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 Course Details
https://wur.osiris-student.nl/onderwijscatalogus/extern/cursus

Host Institution Campus
Wageningen University and Research Center

Host Institution Faculty

Food Technology

Host Institution Degree

Host Institution Department
Food Process Engineering

Course Last Reviewed
2024-2025

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