

Entitlement General Technological and Food Quality Practical Training, 10 cr.

Prerequisites

B1 level of English language. Mathematics and Application Programs. Chemistry. Nutrition and Food Chemistry. Food Safety and Quality. Non Animal Origin Food Products Technology. Animal Origin Food Products Technology. Environment Protection and Sustainable Production.

Main aim

To provide students with the knowledge and skills needed for a food technologist to project and organize the assessment of raw materials, production process and production quality, as well as to manage the technological process of food production.

Summary

In the company where the practice is performed, students get acquainted with food industry activities, improve professional skills by working in production units, examine different stages of food production and technological parameters, familiarize with the equipment, raw materials, finished product quality, hygiene and sanitation requirements.

Learning Outcomes

1. Be able to carry out laboratory tests of the raw materials and finished products, and analyse the results.

2. Be able to familiarise with food additive used in the company, evaluate their functional technological properties and influence on the finished product.

3. Be able to evaluate food additives according to current legislation requirements, classification of food additives based on their function, and labelling of food additives in food products.

4. Be able to describe the quality indicators and requirements for the hygiene, packaging, storage and transportation of finished products.

5. Be able to apply the knowledge of food science in food experimental tests and new product development.

6. Be able to compare technological processes, describe innovations applied in technological process, new recipes implementation plan and strategy.

7. Be able to set the quality indicators for the food raw materials and products, carry out the nutritional energetic value calculations, and present the results.

8. Be able to control the technological process, determine the risk factors (RF), critical control points (CCP), adapt the decision making tree, establish critical limits, conclude flow charts, set

the preventive and corrective measures, perform documentation procedures, and evaluate advantages and disadvantages of the self- regulation principles.

9. Be able to define possible risk factors during technological processes, to evaluate sanitary and hygiene condition of a company and to get acquainted with equipment and inventory characteristics used in production process.

10. Be able to apply the HACCP and GHP requirements in food production stages. Be able to apply the standards and other regulations for the raw material and product in the food company.

11. Be able to analyse the self-control system requirements and apply them in all stages of food production.

12. Be able to perform the raw material acceptance and storage individually and in a team, execute the food production process, and manufacture food products complying with the safety and quality requirements.

13. Be able to cooperate, execute and manage the scheduled tasks in the catering enterprise, and solve problems collaborating with the food safety and nutrition specialists.

Syllabus

Practice in a company, trilateral practice agreements, practice assignments, practice report. Types of catering enterprises. Brief description of the company (department) where the practice has been performed. The plan of the production premises.

Brief description of the work place. Work and servicing in the food industry production and sales departments.

Description of the manufactured production. The raw material storage conditions, terms, quality indexes (sensory, physical-chemical, microbiological). Registers for the raw material acceptance and storage. Preparation of the raw materials for production. Production losses.

Application of the HACCP, Good Hygiene Practice (GHP), and Good Manufacturing Practice (GMP) rules in catering enterprises. The HACCP system in the company. Identification and grounding of the Critical Control Points (CCP).

Food additives used in the company (composition, properties, dosing). Regulations, normative acts, hygiene norms and requirements for food industry companies.

Brief description of the company equipment and inventory. Equipment operation and maintenance. Description of the process (one according to your choice).

Evaluation procedure of knowledge and abilities

Ten grade criterion scale is applied. University practice supervisor and enterprise mentor give their own grades for student's practice work, its results presentation and analysis. The final grade is the arithmetic average grade of the grades given by the supervisor and the mentor. The average grade is rounded down or up integer number.