

Hard and semi-hard cheese technology

Training session N°26

ADVANCED LEVEL

ORGANISATION

Date: from 19/05 (starts 13:30) to 23/05/2025
(ends 12:00) (Week 21)

Duration: 4 day course – 28 hours

Trainer: Julien ROUILLAUD

Cost: € 1950, without meals and accommodation

Course location: ENILEA (French National Dairy School) of Mamirolle - Grande rue - F-25620 MAMIROLLE.

We are located in the heart of Franche-Comté, the first French region for raw milk cheeses and spreadable cheeses. The Dairy school of Mamirolle has been training technicians and experts in dairy companies since 1888.

Travelling to Mamirolle:

By plane:

Basel-Mulhouse airport + car (1.5hr)

Lyon-Saint-Exupéry airport + car (2hr)

Geneva airport + car (2hr)

Paris Charles de Gaulle airport + train (3hr)

By car:

A36 motorway from Strasbourg or Mulhouse

A36 motorway from Paris

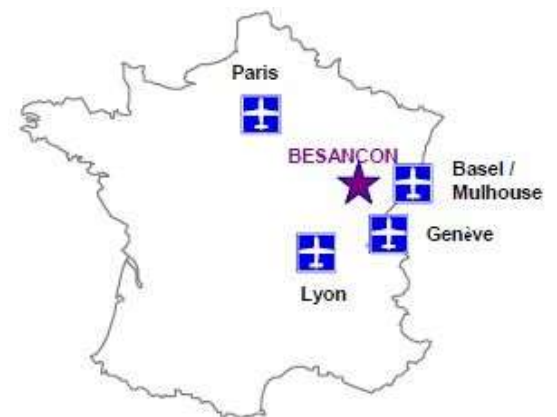
A40/A39 motorway from Lyon

RN57 from Jougne (Geneve)

Accommodation: in the city of Besançon (approx. 120,000 inhabitants)

Training language: English

Who we are: As a member of the National Dairy Schools Network and the European Association of Dairy technologists, our school trains students and dairy professionals from all over the world.



INFORMATION AND REGISTRATION

ENIL: Phone number: +33 (0)3.81.55.92.00
cfppa.mamirolle@educagri.fr

ANFOPEIL

Phone number: +33 (0)3.84.37.27.24
accueil@anfopeil-enil.fr

PRE-REQUISITES

Technicians, cheesemakers, R&D managers, engineers

The course is designed for professionals with:

Knowledge of cheese processes

Practice in cheesemaking or cheese processes

Good knowledge of the English language.

Participants should ideally have basic knowledge of the microbiological and biochemical aspects of cheesemaking.

E-learning (Webalim™) is available for reaching pre-requisites. Please contact us for more information.



CONDITIONS

In the case of an insufficient number of participants, ANFOPEIL may cancel or postpone the training course. The applicant will be informed of this decision at least 2 weeks before the starting date of the training course.

TEACHING METHODS

- Theoretical courses
- Practical sessions / case studies
- Cheese making in dairy conditions
 - Open copper vats of 1,000 and 1,500 litres with vacuum moulding using Châlon Mégard system.
 - Two closed Guérin double O vats of 4,000 litres each with automatic pre-press vat moulding

EDUCATIONAL GOALS

- Better knowledge of hard and semi-hard cheese processes
- Knowledge of raw materials and comparison with standards
- Management of raw and pasteurised milk for hard and semi-hard cheese processes
- Improvement of milk quality in hard and semi-hard cheese processes
- Organisation of work to correct defects in hard and semi-hard cheese processes

PROGRAMME

- **Welcome and presentation of participants**
- **Cheesemaking processes**
 - Presentation of European hard cheeses and semi-hard cheeses: types, characteristics and descriptors, overview of European legislation
 - Quality of raw milk and its influence on cheese
 - Milk preparation and standardisation for hard and semi-hard cheeses
 - Technological parameters
 - Coagulation / Clotting agents, syneresis and whey draining – biochemistry and molecular interactions
 - Acidification and starters – biochemistry and molecular interactions
 - Salting, brining
 - Ripening factors and defects in hard and semi-hard cheeses: causes, resolving problems
- **Practical sessions in pilot plant**
 - Production of hard cheese including addition of water variations for curd lactose reduction
 - Production of cooked curd in traditional copper vats

- Whey starters piloting
- Production of hard cheese including milk protein variations
- Visit of “Hameau du fromage”

This training is also available for specific training sessions in your cheese factory.

ASSESSMENT

The trainees will be assessed at the end of each training course in the form of questionnaires, oral evaluation with the trainer or practical tests. The type of assessment will depend on the topics covered on the course and the type of activities (theory and/or practical).

TRAINING COURSE VALIDATION

A document and a certificate will be awarded to the trainee and/or the trainee's company