

Accepting MEL in High Performance Building Capstone Project Proposals

Calling all building owners!

The [UBC Master of Engineering Leadership \(MEL\) – High Performance Building \(HPB\)](#) program is now accepting capstone project proposals until August 18, 2023. Capstone projects will be matched with groups of 3 to 4 High Performance Buildings students and will focus on developing an energy and carbon concept for a new building. The intent is to develop a vision for the approach to energy-use and emission-reduction at the earliest stage, before detailed design starts. Two key benefits to submitting a Capstone project:

1. Your project will be completed by students who are industry professionals with at least 3 years of related experience before enrolling in the MEL program.
2. This is a great way to work with and review experienced and uniquely educated individuals for any future job opportunities that you may have.

What will be my role as an industry partner?

- Provide a brief building project description.
- Attend two meetings with your student team throughout the project.

What needs to be included in my building project submission?

- Type of building (school, healthcare, daycare, residential, commercial)
- Size of building
- Location of building
- Phase of design – we should emphasize that we are looking for early stages – feasibility, concept, schematic design, ...
- Type of materials that can be provided to students – project description, programming, indicative design – only minimal descriptions are needed.

How can I learn more about being an industry partner?

- The HPB Capstone Instructor (Andrea Frisque) will be hosting a **Zoom meeting on Wednesday, June 7th at 12 noon** to discuss the HPB Capstone projects. HPB students will also be participating in this virtual event and you will have a unique opportunity to meet the students who may be working on your Capstone Project. To RSVP for this event, please contact mel@apsc.ubc.ca.

What is the timeline for the HPB capstone projects?

1. Attend the optional Zoom meeting on Wednesday, **June 7, 2023**
2. Send your project submission to Andrea by **August 18, 2023**.
3. The project will be completed September to December, 2023:
 - First 1.5 hr meeting with students between September 22nd to October 4th
 - Second 1.5 hr meeting with students between November 10th to 29th

What are the deliverables?

Students complete the project work under the supervision of Andrea Frisque, the HPB 506 Instructor. The deliverables are a **written project definition, written final concept and oral presentation**. (The project is completed in a 3-month timeframe.)

Assignment 1: Context

Students will provide the context to the project. The context addresses:

- Project understanding based on the industry partner's project description.
- The intention of the project and goals, as they relate to energy efficiency and GHG emissions.
- External requirements, such as bylaws, codes, and standards, to the extent that they impact energy efficiency and GHG emissions.
- Precedence – where have similar requirements been addressed before, and how? What does and what doesn't compare to the current task?
- What kind of tools, methodologies and technologies could be useful?

Assignment 2: Energy Concept

Develop one or two options at a concept level that could achieve the goals for this project.

Confidentiality?

Students share their work with UBC faculty and student colleagues in written form and via oral presentations. Reports are not posted publicly, except in cases where approval is obtained. If there are additional confidentiality procedures that you want to see followed, these will be confirmed in the project proposal at the outset.

If you are interested, please contact Andrea Frisque (afrisque@sala.ubc.ca) to submit your capstone project proposal for review.