Barrie University STEM Hub

November 27th, 2024

Barrie's Education

> Barrie has a high proportion of its population with a college diploma or certificate, but its university enrollment rate and overall post-secondary participation are lower than the Ontario and national averages.

As a fast-growing municipality, Barrie is among the few urban growth centres in the Greater Golden Horseshoe without a university campus.

Post-Secondary Education

42.8% of Barrie residents aged 25 to 64 years were attending postsecondary school, compared to 51.5% in Ontario and 50.2% in Canada.

Bachelor's Degree or Higher

25.4% of Barrie residents aged 25 to 64 years had a bachelor's degree or higher, tracking lower than 36.8% in Ontario and 32.9% in Canada.

STEM Education Gap

16.7% of Barrie residents
aged 25 to 64 years holds
a post-secondary education in
STEM fields, which is lower than
22.1% in Ontario and
20.2% in Canada.

Lakehead University Presentation

Envisioning Barrie's Future: A Catalyst for Growth, Innovation, and Partnership

Dr. Gillian Siddall, President and Vice-Chancellor Dr. David Barnett, Provost and Vice-President (Academic)



Creating Barrie's STEM Hub: A Nexus of Talent and Technology

Meeting Barrie's educational and workforce needs by offering programs in Electrical Engineering, Computer Science, and Mechatronics to support local industries.



Fueling Barrie's Growth

\$4.54 Billion:

Lakehead's total impact on Ontario's DGP

116

industry and not-for-profit industry partnerships around the world



2,500+

Lakehead alumni living and working in Simcoe County

Labour Force Development: Powering Barrie's Future Workforce

100%

of Lakehead undergrads gain practical experience through experiential learning

Over 95%

of Lakehead STEM undergrads participate in work-integrated co-ops and internships





Over 90%

of graduates work in fields directly related to their studies

Future Proofing Barrie Through Strong Partnerships

Aligned partnership with Barrie's vision by working with the City, industry, Georgian College, local leaders and community groups to support regional goals on talent development, innovation, and economic growth.



Strengthening Barrie's Future with a Strategic Investment



Lakehead

Proposed Site

The relocation of Barrie Transit, scheduled for late summer 2025, along with the current occupancy of the 2nd floor by the Sandbox Centre for Entrepreneurship and Small Business Centre, presents a unique opportunity to utilize a city-owned vacant space to establish a university STEM campus in Barrie and drive activity into downtown.



- Meet the timeline for a **September 2026** academic school year.
 - Approximately 7,000 square feet is available within the first floor.
 - The outdoor courtyard, approximately **15,000 square feet**, offers a unique opportunity for additional educational spaces.

Modular Campus



Images are for illustrative purposes only and not the actual design.

Modular buildings to be installed on the courtyard space can meet the needs for the first 5-years of start-up and ramp up of enrolment and programming.

These modular units will serve as classrooms, instructional labs, and research spaces

• A cost-effective, modular design and temporary solution are intended for phase one of the project, over a permanent build, to maximize the overall utilization of the site.

The benefit of modular spaces is that they are moveable and, as such, have the **potential to be re-used** to meet **future space** needs for the city.

Impact of a STEM University Campus



A STEM Hub university satellite campus will help establish Barrie as an **innovation hub**, aligning with the creation of a **Regional Innovation Centre (RIC)** in Barrie and the growing demand for talents in **innovation**, **automation**, and **Artificial Intelligence**.

STEM program, such as **engineering** and **computer science** are applicable beyond the scope of manufacturing, as the **manufacturing sector** continues to be a key sector and employer across Barrie and the greater region.

The 2022, the County of Simcoe Labour Market study identified that **21% percent** of the top 100 jobs advertised in the **manufacturing** sector required **NOC skill level A (university education)**.

A dual approach, by having **both a college and university presence** in Barrie, can create a comprehensive ecosystem that nurtures skills development, from **technical training** to **research and innovation**.

