

Solutions for Industry



Providing innovative solutions to business, key industry sectors, and the community through applied research and knowledge transfer, in partnership with Niagara College faculty and students.



Research
& Innovation
ncinnovation.ca



Niagara College's Research & Innovation division provides real-world solutions for business, key industry sectors, and the community through applied research and knowledge transfer activities. We conduct projects that provide innovative solutions, such as producing and testing prototypes, evaluating new technologies, and developing new or improved products or processes for small- and medium-sized businesses.



With funding support from various regional, provincial and federal agencies, students and graduates are hired to work alongside faculty researchers to assist industry partners leap forward in the marketplace.

Our centres of excellence include:



Walker Advanced Manufacturing
Innovation Centre



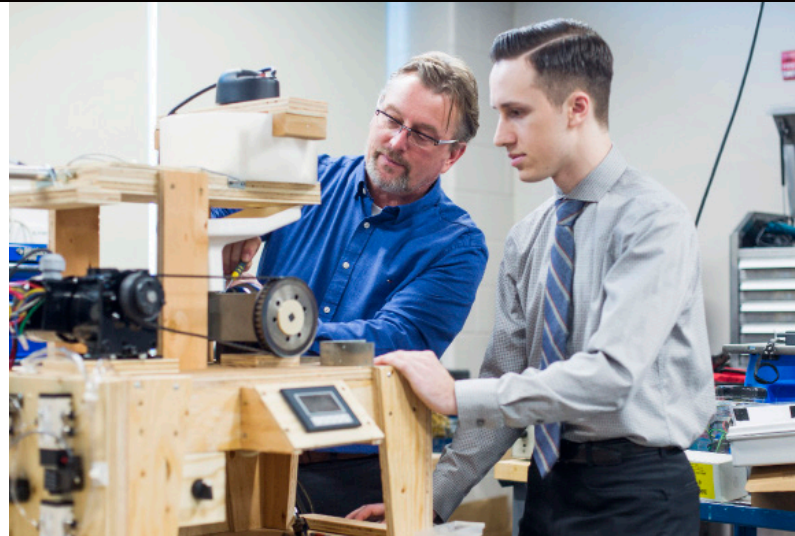
Agriculture & Environmental
Technologies Innovation Centre



Canadian Food & Wine
Institute Innovation Centre



Business & Commercialization,
Digital Media & Web Solutions





The Research & Innovation teams collaborate with SMEs in a range of specializations, as outlined in this brochure. We are ready to put together a strong research and development team determined to find the appropriate solution for you.

Start the conversation today.

Do you have an innovative idea but lack the resources to bring it to life?

MEET WITH US. WORK WITH US.



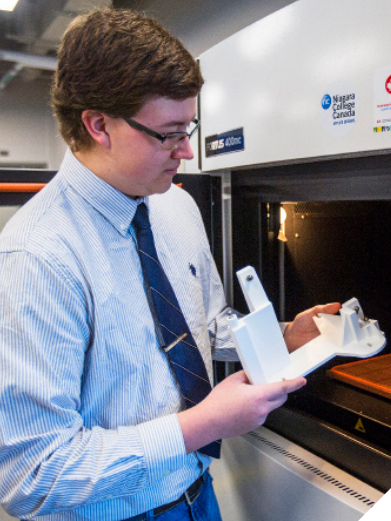
Contact our team. Together, we will determine how best to meet your needs, whether we perform a quick turnaround service, or a full innovation project. Projects can last anywhere from a few days to a few months, all depending on the scope, and our industry partner's needs.

For research and development partnerships, contact us:

t 905-641-2252 ext. 4287

e ebest@niagaracollege.ca

w ncinnovation.ca



Walker Advanced Manufacturing Innovation Centre

Niagara College's Walker Advanced Manufacturing Innovation Centre team specializes in engineering design, 3D technologies, lean manufacturing processes and additive manufacturing. We work with Southern Ontario businesses to bring ideas to life, from concept through to developing working prototypes – from quick turn-around services to full-scale projects – utilizing leading-edge technology, including equipment and software.

We specialize in...

Technical Services

Including: 3D Printing, 3D Design, 3D Measurement and Scanning, Finite Element Analysis (FEA), Computation Fluid Dynamics (CFD)

Automation

Mechanizing a process to decrease human labour and increase efficiency

Product Design & Development

Creating a new product for deployment within your business or to be sold to a customer

Reverse Engineering

Extract knowledge or design intent of your legacy parts by scanning its components in fine detail to produce 3D CAD data

Lean Manufacturing Assessment

Analyzing and improving an existing process within your operations

Product Re-Design & Improvement

Revamping an existing product to improve quality and/or adapt to changing market conditions

Resources & Capabilities

Stratysys 3D Printing Beta Testing Facility

Laser Scanners (small-scale & factory-size)

Vision Systems

Rapid Prototype Machines (FDM & Polyjet)

3D Computer-Aided Design

3D Factory Design

Physical Simulations and Modelling

Engineering Design

Electronics and Electrical

“THE ADVANCED MANUFACTURING TEAM OPENED MY EYES IN A LOT OF WAYS AND CREATED SOME OPPORTUNITIES FOR US TO DEVELOP BETTER SYSTEMS AND BETTER PROCESSES. WE’VE NOW DEVELOPED A SYSTEM AND THAT IS SOMETHING WE DID NOT HAVE IN PLACE.”

~Chris Rogers,
President, Corporate Facility Supply

Agriculture & Environmental Technologies Innovation Centre

Niagara College's Agriculture & Environmental Technologies Innovation Centre team works with private and public sector partners to develop innovative solutions to address today's challenges in agriculture, local and sustainable food production, plant growth, horticultural practices, greenhouse operations, aquaponics, and environmental management.



We specialize in...

Precision Agriculture

Data visualization; agricultural and weather data analysis, cleaning, processing, and storage; static and moving sensors; web platform development for scaled agricultural tools; Real Time Kinetic (RTK), Geographic Information Systems (GIS), and Global Positioning Systems (GPS) hardware and operated systems; centrally controlled mechatronics; and Internet of Things (IoT)

Environmental Analysis

Water, wastewater, and soil analysis with reduction strategies

Horticulture and Greenhouse

Sustainable food, hydroponics, aquaponics, four-season growing, growing media, and product improvement growing trials

Sustainability Solutions

Risk mitigation, cost reductions, and corporate social responsibility

OUR INFRASTRUCTURE
INCLUDES A

20,000

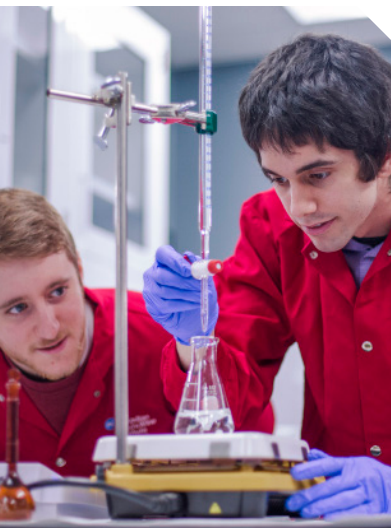
SQUARE-FOOT GREENHOUSE,
AN AQUAPONICS SYSTEM,
SEVERAL ENVIRONMENTAL
LABS, A 40-ACRE ON-CAMPUS
VINEYARD AND A HOP YARD



The Agriculture & Environmental Technologies Innovation Centre is privileged to have on its team, Dr. Mike Duncan, NSERC Industrial Chair in Precision Agriculture and Environmental Technologies.

"WITHOUT ACCESS TO NIAGARA COLLEGE'S FACULTY, STUDENTS, EQUIPMENT, AND NETWORK OF CO-PACKERS, MADD VIRGIN CRAFT BREWED LAGER WOULD NOT HAVE BEEN POSSIBLE, LET ALONE BECOME ONE OF OUR BEST SELLERS IN THE U.S. MARKET."

~Brian Bolshin,
President of Hill Street Beverage Co.



Canadian Food & Wine Institute Innovation Centre

The Canadian Food & Wine Institute Innovation Centre team offers a full suite of services to support industry innovation and commercialization of new products and processes. From new recipe development to shelf-life testing and nutritional labelling, the CFWI Innovation Centre pairs industry partners with faculty, recent graduates and students with the right expertise and equipment to meet your needs.

We specialize in...

Food & Beverage Product Development

Developing new products, improving existing products, increasing product quality, and assisting with ingredient sourcing and packaging recommendations

Food Safety & Regulatory Assistance

Guiding you through applicable food safety and regulatory standards, ensuring compliance, and providing food safety assistance

Laboratory Services

Providing qualitative and quantitative evaluation of food and beverages in our microbiology lab, chemistry lab, food quality lab and shelf-life lab

Nutritional Labelling Services

Creating labelling content for new and existing products to meet regulatory standards

Sensory Evaluation

Engaging chefs, beverage specialists, expert sensory panels and consumer focus groups in sensory evaluation

Resources & Capabilities

Commercial Brewery and Hop yard

Commercial Winery and Vineyard

Commercial Kitchens

Microbiology Lab

Chemistry Lab

Sensory Evaluation

Shelf-Life and Packaging Lab

Commercialization Solutions



Business & Commercialization Solutions

The Business & Commercialization team offers a full suite of solutions to assist industry partners. **We specialize in...**

Initial Market Research

Commercialization Strategies

Operations Management

PR Planning

Social Media Planning

International Market Research

Export Strategies

*Human Resources Training Manuals,
Health & Safety Plans,
Promotional Materials*



Digital Media & Web Solutions

The Digital Media & Web Solutions team works with industry partners to develop and implement various technology applications, using the most up-to-date programming languages, platforms and software packages. **We specialize in...**

Web Applications

Mobile Applications

Software Development



To learn more about partnership possibilities contact us:

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w ncinnovation.ca

