

EECS 4088 Project Course Contract, Gateway to C4

Course: EECS 4088 6.0 Computer Science Capstone Project

Term: AY2024-25, F24-W25

Project title: Cross-Campus Capstone Classroom (C4), “C4 Odyssey 6.0”

(Nominal) Supervisor name (email): Melanie Baljko, baljko@yorku.ca

Student name:

Student number:

Student's email:

Administrative Note

Under typical conditions, students who wish to enroll in “EECS 4088 6.0 Computer Science Capstone Project” identify a suitable project and project supervisor, develop a project contract, and submit it for approval by the EECS4088 course coordinator. Students in EECS4088 must have a completed and signed contract in place in order to enrol. This condition is enforced by the EECS4080 Coordinator, as per departmental requirements.

The course EECS4088 is being used as a gateway course for C4. This presents challenges because the student does not have full project information available prior to the start of the course. This information gets developed at the start of the C4 course, under the direction of the C4 teaching team.

Therefore, this Project Course contract is being used as a substitute. It specifies as much information as possible.

Project Description: General

From <https://www.yorku.ca/c4/what-is-c4/program/>

C4 Odyssey 6.0, 24 weeks in School Year “This year-long course is student-driven, multi-disciplinary, and socially-engaged. It is for undergraduate students who want to own the whole process—from research to project management to outcomes. Teams of 5 to 10 students lead their own projects to address complex challenges that are pitched by partners and supported by on- and off-campus mentors.”

Project Course: Format

The course entails 36 hours of instructional contact.

The course meets in person, Fridays 2:30-5:30pm, Location: Bergeron 211, 213 and 217

Project Description: Specific

The cross-campus capstone classroom projects allow students to work with a group of other students from at least 3 different undergraduate degree programs on a community-based project tied to the sustainable development goals. Teams are expected to use the skills they collectively bring to the challenge, to research and understand a challenge question posed by their community partner, and design and implement a solution to the challenge.

As part of C4, students will reflect on the importance of each discipline in their team, and how each brings different tools, perspectives and values, formulate a strategy for designing a way to address the objective, apply appropriate concepts and fundamentals, theories and practices to address the issue/problem, justify the strength and limitations of the planned approach and make recommendation for possible improvements, recognize possible unintended consequences of the approach, define the scope of the approach proposed, perform preliminary testing, break down the complex task into smaller, more manageable tasks, determine the necessary schedule and timelines to complete the project, monitor project risks, reflect on the team and project activity, and provide peer feedback or every team member.

The specific requirements of the assigned C4 project have been captured separately, and will be shared with students once they are assigned to a project and team.

Requirements

- Must have applied to the C4 course and received confirmation of acceptance into the course.
- Must meet the pre-requisites of EECS4088:
 - cumulative GPA of 4.50 or better over all major EECS courses (without second digit “5”);
 - completed LE/EECS 2030 3.00 or LE/EECS 1030 3.00; and
 - Normally restricted to students who have taken 36 credits in computer science

Resources Provided

Students shall have access to a project budget, to be used by the team, per the instructions on the C4 class page.

Readings

C4 course readings will be made available through the C4 eclass page.

Project-specific readings are provided via the specific project’s Sharepoint site.

Deliverables

The student shall produce a set of deliverables (individually or collaboratively). (The following details may be superseded by descriptions provided in the C4 eclass site). The key project deliverables consist of:

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A research/design portfolio at the end of the Fall semester, containing, as a minimum:

- The team charter and reflection of its effectiveness
- The project charter and its evolutions
- The reflection on the 5-whys deep-dive of the project
- The baseline design for the project implementation, including use-case diagrams, interface prototypes for any software deliverables, architecture diagrams, timeline for implementation and testing.
- The ethics roadmap for ethical implementation of the project
- The SDG impact assessment.
- The partner progress reports as evidence of project planning

An individual reflection on the Fall ITPmetrics activity

A fall project kick-off presentation at the end of the Fall semester, containing:

- An overview of the project challenge
- An explanation of how you intend to address it in the Winter semester
- The design overview for the approach
- How the team is breaking up the work

A winter “journey video” at the end of the Winter semester, capturing the complexities of the C4 journey.

A final project portfolio at the end of the Winter semester, containing:

- Implementation and test details of the as-delivered project output
- Legacy plan for the as-delivered project
- Reflection on the path to the as-delivered product
- Final as-used budget breakdown
- The partner progress reports as evidence of project planning

An individual reflection on the Winter ITPmetrics activity

An individual “My September self” reflection video at the end of the Winter semester, to detail what the student would have wished to have known at the start of the project, on reflection from the end of the project.

A capstone day pitch, poster and materials.

Milestones List

The following is a nominal timeline, subject to in-class adjustment as required:

1. by week 4: Teamwork and collective leadership deliverable completed. First partner progress report completed.

2. by week 5: Team values and charter completed.
3. by week 6: Ethics roadmap reflection completed.
4. By week 7: 5 whys and Second partner progress report completed.
5. by week 10: SDG impact assessment tool completed.
6. by week 12: Project research/design portfolio submitted including Personality ITP metrics reflection. Project kickoff presentation delivered.
7. by week 16: Third partner progress report completed.
8. by week 19: Fourth partner progress report completed.
9. by week 22: Final partner progress report completed.
10. by week 23: Project legacy plan completed.
11. by week 24: Journey presentation delivered.
12. by April 26th: Full final portfolio delivered, including Team ITP metrics reflection.
Individual “My September” reflection video complete. Capstone presentation complete.

Grading and Assessment

Skill Development (50%). This includes marks based on the development of input, reflection and growth as the student moves along their C4 journey.

Breakdown:

- 20% engagement includes 10% in the Fall and 10% in the Winter
- 20% ITP metrics assignments + Reflection [10% fall – ITP Personality reflection and 10% Winter -ITP Team reflection]
- 10% “My September Video” [Fall]

Project Development (50%): This category is mainly focused on outcomes such as project-based learning, plans, portfolios and final presentations/outcomes of the project

Breakdown:

- 20% Research Design Portfolio [Individual and Team]
- 20% Final Project Portfolio [Individual and Team]
- 10% Capstone Day Presentation [Individual and Team]

The C4 teaching team will propose a final grade for the student’s work in the C4 course. It will be based on York University’s “Grades and Grading Schemes” as per the Academic Calendar:

<https://calendars.students.yorku.ca/2023-2024/grades-and-grading-schemes>.

Signatures

Student

C4 Teaching Team Member

EECS 4080 Course Coordinator