

Cornell University
College of Agriculture and Life Sciences

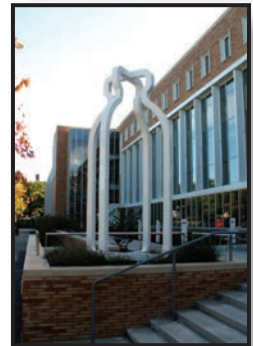
Dairy Foods Certificate Programs

**The Science of Yogurt and
Fermented Dairy Products
Certificate**

**Membrane,
Evaporation and
Drying Technology
Certificate**

**The Science of
Cheese Making
Certificate**

**Fluid Milk
Processing
for
Quality &
Safety
Certificate**



Cornell Dairy Foods Certificate Program

Core Courses



Basic Dairy Sanitation & Safety Certificate *(3 Day Course—Required for Any Certificate Track)*

- Basic Dairy Microbiology/Food Safety Overview
- Good Manufacturing Practices / Dairy Sanitation
- Milk Composition & Unit Processing Operations
- Dairy Regulations/Food Safety Modernization Act



Hazard Analysis Critical Control Points (HACCP) For Dairy *(2.5 Day Course—Required for Any Certificate Track)*

- Hazards associated with dairy foods processing
- Prerequisite Programs and Good Manufacturing Practices
- HACCP plan development
- HACCP based regulations



High Temperature Short Time (HTST) *(2.5 Day Course—Required: may be substituted with Vat Pasteurization)*

- HTST Operation Components
- Regulatory requirements for HTST Operation
- Cleaning & sanitizing HTST Programs
- Requirement as part of NYS Broken Seal Program



Vat Pasteurization Course *(1 Day Course—Required: may be substituted with HTST)*

- Foodborne pathogens resulting from unpasteurized milk
- Components of vat pasteurization
- Thermometer requirements
- Chart recorders and chart requirements

These courses are required to complete any chosen track for the specialized Certificate Programs.

Cornell Dairy Foods Certificate Program

Specialized Courses and Advanced Expert Courses



The Science of Yogurt and Fermented Dairy Products

- Milk quality and impact on cultured dairy products
- Culture microbiology and hands-on cultured dairy making
- Unit operations and sanitation in cultured dairy production
- Formulation utilizing different ingredients



Fluid Milk Processing for Quality & Safety

- Basic Microbiology in relation to Milk Quality and Safety
- Influence of Raw Milk Quality on Pasteurized Milk Quality & Shelf-Life
- Fluid Milk Processing Parameters
- Tools for Assessing Milk Quality and Shelf-Life



The Science of Cheese Making

- Milk quality which impacts cheese making
- Cheese culture and chemistry and microbiology
- Cheese-making unit operations and techniques and hands-on cheese making
- Cheese marketing for small scale producers & key performance indicators for large scale producers



Membrane, Evaporation & Drying Technology

- Quality and food safety effects of operations on value-added dairy ingredients
- Current research topics in value-added dairy ingredients
- Unit operations in filtration, evaporation and drying for dairy products
- Cleaning techniques for unit operations



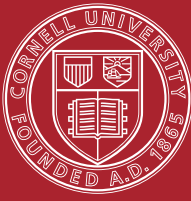
Advanced Expert Cheese Making—(3 Day Course)

- Milk components and advanced chemistry of cheese-making
- Cheese styles and standards of identity
- Cheese defects during process and affinage
- PhD taught lecture-style course

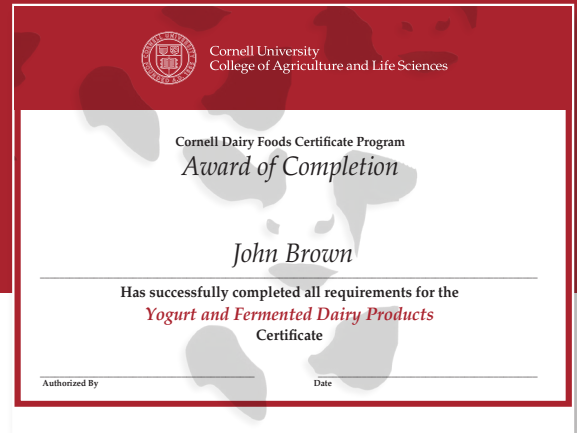


Advanced Expert Yogurt & Fermented Dairy Products—(3 Day Course)

- Milk components and advanced chemistry of cultured-dairy making
- Innovations in cultured dairy production
- Advanced sensory characteristics
- Ph.D. taught lecture-style course



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I am interested in:

- The Science of Yogurt and Fermented Dairy Products Certificate
- Fluid Milk Processing for Quality & Safety Certificate
- Membrane, Evaporation and Drying Technology Certificate
- The Science of Cheese Making Certificate

Name _____

Address _____

Phone _____

E-mail _____

Send To:

Louise Felker

Department of Food Science

Stocking Hall

Ithaca, NY 14853

(607) 255-7098 or

E-mail: lmf226@cornell.edu

To obtain a Dairy Foods Certificate, candidates must successfully complete all core courses, corresponding track course(s) and tests.

All training courses offered by the CU Dairy Foods Extension Program may be taken as stand-alone programs.

This Certificate Program is offered by the Cornell University Department of Food Science Dairy Foods Extension Team.

The program is designed to provide trained personnel for the dairy industry and is open to all interested parties.

Visit:

<http://dairyextension.foodscience.cornell.edu/programs/certificate-program>
or call: 607-255-2892