

Case Study

University of Ottawa and CASTL partner to strengthen biomanufacturing education



40

students trained

98%

Average
satisfaction rating

100%

Reported career
interest

Since 2024, the University of Ottawa has partnered with CASTL and OHRI's Biotherapeutics Manufacturing Centre to offer a three-credit graduate course as part of uOttawa's Microprogram in Biomanufacturing.

The course connects academic learning with industry-informed training through access to equipment, expert speakers, and specialized lab and facility visits at the Ottawa Hospital's Biotherapeutics Manufacturing Centre (BMC).

Blending academic learning and industry practise

As Canada's biomanufacturing sector grows, post-secondary institutions need new ways to bridge academic learning to industry. In partnership with CASTL, uOttawa's Principles of Manufacturing course brings industry expertise, evolving curriculum, real-world processes, and career pathways into the classroom.

Student feedback



High Satisfaction



Stronger Sector Understanding



Increased Career Interest



Confidence in Workplace Skills

"[The strengths of this course were] demystifying the bench-to-bedside process, preparing students for industry work, and showcasing the interdisciplinary nature of biomanufacturing."

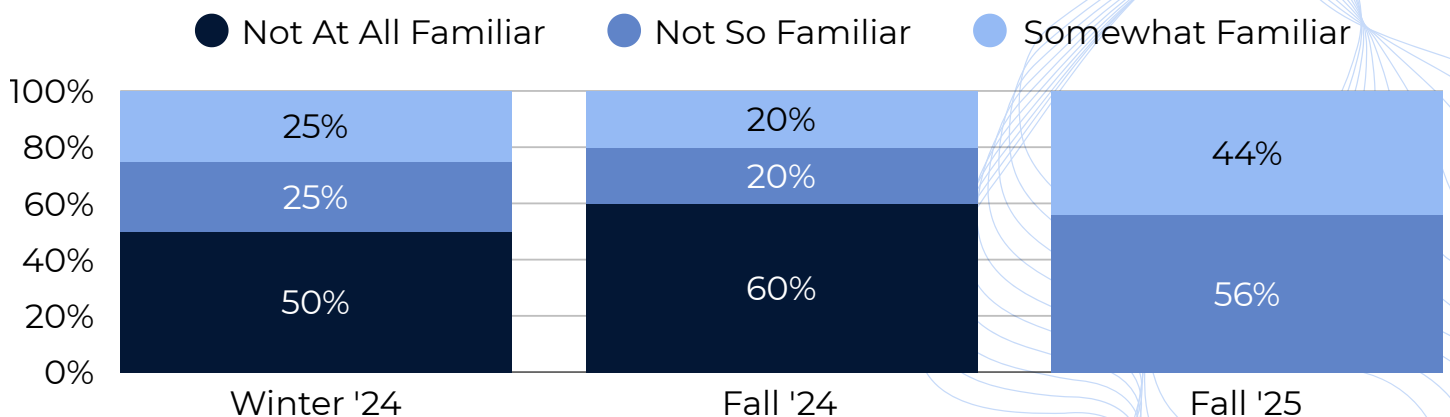
"The real-world applications, by seeing the spaces that we were learning about, helped solidify my understanding."

"I understand the inner workings of the biomanufacturing industry much better than I did before, and I feel like I would be able to work in biomanufacturing now."

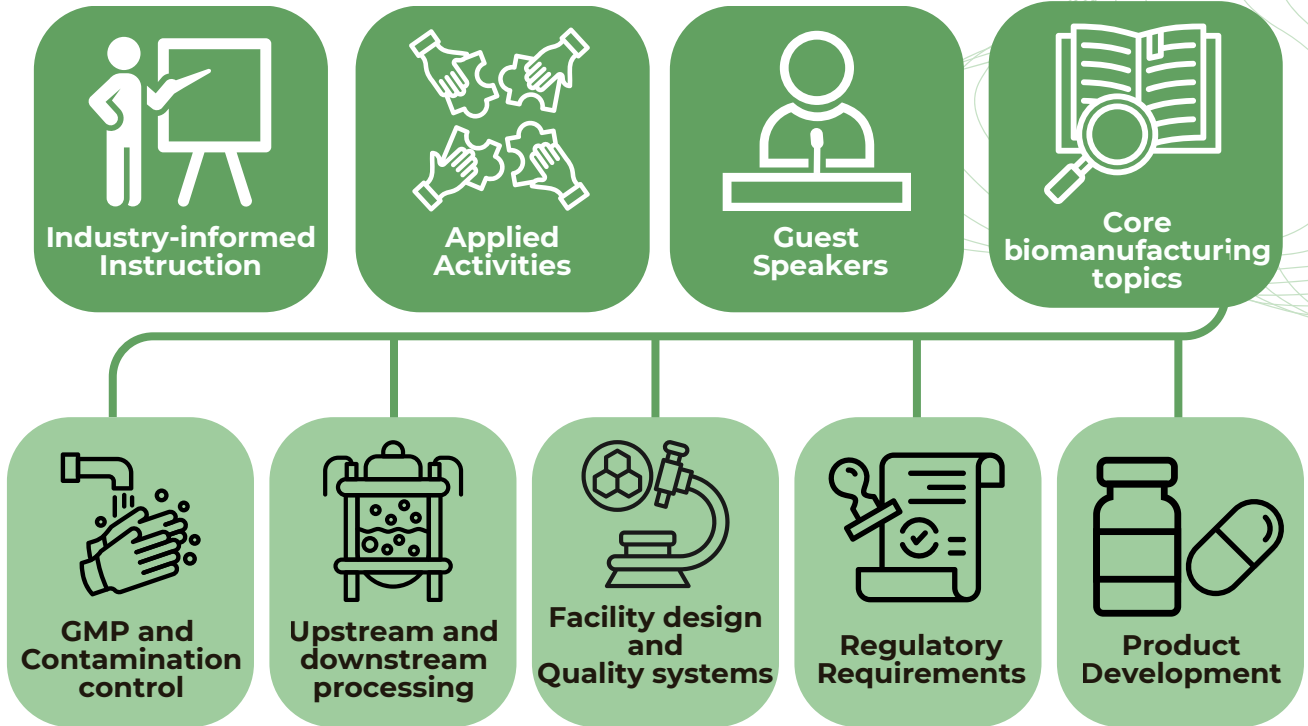


The challenge: limited sector familiarity

Many students enter life sciences programs with strong scientific foundations but limited exposure to biomanufacturing operations. Before taking the course, most students reported low familiarity with the biopharmaceutical manufacturing industry and associated processes.



The solution: Applied learning, including:



“By guiding each cohort through key topics in biomanufacturing, we’re able to spark enthusiasm for a field many trainees are discovering for the first time. I look forward to building on the success of this course and expanding it to other locations.”

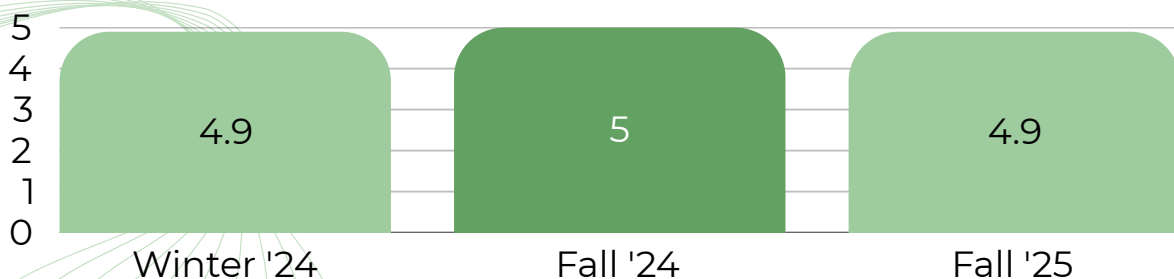
– Sven Ansorge, CASTL Director of Technical Training/Site Lead Montreal



The impact: Consistently high satisfaction

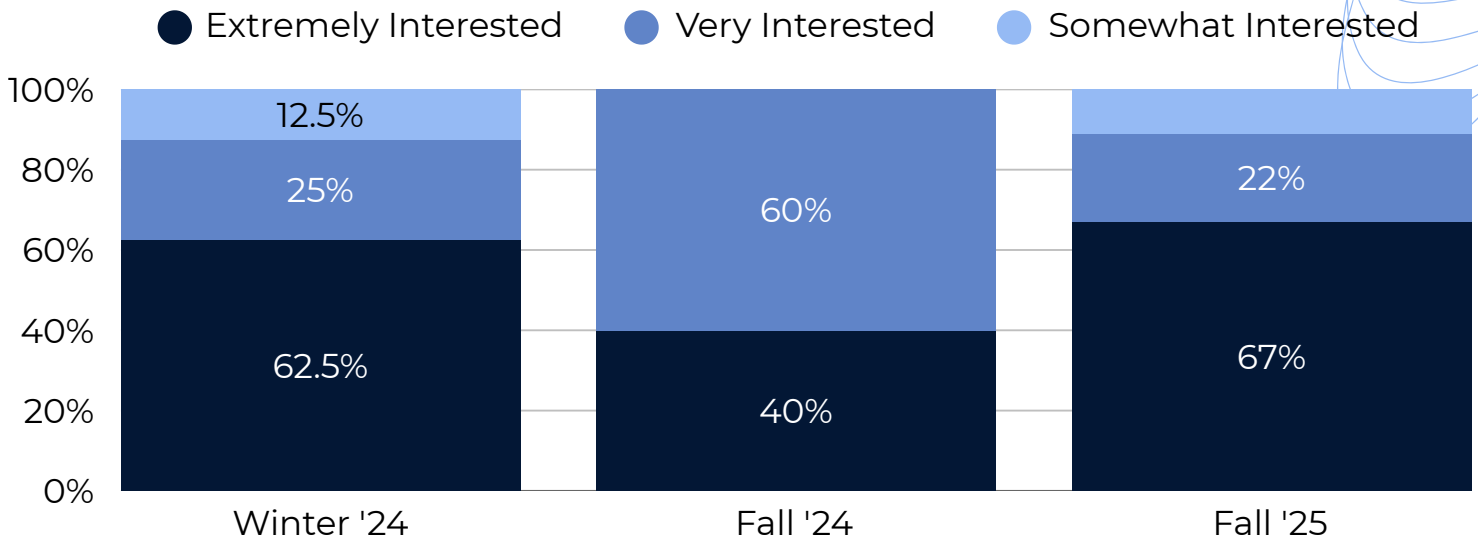
Student satisfaction was strong across all cohorts, with an average 4.9/5 rating.

n = 40 students



Clear increased in career interest

After completing the course, all respondents reported some level of interest in biopharmaceutical manufacturing or biological and advanced therapeutics, showing the partnership's value in turning limited awareness into meaningful career interest.



“As biomanufacturing continues to outpace traditional program development, CASTL’s expert-led, rapidly evolving curriculum demonstrates a new model for delivering industry-relevant training. Strategic partnerships like this will be essential to keeping pace with the evolving needs of students and the sector.”

– Jennifer Quizi, Director of Scientific Operations – OHRI-BMC; Adjunct Professor, Department of Biochemistry, Microbiology and Immunology, University of Ottawa

Why this partnership matters

Strengthens applied learning in a specialized and growing sector

Connects science education to practical industry expectations

Builds awareness of biomanufacturing career pathways

Brings industry expertise and guest perspectives directly into the classroom

Supports institutional goals related to experiential learning, employability, and workforce alignment

Conclusion

The University of Ottawa's partnership with CASTL demonstrates how **post-secondary institutions can enrich academic programming with practical, industry-informed biomanufacturing training.**

Across three cohorts, **students reported high satisfaction, stronger career interest, and increased confidence** in their understanding of the sector.

For institutions looking to better align academic programming with workforce needs, **CASTL offers a practical and effective partnership model.**



"This course positions uOttawa students at the heart of Ottawa's growing biotherapeutics and precision medicine ecosystem. Through our partnership with CASTL and the BMC, we ensure our graduates enter the workforce not just with knowledge, but with the applied skills and industry perspective to make an immediate impact in a sector that will define Canadian health innovation."

– Carolina Ilkow, Senior Scientist, Centre for Innovative Cancer Research, Ottawa Hospital Research Institute, and professor, Department of Biochemistry, Microbiology and Immunology, University of Ottawa

Source notes

Data summarized from University of Ottawa Principles of Manufacturing Course Feedback reports: Winter 2024, Fall 2024, and Fall 2025. Charts use student survey results reported in the three feedback documents. Winter 2024 satisfaction is approximated from the visible rating distribution because the exported average field appears to display incorrectly.

About CASTL

The Canadian Alliance for Skills and Training in Life Sciences (CASTL) is **Canada's biomanufacturing training partner**, focused on developing job-ready talent for the country's growing life sciences sector. CASTL delivers **hands-on, industry-informed training at its state-of-the-art, GMP-simulated training facilities** across Canada in Charlottetown (PEI), Montréal (QC), and Vancouver (BC), combined with flexible online learning.

For more information on CASTL training programs:

Email:

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Website:

castlcanada.ca



Canadian Alliance for Skills and
Training in Life Sciences
adMare Academy Partner

L'alliance canadienne pour la
formation et le développement de
compétences en sciences de la vie
Partenaire de l'Académie adMare



uOttawa



The Ottawa
Hospital

**Biotherapeutics
Manufacturing Centre**