

## COURSE DETAIL

### FOOD PRESERVATION PROCESSES

**Country**

Netherlands

**Host Institution**

Wageningen University and Research Center

**Program(s)**

Wageningen University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Engineering Agricultural Sciences

**UCEAP Course Number**

126

**UCEAP Course Suffix****UCEAP Official Title**

FOOD PRESERVATION PROCESSES

**UCEAP Transcript Title**

FOOD PRESERVATION

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

## **Course Description**

This course gives a description of food production and preservation technologies that are relevant to the food industry. The course includes: food production methods, traditional preservation processes, fluid flow, thermal preservation kinetics and methods (heating, cooling, freezing) as well as novel preservation technologies. Important processing principles (such as residence time, heat transfer) and the consequences for products (shelf life and product quality) will be discussed for various processes and products. The course covers the following: the schematic production methods of a variety of foods and identifies why particular steps in the production are needed; the different methods of food preservation (traditional, conventional and emerging methods) and their applications; principles of fluid dynamics, reaction kinetics, reactor engineering, heat transfer, and various emerging preservation technologies; quantitative prediction of the degree of preservation and belonging energy requirements; the relation between the treatment of products and the changes in texture, depending on their constituents and the specifics of the treatment; practical experiments, how to process the results of the analyses and perform calculations that give insight in required processing/preservation treatments for a range of products.

## **Language(s) of Instruction**

English

## **Host Institution Course Number**

FPE-21306

## **Host Institution Course Title**

FOOD PRESERVATION PROCESSES

## **Host Institution Campus**

Wageningen University and Research Center

## **Host Institution Faculty**

Food Technology

## **Host Institution Degree**

## **Host Institution Department**

Food Process Engineering

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