1 What is BME/ECE/SENG 499?

499 is a cross-listed course offered simultaneously to Biomedical, Electrical & Computer Engineering and Software Engineering students. 499 is a group project based course that allows you to demonstrate all the engineering skills you have acquired over the years. Usually, the best project as adjudicated by the IEEE Victoria Chapter will be awarded a cash prize!

2 How to get started with the 499 course?

To get started you need to form a team, choose a project and identify a faculty supervisor from the faculty community at UVic. For this course, it is recommended that the faculty supervisor is from the Faculty of Engineering. However, you can have a supervisor from another Sciences too.

Once you have identified your team and faculty supervisor, you need to inform the course coordinator with all these details by filling the Project Information form.

3 Project team formation:

Each team must have at least four members registered in the course. Other members can be from another department, faculty or organization.

3.1 Choosing a project

You and your team have three options to decide on a project

1. Choose a project from an industry/organization/club on campus that is already approved by the course coordinator. Usually, for industrial projects students might have to sign a Non-Disclosure Agreement with the organization.
2. Choose a project that is given out by a faculty member on campus.
3. Propose your own project

For options (1) and (2), please refer to the list of projects circulated/posted in CourseSpace. The list will be updated every week until the end of May.

3.2 Choosing a faculty supervisor

The third step in the process is to find a project supervisor at UVic. Please note, it is mandatory to have a faculty supervisor for your 499 project team without whom you will not be able to secure any grades! The faculty supervisor will be responsible for
1. Approving the project idea in terms of volume of work and quality
2. Supporting the team in overcoming technical challenges
3. Validating the correctness of the work done
4. Approving purchase of components
5. Assessing each team member’s contribution and awarding marks based on one’s work

Note: Faculty member supervises the projects on a voluntary basis. The faculty member will not get any course release because he/she supervises one or more 499 group projects.

It is strongly recommended to identify a faculty supervisor pertaining to the core area of the project. A file titled, “Research interests of faculty members” is uploaded in CourseSpace for your reference.

4 What next after submitting the “Project and team information”?

After the initial step, you and your team will start working on the project. To ensure timely completion of the project a few important steps ought to be followed.

To make sure all project groups check all the steps, marks are assigned to each of these milestone activities. The four major documents that need to be submitted are:

1. Work log: Work log is a document that is to be maintained by each member of the team starting from day 1 of the project. Work-log will be collected along with the final report. The document will indicate
   (a) the deliverables of the team member
   (b) actions carried out by the team member in accomplishing the objectives set out
   (c) time spent by the team member in each step
   (d) the challenges encountered and the means adopted to overcome them

   A sample work log will be uploaded in CourseSpace before mid-May. Work-log will be collected at the end of the term.

2. Progress Report: Progress report will comprise of a written document to be submitted to the faculty supervisor. A copy needs to be provided to the course coordinator/TA as well. More details on the expectations of the progress report will be posted on CourseSpace.

3. Webpage: Each project group is expected to create a webpage for its project. More details on this important aspect will be discussed later (usually after first progress report is submitted).

4. Final report: As the name suggests, each project team will submit a report at the end of the term detailing the work done.

Weights of each component is given below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Grade</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Report</td>
<td>25%</td>
<td>June 19 by 4:30 pm</td>
</tr>
<tr>
<td>Work Log</td>
<td>05%</td>
<td>July 31 by 4:30 pm</td>
</tr>
<tr>
<td>Webpage</td>
<td>20%</td>
<td>July 31 by 4:30 pm</td>
</tr>
<tr>
<td>Project Report</td>
<td>50%</td>
<td>July 31 by 4:30 pm</td>
</tr>
</tbody>
</table>

Please note that the public demo part of the project might be added, and the weights changed accordingly, depending of the COVID-19 situation.
5 What assistance do you get from the department?

Due to the present situation, there will be no access to labs or physical meetings between the group members.

The department of ECE offers assistance to all project groups in a couple of ways.

1. Limited funding in the form of reimbursement for approved components purchase. Each group is entitled for of up to $120 (Canadian Dollars) over the course of the term.
2. Access to laboratory space, equipment and software tools is provided throughout the term.

In order to avail either of these, each project group will have to submit a few forms.

1. To get reimbursements, each group is expected
   (a) To submit a letter of approval from the faculty supervisor for purchase of components.
   (b) To submit a copy of the invoice (an email copy or a print version).
   (c) To submit the proof of payment (credit card statement or receipt of payment).
2. To access lab space and lab equipment each member of the interested project group must
   (a) Send an email to the course coordinator requesting access to the lab/equipment.
   (b) Read, understand and sign the safety instructions to be followed in the labs. Please be aware that safety will not be compromised and hence students are advised to comply with the safety standards.

ECE/BME technical support staff includes:

1. Rob Fichtner rf@uvic.ca,
2. Paul Fedrigo pfedrigo@uvic.ca, and
3. Brent Sirna brent@uvic.ca.

SENG technical support staff includes: Lynn Palmer lpalmer@uvic.ca.

6 What is the role of the coordinator?

The course coordinator, with assistance from the TA,

- ensures all registered students have a project team to work with
- creates marking rubrics for different components and communicates to all the faculty supervisors
- approves reimbursement costs and provides access to lab space/equipment
- organizes the final public demonstration event and promotes it among the local community
- compiles marks from different faculty supervisors and assigns grades to all the students
- resolves conflicts arising within group members of a team
7 What is the role of the TA?

In addition to assisting the course coordinator with various activities, the TA is also responsible for marking the

- work-logs of the students
- a part of the progress report and final report submitted by the student groups
- webpages created by the students

8 FAQs

Question: I have a project from an organization with whom I did my coop. I have a project supervisor from the organization. Do I still need a faculty supervisor from the Engineering faculty at UVic?

Answer: Yes, a faculty supervisor from the Engineering faculty of UVic is mandatory. This is irrespective of any additional supervisor your team might have.

Question: I have a project from a company where I did my co-op. I found a faculty member to supervise my project. I have an industrial supervisor as 3rd member of my team. Is this acceptable?

Answer: No, this is not acceptable because you are the only member working (designing or writing a code or creating a website etc.) on the project. Other members of your team are only supervisors. To qualify your team must contain at least three more students who will work on some aspect of design & prototyping.

Question: I am working on a project that I believe has tremendous commercial potential. Can I have team mates from the Business department on campus to help me launch a product?

Answer: Yes, it is perfectly fine to have students from Business department as your team mates.

Question: I have a great project idea. However, I am not able to find any team mates. Can I work all by myself?

Answer: No, unfortunately you alone will not make a team. One of the key objectives of 499 is to ensure our engineering students have ability to work in a team. And thus you need to have a team.