

# CÔNG NGHỆ SẢN XUẤT ĐỒ HỘP THỰC PHẨM Food Canning Technology



# **EXPECTED LEARNING OUTCOMES OF PROGRAMME (PLOs)**

## **General knowledge**

Apply natural, social, technical and economic knowledge to solve problems in preservation, processing, testing, and research and PLO 1 development of food products.

## **Professional knowledge**



Formulate production procedures based on the analysis of technical factors to ensure and enhance product quality.

# **Course description:**

✓ The course provides knowledge about the causes of food spoilage, processing and inspection techniques for canned products, calculation methods in pasteurization, structure and operating principles of equipment in the industry.

 $\checkmark$  At the same time, they also practice skills in analyzing the causes of canned goods, handling and overcoming spoilage

PLO 3

Design quality management systems for processing plants to ensure food hygiene and safety.

# **Soft-skills**

PLO 4	Perform work planning, demonstrate creatively critical thinking, work independently and effectively as a team leader or member.			
PLO 5	Demonstrate communication skills and use specialized English in food technology.			
Professional skills				
PLO 6	Operate production equipment in food manufacture factories.			
PLO 7	Analyse product quality criteria in food preservation and processing procedures.			
PLO 8	Design research to address technological and regulatory problems in the food industry through the evaluation of information, scientific data and information technology applications.			
Attitude				

Work professionally, maintain professional ethics, social responsibility,

conditions in the canning process, calculating and determining the time to kill microorganisms in pasteurization, using measuring and processing equipment related to canning technology.

 $\checkmark$  The module also helps to form the right attitude and awareness about self-study.

CONTENT	CELOs
Chapter 1. Mechanical processing of raw materials	CELO 2; 4
Chapter 2. Heat processing of raw materials	CELO 2; 4
Chapter 3. Exhaust process	CELO 1; 2; 4; 7; 9; 10
Chapter 4. Kinetics of killing microorganisms in pasteurization and sterilization	CELO 1; 3; 6; 8; 9; 10
Chapter 5: Methods and equipment in canned pasteurization	CELO 1; 4; 5; 7; 9; 10
Chapter 6: Processing techniques and quality	CELO 4; 5; 7; 9; 10

**PLO 9** and demonstrate personal physical development.

Demonstrate the spirit of entrepreneurship and life-long learning. **PLO 10** 

# **LEARNING METHODS AND TASKS OF STUDENTS**

- > Students read reference materials before coming to class
- > The teacher gives presentations using Powerpoint, combined with a video describing the process.
- Students working in groups in class
- Do homework on the E-learning system.
- Practice and report results

#### assessment of canned goods

#### PLOs **EXPECTED LEARNING OUTCOME OF COURSE (CELOs)**

# Knowledge

CELO 1	Analyze the nature of the sterilization process.	PLO 2		
CELO 2	Selection of canning pretreatment methods	PLO 1		
CELO 3	Assess the nature of microorganisms in canned food	PLO 8		
CELO 4	Identify the factors affecting the quality of canned products	PLO 8		
CELO 5	Practice the production process of canned products	PLO 4; 5; 6		
Professional skills				
CELO 6	Collect data to calculate sterilization mode for products	PLO 8		
CELO 7	Analysis of spoilage types of canned goods	PLO 8		
CELO 8	CELO 8 Control the sterilization process			
CELO 8 Control the sterilization process PLO 6   Attitude				
CELO 9	Solve problems well in the process of studying and working in groups	PLO 9		
CELO 10	Comply with the rules while studying	PLO 10		

Course assessment	Methods	Ratio %
	Attitude	10%
<b>On-going assessment</b>	Seminar	20%
	Practice	20%
Final exam	Written exam	50%

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