



Engineering CO-OP/Intern - R&D Shellfish Aquaculture

- ☞ Hands on position with an incredible opportunity for your work to have impact an entire industry with focus on sustainable farming, energy and materials.
- ☞ Work within a small, young, energetic, fast-paced, team where YOU design AND build tools for the future of oyster farming.
- ☞ See projects through from start to finish, come up with solutions to open-ended problems and get involved in all aspects of design, analysis, building, testing and implementation.

Job Description:

Applied science students are invited to be actively involved in defining form, function, testing and implementation of new automated processes. The successful candidate(s) will gain hands on shellfish aquaculture industry experience and play a key role in designing and manufacturing new technology to improve shellfish farm production and efficiency. The machines they work on will be incorporated into the existing farm management infrastructure and further tested as they operate at commercial scale.

Co-op Student activities may include:

- ☞ Mechanical applications, electrical applications and process design
- ☞ CAD prototype design, testing and process auditing
- ☞ Machining, fabrication, assembly and installation
- ☞ Project management; Customer and stakeholder communication

Qualifications:

- ☞ Be familiar with power tools and fabrication
- ☞ Have an excellent work ethic and strong initiative
- ☞ Be team-oriented
- ☞ Follow written and verbal instructions
- ☞ Have excellent communication skills in English
- ☞ Be organized in their work
- ☞ Work effectively without direct supervision
- ☞ Be physically capable of lifting large weight (50 lbs)
- ☞ Be comfortable working on floating and/or uneven terrain on shore and on the water

Assets:

- ☞ Great with design – AutoCAD, Solidworks, etc.
- ☞ Experienced with: Machining & wood working ; Electrical wiring & troubleshooting
- ☞ Experience in marine aquaculture, agriculture and/or biology, equipment and/or metal manufacturing
- ☞ Experienced in a fast paced, deliverable based environment
- ☞ Comfortable with boats and the sea – can tie a bowline

You must be currently enrolled in a co-op/intern program and must be currently eligible to work in Canada.

How to Apply:

Please email résumés with cover letter and two references to info@novaharvest.com with “SEPT 2022 CO-OP Position” in the subject line. Your cover letter must highlight your assets, why you are interested in this project, and how your practical experience and skills apply to this position. Please indicate in your application the reason for which you are entitled to work in Canada: Canadian citizenship, permanent resident status, holding refugee status, or a co-op work permit.

Deadline to Apply: June 26th 2022

Applications will be reviewed and only successful applicants contacted for interviews once the deadline has passed

Barkley Sound Oyster Farming Innovation Project

Nova Harvest Ltd., in partnership with Huu-ay-aht Group of Businesses (HGB), is currently embarking on a multi-year project to improve the sustainability of the shellfish aquaculture industry by building, modifying, and designing new automated processes for oyster aquaculture. Together Nova and HGB aim to create a scalable, efficient oyster farming business, advancing the development of the Huu-ay-aht First Nation shellfish aquaculture program, creating jobs in remote/rural territory, and increasing sustainable seafood production in the Barkley Sound.

On-Going and New Project Activities:

- 🌀 On-Going: Platform building, welding and customized design iterations
- 🌀 Iterations on equipment designs once past the prototype stage
- 🌀 Iterations of oyster farm processing flow
- 🌀 5000 L ballast tank automation project
- 🌀 Design new lid system for oyster seeds in nursery to allow for upwelling flow
- 🌀 Testing, refining and validating installed alternative solar power generation equipment

Overall Engineering Applicable Sustainability Objectives:

1. *Environmental sustainability:* Increase environmental sustainability and performance in the seafood sector by adopting clean solar energy and new battery technology, constructing a work platform out of innovative new construction material, and improving the oyster farm tray design, culminating in the reduction of fossil fuel use and the risk of plastic debris from farming activities.
2. *Economic sustainability:* Increase economic sustainability and performance in the seafood sector by applying innovative technology and processes to modernize oyster farming, increase scalability, automation, efficiency, traceability, and, ultimately, production of farming and harvesting shellfish.

Location: Bamfield, BC

Bamfield is located on the west coast of Vancouver Island, in Barkley Sound and the traditional territories of the Huu-ay-aht First Nations. Bordered by the Pacific Rim National Park Reserve, it is in the heart of some of the most stunning scenery and finest hiking, diving, surfing, boating and fishing in Canada. Despite its remote location and small population, Bamfield has a thriving and welcoming community - community is important to us and Bamfield is a special one to be a part of. Candidates should be aware that Bamfield has a population of <300 people and is located >75km away from the nearest town at the end of a logging road. If you like exploring the rocky intertidal, remote islands and beautiful beaches, Bamfield is a great place to be.

Company: Nova Harvest Ltd

Nova Harvest Ltd. is an aquaculture company that applies innovative, science-based solutions to support the development of a sustainable shellfish industry in BC. We have a 10 year proven track record of innovation, design, development, and implementation of new technologies in shellfish aquaculture, from seed to farm. We strive for innovation, efficiency and sustainability. novaharvest.com/about-us/

Partners:

The Huu-ay-aht Group of Businesses strives to enhance the economic, social, cultural and environmental well-being of the Huu-ay-aht First Nations through initiatives that provide sustainable benefits for all. <https://hfnogroup.ca/>

Bamfield Marine Sciences Centre is a world-class teaching, training and research facility and a shared campus of the Universities of Victoria, British Columbia, Alberta, Calgary, and Simon Fraser University. BMSC member university students are encouraged to apply. <https://www.bamfieldmsc.com/>

