



Winter 2026

Building Pathology and Rehabilitation

Department of Civil and Environmental Engineering / Azrieli School of Architecture and Urbanism
ASCE CIVE 4601 / ARCN 4200

Teaching Team

Instructor: **Elyse Hamp**, elysehamp@cunet.carleton.ca

Office hours: online, by appointment

TA(s): Information will be posted on Brightspace

Course Description and Requirements

Course schedule

Please refer to the [Public Class Schedule](#) for the most recent information

Course description

Building Pathology and Rehabilitation is a core course of the Bachelor of Engineering (BEng) and Architectural Studies (BAS) with a Major in Architectural Conservation and Sustainability. It is taught in the 4th year of the program after students have been introduced to basic conservation and sustainability principles and fundamentals of building materials, assemblies and structures. Building on the Architectural Technology courses taught throughout the BAS and BEng and using basic documentation techniques learned in the Historic Site Recording course, students will become familiar with the skills required to investigate existing buildings from a conservation and sustainable design perspective. While focused on typologies present in Eastern Canada's existing building stock, the discussion and analysis will include global examples of buildings of all typologies.

Prerequisites and recommended knowledge

ACSE CIVE3207 / ARCN4100 Historic Site Recording and Assessment. Students are expected be proficient in the preparation of metrically accurate two-dimensional CAD drawings, photogrammetric

processing (for example using RealityScan or Agisoft Metashape software), and basic surveying using a Total Station.

Learning Outcomes

Working both individually and in teams, by the end of the course students will be able to:

- Describe and assess historic and modern building envelope and structural systems, assemblies and materials and their patterns and causes of decay and deterioration.
- Formulate a methodology for the assessment of the physical condition and performance of buildings in support of assessment and performance evaluation and design.
- Identify, analyze and recognize historic construction materials, assemblies and structures.
- Recognize the roles of architects, engineers, materials conservation specialists, building scientists, architectural/ building historians, traditional building trades and other disciplines.
- Design a rehabilitation treatment option based on the visual inspection and analysis of physical conditions, considering conservation principles and other criteria (health and safety, cost, accessibility, etc.).
- Describe specific historic and modern building rehabilitation issues, including preserving patina, addressing inherent vice, locating substitute materials, using modern technologies, and identifying appropriately skilled labour.

Graduate Attributes (GAs)

The Canadian Engineering Accreditation Board (CEAB) requires graduates of undergraduate engineering programs to possess 12 attributes. Courses in all four years of our programs evaluate students' progress toward acquiring these attributes. Aggregate data (typically collected in all sections of a course during an academic year) is used for accreditation purposes and to guide improvements to our programs. Some assessments used to measure GAs may also contribute to final grades; however, the GA measurements for individual students do not determine the student's year-to-year progression through the program or eligibility to graduate. The following list provides the GAs that will be measured in this course and the Learning Outcomes intended to develop abilities related to these attributes.

GA - Indicator	Assessment Tool
1.13.C- GASSSDiscipline-specific concept CEE-13 Building pathology & restoration	The grades achieved in Assignment 7 and Assignment 8, the presentation of the Condition Investigation and the final Conservation Report. In these deliverables, a team of students will present the preliminary proposals to rehabilitate a historic structure based on condition assessment. Student submissions will be evaluated according to the rubric, about the rigorous assessment of conditions in the historic building and how the rehabilitation proposals effectively meet the requirements by the Standards and Guidelines for the Conservation of Historic Places in Canada.
	The grade achieved in the Take Home Exam. This rubric will allow to assess individually the compliance and understanding of building pathology and rehabilitation concepts.

For information on GAs and continual curriculum improvement, visit the [Accreditation section of Engineers Canada website](#).

Accreditation Units

Math	Natural Science	Complementary Studies	Engineering Science	Engineering Design
-	-	-	50%	50%

Textbook(s), Learning Materials, and Technical Prerequisites

Students are not required to purchase textbooks or other learning materials for this course. Important references to be used in course assessments are available at the library, online through the library website, or made available on Brightspace. Course readings which will be covered in the mid-term exam and final take home exam will be specified during the lectures.

Software: the following software may be used during the course and is available to students to **download for free**:

- AutoCAD and Autodesk Recap (latest version). Free copies of AutoCAD and Recap releases are available for download by registering at the Autodesk Education Community (<http://students.autodesk.com>).
- ArcGIS Pro license (latest version) from the Carleton University Library. Read for more information: <https://library.carleton.ca/services/arcgis-student-edition>. Alternatively, students can use Quantum GIS (QGIS), an open-source and free GIS package available at <http://www.qgis.org>.
- Epic Games RealityScan (<https://www.realityscan.com/en-US/download>), or Agisoft Metashape Pro (30-day demo). More information will be provided during the course. See the tutorial shared on Brightspace for more instructions.
- Mendeley Reference Manager (<https://www.mendeley.com/download-reference-manager/windows>) or Zotero (<https://www.zotero.org/>). Note that a Microsoft Word plug-in can be installed for both Mendeley and Zotero, making the creation of in-text citations and bibliographies semi-automatic.

The following equipment may be provided by the Department of Civil and Environmental Engineering (Civil Engineering Lab, 2032 Minto Centre) for use during site visits. The protocol specified on Brightspace must be followed for requesting equipment loans.

- A camera tripod.
- Hand recording kits (measuring tape, Disto (electronic distance meter (EDM)), plumb bob and string).
- DSLR digital cameras: Nikon D5300 + 18-55 mm Nikon Lens;
- Laser level;
- Total Station.

Topics and Tentative Plan

This is an in-person course, with weekly 3-hour lectures and 3-hour labs led by the instructor and teaching assistants. Some on-site investigation and documentation will be necessary for the completion of the group-based term project. The lecture period will consist of teaching modules and discussion of assigned readings, presentations, assignments, and short-response activities. Lab time will be used for tutorial topics, fieldwork, group work for the term project, meeting the instructor and/or teaching assistants, and writing the midterm exam. Lectures may include guest speakers. Students are encouraged to participate in analytical discussions and link with other courses, projects, and experiences.

Note that details of weekly lecture content are subject to change, based on the progress of topics covered throughout the course.

Week	Lecture Topics	Tutorials
Week 1 (Jan 8-9)	1.1: Introduction to Building Pathology & Rehabilitation. 1.2: Course Introduction, Outline and available Historic Sites. 1.3: Characterization of buildings; construction types; functional types; inherent environmental features	No tutorials
Week 2 (Jan 15-16)	2.1: Preparing a Statement of Significance in Canada 2.2: Building deterioration: Defects, damage and decay. 2.3: Investigation: Condition & Performance Assessment. Introduction of Assignment 1 and 2	Tutorial 1: Preparing Site Reconnaissance Tutorial 2: Site Plans using GIS Select sites, form groups, select team lead Submit teams' site and composition Jan 19 (11:59 PM) on Brightspace
Week 3 (Jan 22-23)	3.1: Values centred assessments 3.2: Diagnostics, Criteria & Analysis. 3.3: Repairs: Planning the conservation approach. Introduction of Assignment 3 and 4	Site visits (pending permissions)
Week 4 (Jan 29-30)	4.1: Introduction to Materials 4.2: Masonry materials, assemblies, and structures (Guest lecture by <u>Jamie Marrs</u>)	Site visits (pending permissions)
Week 5 (Feb 5-6)	5.1: Introduction to masonry, metals, Earth, Wood and Concrete. 5.2: Characterization and Testing of Historic Masonry Structures by <u>Anushka Mukherjee</u>	Assignment 1 review with TAs and group work Assignment 1 due in tutorial
Week 6 (Feb 12-13)	6.1: Metal materials, assemblies, and structures. 6.2: Earth: materials, assemblies, and structures	Tutorial 3: Preparing an essay & Literature Review and AI exercises (Assignment 3) Assignment 3 due in tutorial Assignment 2 due February 13 (11:59 PM)
Winter Break (Feb 16-20)		
Week 7 (Feb 26-27)	7.1: Deconstruction and material reuse in heritage conservation (Guest lecture by <u>Prof. Susan Ross</u>) 7.2: Rehabilitation; Upgrades: addressing performance objectives Introduction of Assignment 5, 6, 7 & Final Report	Site visits (pending permissions) Assignment 4 due February 27 (11:59 PM)
Week 8 (Mar 5-6)	8.1: Heritage Watchlist and Adaptive Reuse (Guest Lecture by <u>Taylor Quibell</u>) 8.2: Adaptive Reuse; Preparation of a Conservation Management Plan 8.3: Rehabilitation; Projects: Planning repair and upgrades	Tutorial 4: Condition assessments, values assessment, and photogrammetry Midterm exam (1 hour) in tutorial

Week 9 (Mar 12-13)	9.1: Conservation of Wood Materials (Guest Lecture by <u>Natalie Smith</u>) 9.2: Concrete materials, assemblies, and structures 9.3: Non-destructive Testing Methods	Site visits (pending permissions)
Week 10 (Mar 19-20)	10.1: Sustainability of Historic Buildings 10.2: Introduction to Climate Adaptation: what does it mean to Historic Places	Assignment 5 review with TAs Assignment 5 due in tutorials
Week 11 (Mar 26-27)	11.1: Emerging challenges in Conservation of Modern Historic Places 11.2: Innovation in Conservation and Monitoring of Historic Sites (Digital Twins) 11.3: Key messages Overview on uploading and managing data on Dataverse	Online office hours Assignment 6 due March 27 (11:59 PM)
Week 12 (Apr 2-3)	Conservation Investigation Presentations (Assignment 7) Assignment 7 due April 2 (4:00 PM)	Statutory Holiday - no tutorials
	Final Condition Investigation Report due April 23 (11:59 PM) Submit project data to Dataverse by April 23 (11:59 PM) Take Home Exam (3 hours) due April 23 (11:59 PM)	

Evaluation and Marking Scheme

A one-hour mid-term exam will be conducted in the tutorial session, and a three-hour take home exam will be made available on Brightspace on the last day of classes, due at the end of the exam period. There will be seven assignments throughout the term, consisting of group work and assignments to be conducted individually. The final report for the course project must be submitted by the last day of the exam period. In-class short-response activities will be conducted throughout the lectures, based on the lecture topics covered that day. A detailed description of each assignment is detailed below, and the grading of the course assessments is as follows:

Assignment	Grade	Deadline
Assignment 1: Draft of Building Characterization	4%	February 6th in Tutorial
Assignment 2: Building Characterization	10%	February 13th 11:59 PM
Assignment 3: Literature Review & AI Exercises	4%	February 13th in Tutorial
Assignment 4: Conservation Technology Essay	10%	February 27th 12:59 PM
Mid-Term Exam (in Tutorial Session)	10%	March 6th in Tutorial
Assignment 5: Draft of Condition Assessment Drawings	4%	March 20th in Tutorial
Assignment 6: Condition Assessment Drawings	10%	March 27th 12:59 PM
Assignment 7: Conservation Investigation Presentation	5%	April 2 nd 4:00 PM
In-class short-response activities	3%	Weekly lectures
Conservation Report	15%	April 23 rd 11:59 PM
Take-Home Exam	25%	April 23 rd 11:59 PM

An assignment handed in late will be deducted 10% per day from the assessed grade.

Concise and accurate technical writing is important in professional work; student writing, and verbal work will be assessed on language (grammar, spelling, structure, style, presentation) and content. When possible, only peer-reviewed academic publications or references provided throughout the course should be used as reference for course submissions; this should be presented using appropriate academic citation styles; for this, you are recommended to consult: <https://library.carleton.ca/help/citing-your-sources>. In this course, either the APA or IEEE citation style must be followed for all course submissions, including in-text (author-date) citations.

Mid-term Exam (in Tutorial Session)

A one-hour mid-term exam (worth 10% of final grade) will be completed in the tutorial session on March 6th. The mid-term exam will be completed on paper. Students are expected to bring their own writing utensils (pencil, eraser, pen, etc.). The mid-term exam questions and paper will be provided. The format of mid-term exam will be four short-answer questions. The topics will cover course readings specified in class, and course lectures and guest lectures up to that date.

Take Home Exam

Student will complete a take-home exam (worth 25% of final grade) at the end of the course. The take-home exam will be made available on Brightspace on the last day of classes and must be completed by the last day of the exam period (April 23 11:59 PM). Once the student opens the exam on Brightspace, the student will have **3 hours to complete the exam**. The format of the exam will be open-book, and will include multiple choice questions, short answer questions, and long answer questions. The topics will cover the course readings, lecture and guest lecture material, and lessons learned through the completion of course assignments and course project. See the AI statement in this course outline for specifications on the use of AI in any course submissions. Final exams are for evaluation purpose and will not be returned to students.

Deferred Final Examinations: Students who are unable to write the final examination because of extenuating circumstances, as defined in the [Academic Consideration Policy](#), may apply for accommodation by contacting the Registrar's office. Consult the [Section 4.3 of the University Calendar](#).

Students who claim extenuating circumstances defined in the [Academic Consideration Policy](#), as a reason for missed term work are held responsible for immediately informing the instructor concerned and for making alternate arrangements with the instructor and in all cases. This must occur no later than three (3) days after the term work was due. The alternate arrangement must be made before the last day of classes in the term as published in the academic schedule. Consult [Section 4.4 of the University Calendar](#).

Attendance and Participation

Students are required to attend all activities, including lectures, site visits and tutorials. Success in the course depends upon participation in course activities, class discussions, and completion of readings. Absences will generally be excused only for emergencies.

Several assignments in this course are undertaken in teams. Team members are expected to contribute equally to group assignments, be courteous, review each other's work, and communicate the performance of their group to faculty at regular intervals.

The on-time submission of the Informed Consent Agreement and Student Consent to Publish forms by **January 19th (11:59 PM)** are part of meeting the expectations of this course requirements.

Assignments

Part of the evaluation of student work will be based on the following assignments. For final details, see the instructions provided on Brightspace and during the lecture.

Assignment 1: Draft of Building Characterization and Assignment 2: Building Characterization

Students will work in teams of up to six and select a site to study for the entire course. Each team will select a site from the list of provided sites (to be shared on Brightspace), and prepare a visual survey, or “building characterization sheet.” This report will include an overview of the site context (including a building-scale site plan and an urban-scale site plan), general history, character-defining elements, construction typology, and inherent environmental features. Depending on the accessibility of the selected site, the scope may be limited to the external envelope of the building. Students may use GIS data available at MacOdrum Library and field photography to inform and include in their report. Note that only one submission per group is expected for this assignment, and the submission of supporting material used to prepare this assignment is expected to be uploaded on Dataverse at the end of the course.

Assignment 1 will be completed in the weekly lab session, involving a review of the draft version of Assignment 2. Successful completion of Assignment 1 will be reviewed based on preparation of a draft format of the report (outline of the report sections), identification of character defining elements for the site, and identification of main sections and construction materials in the building. Assignment 2 shall be the complete and final version of the work described in this section, i.e. the complete Building Characterization. See detailed instructions on Brightspace.

Assignment 3: Literature Review and AI Exercises

This assignment will be completed during the weekly lab session. A literature review is an important skill for practitioners, to be able to search and identify high quality peer-reviewed publications, compile and understand information on a specific subject using critical thinking and use that information to inform their decision or design pertaining to the conservation of an existing structure. As generative AI becomes a staple in many aspects of society, it is critical that students learn how to use AI *effectively*, in a way that *enhances* and *does not replace* the learning process. Through these exercises led by the Teaching Assistants during the lab session, students will work in pairs to conduct a mini-literature search and review on a topic relevant to Assignment 4 (see the next section) and compare with a mini-literature review conducted using a generative AI-based platform, such as NotebookLM or Logically.app. See the AI statement in this course outline for specifications on the use of AI in any course submissions. See detailed instructions on Brightspace.

Assignment 4: Conservation Technology Essay

Each student will select a type of historic or modern building material, assembly, or structure from the site being studied for their course project and will write a brief essay on this technology. Using peer-reviewed publications to inform the writing, the essay should provide a brief history of the technology's development and use in Canada and identify pathological conditions and sustainable interventions applicable to that

material. A reference manager such as Mendeley or Zotero should be used to format in-text citations and a bibliography. See the AI statement in this course outline for specifications on the use of AI in any course submissions.

Assignment 5: Draft of Condition Assessment Drawings and Assignment 6: Condition Assessment Drawings

Teams will produce two measured elevation drawings: a materials identification drawing and a surface condition drawing. The purpose of this exercise is to identify construction and architectural materials in an existing structure, to conduct a condition assessment to identify instances of damage and deterioration, and to employ recording techniques (learned previously in the Historic Site Recording course) to support the investigation of an existing site. The condition assessment shall be conducted through on-site investigation and identification of damages or deterioration found on the site, using photography and notes to support the reporting and data collection.

Each team will produce metrically scaled ortho-corrected images of the subject elevation of the building, using RealityScan (free version) or Agisoft Metashape (30-day trial) for the photogrammetric processing, from which the architectural elevation drawings will be generated in AutoCAD. Dataverse data may be used to produce the ortho-corrected images, if available. Submission of supporting material used to prepare this assignment is expected to be uploaded on Dataverse at the end of the course. The elevation drawings shall conform to standard architectural requirements, including titleblock, scale bar, use of varying lineweights, and a material or condition legend.

The two elevation drawings shall be accompanied by a one-page report detailing basic site information (name, location, function) and the methods used to record and document the building. This should include the equipment and settings used if on-site recording was done (Total Station surveying, photography for photogrammetry), and the steps and software used to process the photos to create ortho-corrected images, scale the ortho-corrected images, and generated a drawing in CAD.

Assignment 5 will be completed in the weekly lab session, involving a review of the draft version of Assignment 6. Successful completion of Assignment 5 will be reviewed based on preparation of a drafted titleblock, legend and hatch patterns for materials and conditions, drafted ortho-corrected images, and plan for completion of the elevation drawings. Assignment 6 shall be the complete and final version of the work described in this section, i.e. the two elevation drawings and short report. See detailed instructions on Brightspace.

Assignment 7: Conservation Investigation Presentation

This presentation shall provide an overview of the findings and work completed for the course project, including the Building Characterization and the Condition Assessment Drawings. Each team shall give a presentation of 10 minutes as a group, summarizing the content which will be included in the final Conservation Report. This should include an overview of the site context, general history, character-defining elements, construction typology, inherent environmental features, values-centered assessment, and condition assessment completed as part of Assignment 6.

Conservation Report

Following the feedback provided during Assignment 7 (Conservation Investigation Presentation), teams will prepare a comprehensive report on the building characterization and condition assessment of their site. The building characterization shall include the information from Assignment 2 with any required revisions and a condition assessment of the site. This assessment shall identify observed types of damage and deterioration, assess their probable causes and level of severity, and propose recommended conservation work. The condition assessment shall be supported by photographs and the two elevation drawings prepared for Assignment 6. See detailed instructions on Brightspace.

Dataverse

All assignments are to be submitted as PDFs on Brightspace. All supporting material and raw data gathered (e.g. images, survey data, CAD drawings, ortho-corrected images, etc.) for the production of the assignments and the final Conservation Report must be submitted to Dataverse. For the submission of supporting material, the digital file format and naming protocols provided on Brightspace under the course outline must be followed. To upload the data onto Dataverse, a team member should be appointed to create a Dataverse account and request access to the dataset for your group's site. Email the course instructor by **April 2nd** to request access to the dataset, providing the name of the site and the Dataverse account name of the student who will upload the data. See the Dataverse protocol and File Naming Protocol on Brightspace for more information.

Academic dates

Students should be aware of the academic dates (e.g. last day for academic withdrawal) posted on the Registrar's office web site <https://carleton.ca/registrar/registration/dates/academic-dates/>

Instructor Bio

Elyse Hamp is a PhD Candidate in Civil Engineering at Carleton University, Team Lead at the Carleton Immersive Media Studio (CIMS), CIPA-HD Emerging Professional, and Manager of the UNESCO Research Chair on Digital Twins for the Conservation of World Heritage, co-chaired by Professor Mario Santana (Carleton University) and Professor Veronica Heras (Universidad del Azuay). Her graduate research focuses on the structural analysis and non-destructive testing of historic unreinforced masonry using digital tools and numerical analysis. She completed her MSc in Civil Engineering in 2021, on the seismic analysis of unreinforced masonry structures with plan irregularities using the Applied Element Method. Elyse has worked internationally with the University of Minho on the HeritageCare preventive conservation project and on cultural heritage documentation projects in Myanmar, Italy, and Peru. She has worked as a Teaching Assistant at Carleton University since 2019, instructing engineering statics and mechanics, site recording techniques, and building pathology.

Academic Integrity and Plagiarism

- a) Please consult the Faculty of Engineering and Design information page about the Academic Integrity policy and our procedures: <https://carleton.ca/engineering-design/current-students/fed-academic-integrity> Violations of the Academic Integrity Policy will result in the assignment of a penalty such as reduced grades, the assignment of an F in a course, a suspension or, expulsion.
- b) One of the main objectives of the Academic Integrity Policy is to ensure that **the work you submit is your own.** As a result, it is important to write your own solutions when studying and preparing

with other students and to avoid plagiarism in your submissions. The University Academic Integrity Policy defines plagiarism as “presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.” This includes reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source.

Examples of violations of the policy include, but are not limited to:

- any submission prepared in whole or in part, by someone else;
- using another’s data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one’s own; and
- failing to acknowledge sources of information through the use of proper citations when using another’s work and/or failing to use quotations marks.

Generative AI Statement

AI use in this course: Students may use AI tools for ideas, clarifying challenging concepts or getting started on projects. Some acceptable uses include:

- Assignment 3 exercise using NotebookLM or Logically.app for basic literature analysis.
- Sounding board (e.g. generating essay topics with ChatGPT, using Microsoft Word’s Smart Lookup or Copilot to find inspiration and related topics).
- Providing definitions or explanations of complex concepts (e.g. using AI to explain a difficult theory or to find relevant information). Note that these definitions **MUST** be supported by peer-reviewed publications. The use of AI in this context is only to aid in the basic understanding of the concept as a starting point, and from there, peer-reviewed publications must be used to support written content for any course submissions. **All writing and content for course submissions must be your own.**

Documenting use of AI: It is not necessary to document the use of AI for the permitted purposes listed above. If you have questions about a specific use of AI that isn’t listed above, please consult your instructor.

Why have I adopted this policy? This policy ensures that student ideas and learning are prioritized and authentically represented, maintaining the integrity of the work produced by students while allowing basic support to enhance clarity, correctness, layout and flow of ideas. The goal of adopting a limited use of AI is to help students develop foundational skills in writing and critical thinking by practicing substantive content creation without the support of AI.

Limitations: Students may not use AI to generate any content for the course submissions. AI may only be used as a tool to aid in the learning process, as described above.

Copyright

The materials (including the course outline, slides, posted notes, videos, labs, projects, assignments, quizzes, exams, and solutions) created for this course are intended for personal use only. They may not be reproduced, redistributed, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without written permission from the author(s), both during and after the semester.

Learning and Working Environment

The University and all members of the University community share responsibility for ensuring that the University's educational, work and living environments are free from discrimination and harassment. Should you have concerns about harassment or discrimination relating to your age, ancestry, citizenship, colour, creed (religion), disability, ethnic origin, family status, gender expression, gender identity, marital status, place of origin, race, sex (including pregnancy), or sexual orientation, please contact the [Department of Equity and Inclusive Communities](mailto:equity@carleton.ca) at equity@carleton.ca

We will strive to create an environment of mutual respect for all through equity, diversity, and inclusion within this course. The space which we work in will be safe for everyone. Please be considerate of everyone's personal beliefs, choices, and opinions.

Academic Accommodations

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at **613-520-6608** or pmc@carleton.ca.

You should request your academic accommodations in the [Ventus Student Portal](#), for each course at the beginning of every term. For in-term tests or midterms, please request accommodations at least two (2) weeks before the first test or midterm. Please consult the [PMC website](#) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Accommodation for Student Activities: Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see the [Senate Policy on Accommodation for Student Activities \(PDF\)](#).

Pregnancy Obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [Student Guide to Academic Accommodation \(PDF\)](#).

Religious Obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, please review the [Student Guide to Academic Accommodation \(PDF\)](#).

Survivors of Sexual Violence: As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit the [Sexual Violence Prevention & Survivor Support](#).

Engineering Academic Advising

[The Engineering Academic Support Service](#) assists undergraduate engineering students with course selection, registration, and learning support from first-year through to graduation.

Academic Advisors Contact can be found here: <https://carleton.ca/engineering-design/current-students/undergrad-academic-support/undergraduate-advisors/>.

Student Mental Health and Wellness

As a university student you may experience a range of mental health challenges that can significantly impact your academic success and overall well-being. Carleton's [Wellness Services Navigator](#) is designed to help students connect with mental health and wellness resources.

If you need to talk to someone from the department for more information and support with connecting to resources, you can contact the following faculty members, depending on your program. Or contact the department at CEEUGChair@cunet.carleton.ca.

ACSE: Prof. [Elie Azar](#)

Email: Elie.Azar@carleton.ca, Office: 3432 Mackenzie

CIVE: Prof. [Christian Viau](#)

Email: Christian.Viau@carleton.ca, Office: 4535 Mackenzie

Here is a list of on-campus and off-campus resources:

1. **Carleton's Wellness Desk:** Located at [204A MacOdrum](#) Library, is a space for students to learn about resources, connect with our Wellness Coordinator, and decompress during stressful times of the year. You can pop into the Wellness Desk any time during its hours of operation – no appointments necessary! <https://wellness.carleton.ca/mental-health/wellness-desk/>
2. **Carleton's Health and Counselling Services:** To book an appointment contact the main clinic by calling (613) 520-6674. If urgent, let the Patient Care Coordinator know or go in person to the main clinic (2500 Carleton Technology and Training Centre Building) and indicate that they are in crisis and need to speak to someone right away. <https://carleton.ca/health/>
3. **Residence Counselling and Wellness Service:** Counselling services specifically for students in residence. <https://carleton.ca/health/residence-counselling/>
4. **Therapy Dogs:** Carleton's therapy dogs are around campus with their owners (who are Carleton University staff and faculty) to comfort and provide support to help you thrive as a university student. <https://wellness.carleton.ca/mental-health/therapy-dogs/>
5. **Emergencies and Crisis and Emergency Numbers**
6. **Good2Talk (1-866-925-5454):** Good2Talk is a free, confidential helpline providing professional counselling and information and referrals for mental health, addictions and well-being to post-secondary students in Ontario, 24/7/36 <https://good2talk.ca/>
7. **The Walk-In Counselling Clinic (off-campus community resource):** The Walk-in Counselling Clinic has offices in various locations across Ottawa and the greater Champlain region that are open 7 days a week. Individuals will be assisted, with no appointment, on a first-come, first-serve basis during the Walk-in Counselling Clinic hours. The Walk-in Counselling Clinic **offers services in many languages** and is free and confidential. More information can be found at: <https://walkincounselling.com/>
8. **Distress Centre of Ottawa and Region:** Available 10am-11pm, 7 days/week, 365 days/year. **Distress Line:** 613-238-3311, **Crisis Line:** 613-722-6914 or 1-866-996-0991, **Text:** 343-306-5550. <https://www.dcottawa.on.ca/>
9. **Distress and Crisis Ontario,** Available for chat 2 pm – 2 am EST. <https://www.dcontario.org/>

10. **BounceBack Ontario (Toll-Free: 1-866-345-0224)** is a free skill-building program managed by the Canadian Mental Health Association (CMHA). It is designed to help adults and youth 15+ manage low mood, mild to moderate depression and anxiety, stress or worry. Delivered over the phone with a coach and through online videos, you will get access to tools that will support you on your path to mental wellness. <https://bouncebackontario.ca/>.