

Skills and Innovation in the Agri-Food Sector

Colleges and institutes help feed the world

From farming to food manufacturing and the culinary arts, the agri-food sector is essential to Canada's economy and the well-being of all Canadians. Growing international demand for Canadian products and expertise also presents great opportunities for that sector. Thanks to a variety of programs that touch on all aspects of the food supply chain, colleges and institutes possess valuable expertise that supports growth and innovation in this vital industry.



Education and Training

Food production is now a complex industry and colleges and institutes offer training programs adapted to every aspect, from the study of nutrition to the management of large-scale operations.



CICan member colleges and institutes across Canada offer over

350

programs related to **agri-food**

leading to a **variety of credentials**, including:

110+
Diplomas

180+
Certificate Programs

20+
Degrees²

30+
Post-graduate
Certificates or Diplomas

Over **200,000** companies in Canada are involved in the agri-food sector¹

Popular Programs



Agriculture and Aquaculture

- Agribusiness
- Agri-Business Management
- Agricultural Management
- Agricultural Economics
- Agriculture and Bio-Resources
- Transformation of seafood products and aquaculture technologies
- Fisheries and Aquaculture



Food Science

- Nutrition and Food Science
- Plant Science
- Food Bioscience
- Food Science Technology
- Horticulture Science



Food Preparation and Distribution

- Food and Nutrition Management, Nutrition and Food Science
- Food and Beverage Management
- Food Safety
- Food Technology
- International Food Business
- Food Media

Applied Research and Innovation

Improving food production requires technical know-how, but also passion and creativity to create new processes, as well as new food products adapted to evolving tastes and needs. With such a variety of programs available, colleges and institutes have developed the expertise required to improve all aspects of food production.

Over **40** college-based research centres and laboratories are dedicated to improvements in agri-food across the country. This includes centres such as:



The *Centre for Social Innovation in Agriculture* at the **Cégep de Victoriaville (QC)** promotes a collaborative approach to help local producers adapt to new challenges in the agricultural sector.



Canada's Smartest Kitchen at **Holland College (PE)** offers a host of services to businesses of all sizes, including food product development, market research and sensory testing.

There are currently over **55** applied research projects³ related to the **agri-food sector** in colleges and institutes across the country. All are conducted in collaboration with local businesses and employers, the majority being small or medium-sized enterprises. Examples include:



Douglas College (BC), in collaboration with Applied Bio-nomics Ltd. helped test new biological pest control methods adapted to the needs of BC's blueberry producers.



Saskatchewan Polytechnic (SK) worked with Saskatoon's Great Western Brewing Company (GWBC) to develop a genetic profile of the firm's yeast culture to ensure the continuity of its beer brands.

Spotlight

Colleges and institutes across Canada have helped create a wide variety of new food products thanks to the **expertise** of their staff and the use of specialized facilities, labs and test kitchens.



Niagara College (ON) crafted a non-alcoholic lager for MADD Canada.



Olds College (AB) found a way to grow gourmet mushrooms using the spent grains from beer brewing and recycles the barley as feed after the mushroom growing increases the grains' protein.



George Brown College (ON) helped improve the shelf life of vegan alfredo sauce.

¹Using the North American Industry Classification System (NAICS), we include in Agri-Food the Crop Production, Animal Production and Aquaculture, Support Activities (Crop, Animal), and Food Manufacturing sectors. See Industry Canada. "Canadian Industry Statistics," <https://www.ic.gc.ca/app/scr/app/cis/search-recherche> for details (accessed Summer 2017).

²Includes degree pathways.

³Research project data taken from Colleges and Institutes Canada's "Applied Research Survey," 2015-16.

