



Buttermaking & Milk Fat Fundamentals Short Course

September 24, 2025, Cal Poly San Luis Obispo, Dairy Products Technology Center

Agenda

8:00 – 8:15	Welcome and introductions	Dr. Carmen Licon, Director, DPTC
8:15 – 9:45	Theoretical foundation: <ul style="list-style-type: none"> Milk composition and fat chemistry Separation and cream treatment Temperature treatment and fat crystallization Fermentation of cream (for cultured butter) 	Dr. Baheesa Zaitoun, DPTC Staff
9:45-10:30	Equipment and technology: <ul style="list-style-type: none"> Continuous vs batch churning systems Equipment for continuous churning 	Srinivasarao Bandla, Land O' Lakes
10:30	Break	
10:45-12:00	Butter production techniques: <ul style="list-style-type: none"> Phase inversion Buttermilk separation Salt and additive incorporation Packaging 	Srinivasarao Bandla, Land O' Lakes
12:00 – 12:30	Lunch, Tasting	
12:30 – 12:45	Pilot plant introduction	DPTC Staff
12:45 – 2:00	Hands-on activity I: Cream quality control <ul style="list-style-type: none"> Fat content measurement Sensory evaluation of cream Small-batch butter production 	Dimitri Genard, DPTC Staff
2:00-4:00	Hands-on activity II: Butter churning <ul style="list-style-type: none"> Continuous churning equipment operation Monitoring churning parameters Butter molding and packaging 	DPTC Staff
4:15 – 5:00	Sensory Evaluation, Butter Quality <ul style="list-style-type: none"> Cream condition Manufacturing Practices Addressing body and texture, salting defects 	DPTC Staff
5:00 – 5:30	Q&A, Certificates	Dr. Carmen Licon, Director, DPTC

Registration Cost:

\$450/ individual, \$400 multiple, \$175 student/academic
Includes course, lunch, parking

Registration at:

<https://dairy.calpoly.edu/short-course-symposia>



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The Butter Making & Milk Fat Fundamentals Short Course offers a thorough understanding of butter production, practical techniques, and regulatory knowledge. Participants will gain valuable hands-on experience while mastering industry standards and quality assurance practices.

Course Duration: 8 hours

Audience: This course is designed for food industry professionals, dairy production and quality control, entrepreneurs, distributors.

Objective: Comprehensive understanding of industrial butter production processes, techniques and quality control.

Learning Outcomes

- Comprehensive understanding of butter production processes
- Practical skills in cream and butter quality control
- Knowledge of modern butter production technologies

The program is co-organized with CMAB/CDIC, with partial funding and contributions from Dairy Management Inc., the USDA's Pacific Coast Coalition Dairy Business Innovation Initiative and the California Milk Advisory Board.

Program as of July 23, 2025, subject to change.



Need more information? Contact our staff ! Samantha Bass
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