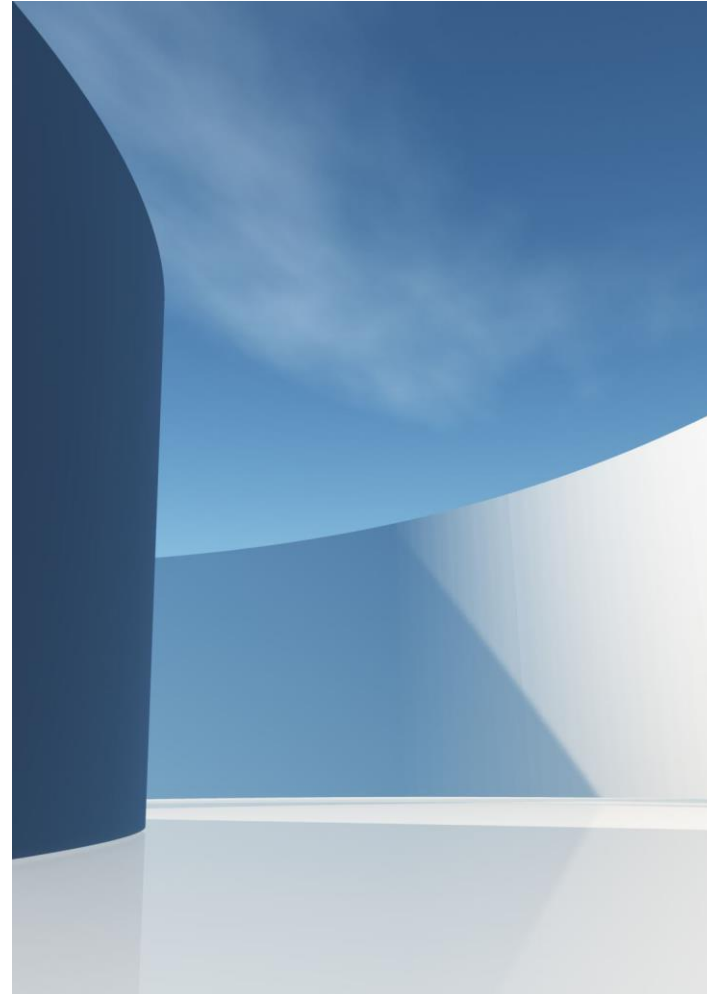


INFORMATION SESSION SYSC 4907

Winter 2026



Topics of Discussion

- SYSC 4907: The Course
- The 4th Year Project
- Project Selection
- Opportunities beyond the Course Outline

Project Website

- All information about the project is on the web.
 - <https://carleton.ca/syst/sysc4907/>
 - Links: Notices, FAQ and Deadlines
 - Read the website before asking questions

Systems and Electronics

- SYSC 4907 Systems Projects
- ELEC 4907 Electronics Projects
- Type of project is determined **by supervisor**, not by the students
 - Systems Project: Supervised by Systems Faculty
 - Electronics Project: Supervised by Electronics Faculty
- Free movement of students between departments
 - CSE
 - COMM, SE and Biomed: expected that you do a project under a Systems supervisor
- **All information in this session is for projects supervised by Systems Faculty only.**

Project Registration

- Works like any other course, you register via Central Carleton, if you meet the prerequisites
 - Must register for Fall and Winter
 - If you change your projects, make sure you change your registration
 - Systems project to Electronics project
 - Electronics project to Systems project
 - Incorrect registration causes delays in graduation
- Choosing your project: "Project Selection"

Project Registration cont'd

- Prerequisite: 4th year Engineering Year Standing and Professional Practice ECOR 4995 (May be taken concurrently)
- Some projects may have additional prerequisites
- In the Systems Department:
 - **All** prerequisites are enforced
 - Co-op students may **not** take the project during a work term

Summer Projects?

- I only have one course left. I could graduate in the Fall. May I do my project over the summer?
- The System Department does not offer the project over the summer. Why?
- The philosophies behind the project include more than just the technical execution of a solution
 - Time management—over a long period, competing duties
 - Public presentations
 - Peer assessment

The 4th Year Project

- An example of good engineering analysis and design that demonstrates your engineering skills
- At least 200 hours... average 8 hours per week
- Work under the supervision of a faculty member...
 - Meetings, milestones, applying engineering processes
- But the initiative for keeping your project on schedule must come from you
- Good Engineering also requires communication & documentation

Group Projects

- Engineering Accreditation requires team experience: **No individual projects allowed**
- For all deliverables, there is a choice between individual and group reports
 - Each individual may write their own OR
 - A common group portion is prepared and shared by all members, followed by individual contributions
- It is the **supervisor's** decision with the following stipulations:
 - Each individual must contribute an equal portion
 - The author of each portion must be clearly evident
- Every student receives an individual mark

Department of Systems and Computer Engineering



Available Capstone Projects

Training, Health and Safety

- WHMIS Training
- Soldering Training
- These will be assignment in Brightspace
- Item left by groups need to clearly labeled with the group number and contact information. Items not labeled will confiscated or disposed of at the department discretion.

March to May

● **Select your projects**

Explore the **projects** offered by the supervisors. Then complete this **form** to select your 5 preferred projects.

June

● **Project assignment notification**

The department will assign a project to you, based on your preferences. The assignment will take into account the group size and possibly the decision of the project supervisor. You will be notified of the project assigned to you before registration.

July to early September

● **Courses registration**

At the time you register for your courses for the Fall term, you will have been assigned the section of SYSC 4907 associated to your project supervisor. You only need to add the other courses you wish to take.

SYSC 4907 has a designated meeting time; it is added to make sure that all students of your project group are available at that time so that you can all meet and work on the project.

Early Fall term

● **Project proposal**

The purpose of the proposal is to introduce the project that you will construct over the course of the next year. The proposal should be written in such a way that it can be understood by a person not familiar with the project [...].

Project Timeline- Before Fall Term

- The SYSC 4907 website will have a list of project proposals, which will get populated over the next few weeks and months
 - Check regularly
 - More on how to select a specific project later

Project Timeline- Fall Term

- Project Selection and Course Registration
 - Early to mid September, deadlines on website
- Proposal (Mid-late September, but please check with your supervisor):
 - To convey the major objectives and the engineering challenges of the proposed project
 - Driven by project proposal and in discussion with project supervisor
 - To present an initial plan for the work to be done by each member (timetable)
- Progress Report (End of Fall Term)
 - A mid-point checkup on the progress achieved, with reference to the original proposal
 - A chance to re-define your project, now that you know more
 - A (refined) plan for the final term
 - Rule of Thumb: All research, requirements & design complete

Project Timeline- Winter Term

- Oral Presentations
 - Within a strict fixed 10-minute period, you present your work thus far to your supervisor, a 2nd reader and your peers
 - A visual performance, requiring different skills
- Poster Fair
 - A poster display will exhibit the final product of your project
 - Visitors will be wandering about, asking you questions whenever interested. It's a chance for you to talk about your work
- Final Report (End of Winter Term):
 - To fully document the engineering of your finished product
 - Ideal Goal: allow the use and continuation of your work
 - Major component of your final grade

4TH YEAR CAPSTONE PROJECT POSTER FAIR

Join us and discover the innovative projects
created by our 4th-year students!

MARCH 27

10:00 AM TO 3:00
PM RICHCRAFT
HALL



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Beside deliverables, during the term

- How much work is expected from me?
 - Rough rule of Thumb: minimum 8 hours/week
- How can I get a good mark on the project?
 - A project must contain all engineering elements: requirements analysis, design, implementation, testing and documentation
 - The technical work must reflect the methodologies taught in courses
 - The best projects are marked by creativity and initiative
- Bottom Line: **the project is your responsibility**
 - Supervisors can only remind/ guide/ criticize you

Getting Down to Work

- How often should/can I meet with my supervisor?
- What do I do in our meeting?
- What can I ask my supervisor?
- I've got 3 midterms, 5 labs. I can't work on my project.

Selection Process

- When: Anytime between now and mid September
 - First Come First Serve: Projects get full
 - During the summer, many supervisors are away; so please try and reach out sooner rather than later
 - Every student will have a project, but the early birds get the projects/ supervisors that they want
- How:
 1. Read the project descriptions on the web
 2. Talk to supervisors (email to arrange appointments)
 - Some projects have prerequisites
 - It's up to you: **Treat it like a job search**
 3. Reach agreement with supervisor, **then....**

Project Selection Form

- Complete the on-line **Project Selection Form**
 - Once submitted, the agreement between you and the supervisor is formal:
 - The supervisor will hold a spot for you.
 - **An initial group number will be assigned, although group numbers may be changed in late September**
 - The current list of projects will be available online
 - Projects/ Professors that become full will be blocked
- If you decide to change projects
 - Selection of a second project will not be permitted until you first notify the initial supervisor
 - Use the online system to drop the project then add the new.

Department of Systems and Computer Engineering



Capstone Projects Selection Form

Propose Your Own Project?

- Definitely!
- Criteria:
 - All or most aspects of engineering: requirements, analysis, design, implementation, testing
 - Makes use of course work but goes beyond; requires independent learning
 - Beyond integration of existing parts; some part must be your own creation
- Still a group project needs team members!

Grading

- Unlike other courses: No fixed percentage breakdown
- Key players: Supervisor, second reader
- Final project is the most important factor but
 - Each deliverable contributes
 - Your conduct contributes
- We try to assign the same person as second reader for oral/poster/ final report

The Project Coordinator

- Coordinates departmental events (selection, presentations/poster fair)
- Ensures that all student have a project
- Ensures workload is evenly distributed among faculty
- Last resort for students looking for projects
- Can provide guidance but **is not involved in the project** and does not evaluate any deliverables
- **Required in all communication: Group number (if you are in a project group already)**
 - Email- ug-projects@sce.carleton.ca
 - Undergrad admin: ugadmin@sce.carleton.ca

Supervisors vs. Coordinator

- Coordinator
 - Looks after overall administration of the projects
 - Organizes project-wide events
 - Is a person to help when troubles arise
 - Has no involvement in the project itself (not a co-supervisor)
- Supervisor
 - Responsible for regular supervision of progress
 - Responsible for informing student of all project requirements
 - Governs the format of the project deliverables, within the guidelines stated for the project.
 - Responsible for providing any resource required by project
 - Responsible for evaluating student and the project deliverables

Opportunities

- Competitions
 - Regularly check your emails and look on the website for updates on new opportunities
- Patents
- sWall
- Departmental Toystore/Video Competition
 - We're looking for off-the-shelf demos on a CD that we can use in University Open Houses

Project Website

<https://carleton.ca/syst/sysc4907/>