensing boilers. Two variable volume primary chilled water pumps circulate hot water through the heat reclaim chiller. The heat recovered by the heat reclaim chiller is used to offset the building's heating demand.

Primary hot water distribution

Every boiler is provided with a variable volume hot water pump. The pumps circulate the primary hot water through the boilers. The building hot water heating serves air handling units (AHUs) with a direct connection to outside air; AHUs without a direct connection to outside air – hot water system; snow melting heat – glycol system; in-floor radiant heating heat – hot water system Unit heaters – hot water system; VAV reheat coils in selected areas – hot water system.

Emergency Power

The hydronic heating system and the radiant floor heating system is connected with emergency power. This will provide base heating during power outages and prevent freezing within any space.

Internal Heating and Cooling

The 3rd and 4th floors have been provided with the following:

- The radiant floor cooling and heating that is identified above.
- Location for capped chilled water supply and return lines from the “high temperature chilled water loop” serving only the interior spaces. This feature has been provided so that the tenant may add supplementary cooling using fan powered cooling boxes and/or chilled beams.
- Chilled water supply and return lines will be provided to the minimal fan power cooling to maintain interior conditions within the shell spaces.

Air Handling

AHU-01 and AHU-02, the two air handling units, provide the minimum required outside air volume to each space from levels 3-13. Outside air requirements will be determined by occupancy, square footage, and occupancy type, as per ASHRAE 62.1 requirements. The units will provide 50% redundancy to the facility in the event that one AHU fails or is shutdown. AHU-01 and AHU-02 are located in the level 14 Mechanical Room (1401).

Fan coils

Electrical rooms, elevator machine rooms and IT rooms local fan coils have been installed to provide cooling for the electrical rooms, elevator machine rooms and IT rooms. Fan coils will be provided with 5.6°C (42°F) chilled water to maintain temperature setpoint for each space. The chilled water – low temperature loop will provide the chilled water to these FCUs. The fan coils serving the electrical rooms, elevator machine rooms and server rooms will be provided with emergency power.

Exhaust Systems

A general exhaust branch connection c/w a motorized damper is provided on every floor served by AHU-01 and AHU-02. This branch connection is provided on each riser from AHU-01 and AHU-02. The general E/A branch is used to exhaust the difference between the minimum outside air and sanitary exhaust air for levels served by AHU-01 and AHU-02. A sanitary exhaust branch connection c/w motorized damper is provided on every floor to serve the washrooms.

Lab Exhaust/Fumehoods/Drainage

No fumehoods are allowed in the building. Any lab spaces requiring dedicated exhaust will need to be examined at the design stage with the building's mechanical review team. No spaces will be provided with lab drainage.

Outside Air Humidification

A natural gas-fired packaged steam humidification boiler is provided to serve the air handling units humidification requirements.

Fire Protection

The entire facility is provided with a zoned wet pipe sprinkler system. Each area of the building requiring a separate fire zone is provided with supervised sprinkler shutoff valve, flow switch, and test valve arrangement. The Fire Alarm System in the building is a two-stage system.

Standby battery is provided for the fire alarm system and sufficient for 24 hours of electrical supervision plus 2-hours. The system is also connected to emergency power.

Full voice communication is provided for the system.

Building Automation

A central Building Automation System (BAS) Johnsons Controls system with electric actuators for the control valves and direct digital control for all temperature sensors. Temperature/humidity sensors in occupied space are high precision electronic type.

Electrical

The building is supplied with a low voltage (less than 750 Volt to the ground) distribution system: a double-ended style system with tiebreakers. These main low voltage distribution boards are fed with two sources through separate sets of transformation. The double-ended style main switchboard is arranged such that under normal circumstances each dry-type power transformer is loaded to 50% of its total capacity. With this configuration, if either of the transformers fails, the main breaker of the failed transformer will be disconnected, and the tiebreaker will close, allowing the load to be fed from the remaining transformers some manual load shedding.

All main and tiebreakers are drawn out breakers with digital trips and arc-flash reduction feature in the main switchboards and must be 100% rated. The branch breakers are fixed and complete with digital trips and the arc-flash reduction feature. Each of the main and tiebreaker sections are complete with a barrier for safe servicing in the future.

Two (2) 600V vertical bus duct risers are installed from either side of the main electrical room switchboard to the penthouse. The bus ducts are complete with a copper bus, weatherproof enclosure, full neutral and ground bus. The bus ducts are complete with provision for plug-in units

every 2'-0" in electrical rooms and will be connected alternately with one for odd floors and the other for even floors.

Power distribution in the building is as follows:

Power distribution	
Item	Supply Voltage
Main Service Feeder	13.8KV
Main Electrical Distribution	600V
Large Mechanical Loads	600V
Site Lighting	347V and/or 120V
Interior Building Lighting	120V
General & Office Power	120V
Light Mechanical Loads	120/208V

120/208V transformation are provided on each floor for lighting, receptacle loads and mechanical equipment. The following basic assumptions were made for the base building:

Normal power capacity assumption				
Type	Lighting (W/Sq. Ft.)	Equipment (W/Sq. Ft.)	Mech (W/Sq. Ft.)	Sub-Total (W/Sq. Ft.)
Core Area	0.50	0.75	1.00	2.25
Offices/Multi-purpose/Meeting Rooms	0.50	2.50	4.00	7.00
Labs	0.75	6.00	6.00	12.75

Electrical requirements for the Department of Computer Science should be checked and approved through Facilities & Services and SRIC's electrical review team.

Lighting & Control

High efficiency LED luminaires will be provided. Lighting will be designed to OBC, IES and as per LEED requirements.

Offices to use direct/indirect LED luminaires. Any areas with transient occupancy will be provided with ceiling or wall mounted occupancy sensors.

In areas with natural lighting, luminaires will be controlled by daylight sensors to make maximum use of natural light. Daylight sensors to dim fixtures.

Mechanical and electrical room lighting shall be controlled by standard wall switches.

Night lighting circuits will be provided in all open areas to allow the movement of occupants through the area without the need to turn on all the lights within the space.

Emergency Power

Emergency power is supplied through an emergency generator to support the base building life safety elements only.. It is not anticipated that the Department's research labs will require emergency power provisions.

Metering

Meters will separately identify HVAC load, receptacle load, and lighting load. This metering system is tied to the Building Management System. Each lighting panel shall be metered with energy sensors.

A dedicated tenant services panel will be located on both the 3rd and 4th floors. For tenants using any number of circuits from the tenant services panel on the floor, each circuit shall be metered, and the energy consumption report shall totalize the energy consumption for the tenant. The tenant services panel shall be suitably sized to accommodate the current sensors for each circuit.

Environmental Health and Safety

All noise emitting sources will comply with acoustic emission regulations and standards. All significant air emission sources to comply with air emission regulations and standards.

Designated Substances

The SRIC building opened in 2024 and is fully new construction. There are no designated or hazardous substances that would be required abatement for this project. DSSRs are available.

e) Site Considerations

Site context

The Schwartz Reisman Innovation Campus is a 13-storey building, located on the northeast corner at College Street and University Avenue, between the university's campus, the Ontario Legislature, and the city's Discovery District. It lies directly adjacent to the Queen's Park subway station, and its west façade fronts onto provincial green space along University Avenue. The building's main entry front College Street.

Master Plan

The west building of SRIC is the first phase of the site's masterplan. It is to be followed by a 20-storey, 500,000 ft² tower to the east, for a combined 750,000 ft² of new institutional space across the complex. The second phase will contain laboratories and research space for innovators in regenerative medicine, genetics and precision medicine.

Zoning regulations

Given the interior nature of this project, zoning approvals are not anticipated.

Municipal Approvals

A Building Permit from the City of Toronto will be required for this project.

Site access

The entrance to the parking ramp leading to the loading dock is on the east end of the building, off College Street. No parking is available on site however there is alternative parking at the MaRS building

The loading dock is accessible between 6am – 6pm, unless arranged in advance and in writing. Loading zones are designated for short-term use by delivery and service vehicles only. The loading dock entrance has a height limitation of approximately 14.7 feet or 4.5 meters

f) Campus Infrastructure Considerations

Information Technology

The University's IT backbone is not on site. The IT connections from the SRIC buildings to the main campus are run through rented, 3rd party fibre lines. The needs of the Department of Computer Science are extensive, and the rental cost of an adequate number of fibre lines is substantial, running upwards of \$1 million per year. The project team is working with ITS to explore economically feasible options to connect the Department to the main campus. A feasibility study is underway, but the results are not known yet. Operationally, there are future costs involved that are not known at this point of time.

The IT needs for this project are detailed in the Room Data Sheets. No server rooms are planned; however two computer support rooms are required to support research initiatives.

Vehicle Parking

Vehicle parking is not currently available on site, with the exception of accessible parking spots, located on P1. The closest parking lot is across the street at the MaRS building.

Bicycle parking

Bicycle storage is provided on the P1 and on the west exterior of the building. E-bikes are permitted and must be stored in the designated bike storage room located on Level P1. Bicycles are not permitted in other areas of the building. The bike ramp and bike storage room are designated for the exclusive use of tenants and authorized personnel only. Tenants must utilize the bike ramp to access the bike storage room on P1 and are required to secure their bicycles within the designated storage area. Bicycles stored in the designated bike storage room must not remain in the storage area for more than three (3) consecutive days to allow equitable and fair bike rack availability for all occupants.

g) Secondary Effects

The relocation of the AI research group will free up 1433 NASM in the Bahen and Pratt buildings, The future of the Pratt space is currently being explored with the Department. The Department's anticipated growth trajectory will require the retention of the Bahen space as faculty hiring progresses.

h) Project Phasing

There will be no project phasing required for this project.

i) Schedule

Project milestones:

Preliminary Project Approval: CaPS Executive Committee: January 2025

Consultant RFP: end of January 2025

Schematic Design: September 2025

Design Development and Contract Drawings: October 2025

Full Governance Approval: April - May 2026

Tender: May 1, 2026

Tender close: June 5, 2026

Tender Award target date: June 19, 2026

Mobilization and construction: July 2026 – May 2027

Occupancy: Summer 2027

IV.Resource Implications

a) Total Project Cost Estimate

The total estimated cost for the project includes estimates or allowances for:

- construction costs (assuming a lump sum type of tender to qualified general contractors in the month of (date))
- contingencies

- taxes
- secondary effects
- demolition
- permits and insurance
- Professional fees, architect, engineer, misc consultants (ie. LEED etc.), project management.
- computer and telephone terminations
- moving and staging, decommission of labs being vacated
- furniture and equipment
- miscellaneous costs [signage, security, other]
- commissioning
- donor recognition
- escalation

b) Operating Costs

Operating costs will include IT provisions, which are still to be determined. The two floors will have separate meters installed by the commencement of construction. As a result, HVAC load, receptacle load, and lighting load will be billed to the Department, on the basis of meter readings.

c) Funding Sources

The project will be funded through the Faculty Major Capital Projects Reserve.

APPENDICES:

1. Room Specification Sheets (on request)
2. Project Energy Charter
3. Total Project Cost Estimate (on request to limited distribution)
4. Landlord manuals, policies