



Carleton
UNIVERSITY

DEPARTMENT OF
Cognitive Science

INFORMATION FOR RETURNING B.COG.SC. STUDENTS FALL 2023

PROGRAM REQUIREMENTS - THE CALENDAR VS. YOUR AUDIT:

- Your audit always lists the program requirements for the year you enrolled in your program (this is indicated at the top of your audit as the Catalog Year).
- The main page of the Undergraduate Calendar lists the current program requirements. You can access previous versions of the Calendar in the online archives here: (<http://calendar.carleton.ca/archives/>).
- You can switch to the current catalogue year by e-mailing registrar@carleton.ca with your request. Please note that you **cannot** switch to a non-current catalogue year (e.g., you can't switch back if you change your mind). We encourage you to run a 'what-if' audit before switching catalogue years to make sure you are happy with it. Please contact Melissa (melissa.lett@carleton.ca) should you require assistance with this.

THINGS TO KEEP IN MIND GOING INTO 2ND YEAR:

- You should be taking CGSC 2001 and CGSC 2002. For the 2023-24 academic year, CGSC 2001 AND 2002 will be offered in both semesters. These courses may be taken simultaneously or in any order.
- You should make sure to stay up to date with courses in your Major and in your Concentration.
- Students enrolled in the Cognition and Computation Concentration must take COMP 1005. However, students registered in all other concentrations are encouraged to register in CGSC 1005. Having one of these courses is mandatory and serves as a prerequisite to CGSC 3601, which you will need to graduate with an Honours degree.

THINGS TO KEEP IN MIND GOING INTO 3RD YEAR:

- If you are taking Co-op, you need to enroll in COOP 1000 (CGPA cutoff is 8.5) in the fall term. If you have questions regarding Co-op, please contact our Co-op advisor, Nadiya Slobodenyuk (nadiya.Slobodenyuk@carleton.ca).
- If you are going to do the Honours thesis pathway you need to enroll in CGSC 3908 this year (Major/Concentration CGPA requirement is 8.0, and an override is required). You should also be starting to think about possible advisors for CGSC 4908 (Honours Thesis) for the following year. More information about the Honours Thesis process will be provided in CGSC 3908.
- Keep up to date with 3000+level CGSC courses. In addition to CGSC 3908 and CGSC 3601, we also offer CGSC 3004: Philosophy and Cognitive Science, CGSC 3201: Cognitive Processes, CGSC 3301: Language

and Cognitive Science, CGSC 3501: Cognitive Neuroscience, CGSC 3603: Artificial Intelligence: Philosophical and Ethical Issues, CGSC 3704: Cognitive Science and the Digital Humanities, and CGSC 4601: Cognitive Modelling in Cognitive Science.

- If you have not taken either CGSC 1005 or COMP 1005, take one of them this year (see above for details as to the one recommended for your concentration). Taking one or the other is a pre-requisite for CGSC 3601. If you have taken one of these courses and are in the Honours Degree, you can take CGSC 3601 this year.

THINGS TO KEEP IN MIND GOING INTO 4TH YEAR:

- If you are planning on applying to graduate programs and/or apply for graduate scholarships, make sure you are aware of the relevant deadlines. Many graduate scholarship applications are due in early fall.

- Make sure to take CGSC 3601 (see above) if you've not already done so.

- CGSC 4908 has three sections (A, B, and C). If you've not taken this course before, make sure you have registered for Section A. To register you must meet submit a completed thesis contract form (see here: [CGSC-4908-HONOURS-THESIS-CONTRACT-updated2022-1.pdf \(carleton.ca\)](#))

- Note that we also offer CGSC 4909 – the Honours Project course (1.0 credits). If you are interested in getting some research experience, but are not doing the Honours Thesis, you should consider this course. There is no GPA requirement for registering for this course, but you must have 4th-year standing in the Cognitive Science Honours program. Spots are limited.

- We are offering two special topics course in the 2023-2024 Academic Year. CGSC 4900A: Introduction to Meta-Analysis, will be offered in the Fall, and CGSC 4900B: Hyperdimensional Cognitive Models, will be offered in the winter. Please see the course descriptions and prerequisites, below.

CGSC 4900A: INTRODUCTION TO META-ANALYSIS: PRACTICALITIES AND PITFALLS

Are you curious about the overall consensus within a field on a specific topic, such as the impact of stress on exam performance? Meta-analysis is a powerful tool for evaluating collective insights across various studies. In this course, we will explore meta-analytic papers in cognitive science and related disciplines, learn techniques for conducting systematic literature reviews (e.g., using COVIDENCE), extract pertinent summary effect sizes, and synthesize this information through meta-analysis. Students will engage in discussions on weekly topics and collaborate on a group project to meta-analyze a research question developed with the instructor. By the end of the course, students will possess a solid understanding of how to conduct and assess meta-analyses, as well as practical knowledge of their applications and limitations. Prerequisites: 4th year standing in Cognitive Science Honours Degree

CGSC 4900B: HYPERDIMENSIONAL COGNITIVE MODELS

Modelling cognition using artificial intelligence techniques such as reinforcement learning, vector-symbolic models, neural networks, and/or machine learning. Prerequisites: CGSC 3601 and 4th year standing in Cognitive Science Honours Degree

In addition to your course requirements, it is important to be aware of CGPA requirements needed for graduation. Please refer to your audit for more information and contact [Melissa](#) if you have any questions.