

Dairy Processing Focus Area

The dairy processing focus area emphasizes understanding the chemistry, microbiology, and engineering properties of dairy foods to improve the quality, safety, and manufacturing methods of milk, cheese, and other processed dairy products.

One-year, STEM-designated, course-based master's degree program

Offered by Cornell University's #1 nationally ranked Food Science and Technology program, the MFS graduate degree program offers customized coursework and experiential projects to advance technical knowledge and career potential in the Dairy Processing Industry.

The 30-credit master's degree program can be completed in as little as two semesters of full-time study and prepares individuals for the contemporary workplace through knowledge development, refinement of analytical tools, and advanced training in the latest theory and methodology related to Dairy Processing. This master's degree program broadens expertise and expands professional versatility to produce the next generation of innovative leaders in the Dairy Industry or related fields.



Sam Alcaine, Associate Professor

#1 Ranked Food Science and Technology Program	Flexible, Interdisciplinary Program	Dedicated Career Support
<p>Internationally recognized faculty with global reach expertise in all facets of food science.</p> <p>Excellent selection of courses in basic and applied sciences.</p> <p>Modern, well-equipped research laboratories and pilot plant facilities.</p> <p>Established relationships with major national food companies.</p>	<p>Students work with world-renowned faculty and dedicated program staff to develop an individualized course of study based on their area of interest.</p> <p>The majority of courses (20 credits) will be within CALS; however, students have the opportunity to take courses across a range of fields of study at Cornell.</p> <p>With the guidance of a faculty advisor, students work on solving a real-world problem, gaining valuable insights and skills for career next steps.</p>	<p>Network of supportive Cornell alumni and professionals, such as the Food Science Advisory Council.</p> <p>Information sessions and networking events with food industry employers.</p> <p>Assistance with interview skills, résumé writing, and identifying career opportunities through CALS Career Services.</p>



Admissions Requirements

Careers

Bachelor's degree in scientific field, such as microbiology, chemistry, biology

For non-science background, at least 15 credits of introductory college-level science courses, including general chemistry, organic chemistry, general biology, and corresponding labs. Coursework in microbiology and biochemistry is recommended.

GRE

TOEFL/IELTS for international applicants

Additional requirements and application can be found at: gradschool.cornell.edu

MFS graduates develop in-demand skills that are valued across multiple career paths and sectors. Alumni are hired by a range of employers, including:

Chobani

Cargill

Tillamook County Creamery Association

Dannon

Byrne Dairy

Alumni Spotlight



Joseph B. Tarnate, MFS '18

Prior to attending Cornell, I was an undergraduate student at University of Florida pursuing a degree in Animal Science. After gaining knowledge on the production side of agriculture, I wanted to learn more about the processing side. Cornell's Food Science Department offers amazing courses taught by well-renowned professors in the industry.

I chose the Cornell Food Science MFS program because of its short duration and the flexibility it provides for students to tailor their research and experiences to their own personal desires and interests. It's a great program for students who want to work in the industry soon after completing an undergraduate degree and want to specialize in certain skills prior to working.

Dairy Processing



This area of study focuses on the principles and practices fundamental to the processing, evaluation, storage, and use of dairy products. Students gain experience with traditional and emerging food processing technologies and have access to Cornell University's many facilities and programs committed to dairy research, including a state-of-the-art dairy processing plant, the Milk Quality Improvement Program, and the Northeast Dairy Foods Research Center.

Sample Curriculum

COURSE	TITLE
ANSC 5510	Dairy Herd Management
FDSC 5210	Food Engineering Principles
FDSC 5230	Unit Operations and Food Packaging
FDSC 6010	Food Science and Technology Graduate Boot Camp
FDSC 6000	Seminar in Food Science
FDSC 6950	Current Readings in Food Science
ALS 5900	Project Development

FALL

COURSE	TITLE
FDSC 5010	Concepts of Food Product Development
FDSC 6170	Food Chemistry
FDSC 6250	Food Processing: Conventional and Emerging Technologies
FDSC 6650	Food and Bioprocessing Systems
FDSC 6000	Seminar in Food Science
FDSC 6040	Chemistry and Functional Properties of Food Ingredients
ALS 5900	Project Development
ALS 5910	Project Completion

SPRING