Joint EU/CoE Project Strategic Development of Higher Education and Qualification Standards



#### The minimal elements of occupational standard

# **1. BASIC CHARACTERISTICS**

#### 1.1 Name(s) of the occupation

Food Technology Engineer (Agency for Statistics of BiH, The Law on Statistics of BiH ("Official Gazette of BiH", No. 26/04 and 42/04), Decision on introducing and implementing the classification of occupations ("Official Gazette of BiH", No. 100/10).

#### 1.2 Code of occupation

2145 (Agency for Statistics of BiH, Decision on introducing and implementing the classification of occupations ("Official Gazette of BiH", No. 100/10).

#### 1.3 Link to the international classification

International Standard Classification of Occupations according to the ILO recommendation (International Labour Organization) Decision on introducing and implementing the classification of occupations ("Official Gazette of BiH", No. 100/10).

International Standard Classification of Occupations according to the ILO recommendation (International Labour Organization), (Decision of Classification of Occupations "Official Gazette of FBiH", No. 60, 2014)

#### 1.4 Level of necessary qualifications

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# 2. DESCRIPTION OF OCCUPATION / KEY OPERATIONS AND COMPETENCIES NEEDED

#### 2.1 Description of occupation

- Planning, organization and supervision\* of work in food processing plants
- Planning and organization of work in food analysis laboratories
- Work in scientific-research institutes
- Planning and control of raw materials and ready-made products

\* Supervision in food processing plants relates to small-scale industrial plants

#### 2.2 Key tasks and necessary knowledge, skills and competencies

GROUPS OF TASKS	WORK ACTIVITIES	COMPETENCIES (KNOWLEDGE, SKILLS AND COMPETENCIES)
Production planning and preparation	Short- and long-term planning, optimisation of expenditures	Analysing the documents and data bases and developing a production plan.

Production process	Managing the production process	Developing job orders, planning the work force, monitoring the parameters within the scope of production process and responding to extraordinary situations in the course of the production process.
	Product typification	Applying stoichiometric computing of the quantitative composition of a typified product
	Control of raw materials, production materials and packaging materials	Taking samples according to job orders; Establishing physical (temperature, pH, density, etc.), chemical (relative acidity, composition of ingredients) and microbiological properties (total number of microorganisms, pathogenic microorganisms and somatic cells), and responding to incompatibilities of raw, production and packaging materials.
Quality control	Process control	Controlling the production process (use of raw, packaging and production materials, sanitation/hygiene of equipment, work surfaces and staff, and supervising critical control points)
	Control of packaging process and ready- made products	Controlling the packaging, declaration, labelling Controlling organoleptic, microbiological, physical-chemical properties in ready-made products
	Quality assurance	Implementing legal regulations and quality systems ISO, HACCP, HALAL, KOSHER
	Control of storage conditions for ready- made products	Controlling hygiene and sanitation conditions in accordance with the relevant legal regulations and standards.
Health and environment protection	Coordination of tasks related to health protection and safety at work Environment protection management	Implementing legal regulations on safety and protection at work (fire protection, noise protection, hygienic minimum, sanitary examinations, and thorough medical check-ups) as well as OHSAS standards. Implementing environment protection legislation (waste water, solid and liquid waste management, emissions in air) and the related ISO 14 001 standard.
State Administration (ministries, agencies) and local administration (towns and municipalities)	Development of legal regulations and by- laws; analysis of economic status; suggesting measures; data collecting; development of information and performance analysis; registration of food processing facilities	Being familiar with and implementing legal regulations in the field of food processing industry.

# 3. QUALITY ASSURANCE

- **3.1 Justification for the introduction of occupational standards**
- 3.2 Developers and the date
- 3.3 Value of OS for qualifications standard development
- 3.4 Competent institution and link to the sectoral council expert opinion
- 3.5 Date of entry in the Register
- 3.6 Working Group members

Institution	Name
Bihać University	Dr.sc. Zemira Delalić, Full-time Professor
	Dr.sc. Suzana Jahić, Docent
Banja Luka University	Dr.sc. Delić Duška, Docent
Barija Luka Oniversity	Mr.sc. Vučić Goran, Senior Assistant
Tuzla University	Dr.sc. Elvis Ahmetović, Associate Professor
	Dr.sc. Milica Vilušić, Associate Professor
	Dr.sc. Milenko Blesić, Associate Professor
Sarajevo University	Dr.sc. Hamid Čustović, Full-time Professor Dr.sc. Đikić Mirha, Associate Professor
Zaniaa University	Dr.sc. Salih Tandir, Associate Professor
Zenica University	Dr.sc. Hajrudin Skender, Associate Professor
Džemal Bijedić University	Dr.sc. Hanadija Omanović, Associate Professor
Mostar	Dr.sc. Semira Sefo, Docent

# 4. ADDITIONAL INFORMATION

# 4.1 Specific legal regulations directly related to the occupation

- 1. Law on Food ("Official Gazette of Republika Srpska", No. 49/09),
- 2. Law on Vine and Brandy ("Official Gazette of Republika Srpska", No. 71/09),
- 3. The Book of Rules on the content and the implementation of general and specific food hygiene conditions (Official Gazette of Republika Srpska ", No. 111/09 , 10/11 and 89/13),
- 4. The Book of Rules on the procedure for establishing compliance with the testing laboratories work conditions ("Official Gazette of Republika Srpska", No. 106/10),
- 5. Law on Food ("Official Gazette of BiH", No. 50/04)
- 6. Book of Rules on the hygiene of foodstuffs ("Official Gazette of BiH", No. 04/13)
- 7. Book of Rules on the hygiene of food of animal origin (Official Gazette of BiH", No. 03/12 i 28/14)
- 8. Book of Rules on providing consumers with food related information (Official Gazette of BiH", No. 68/13)

# 4.2 Health risks in occupation and working conditions

Work in food processing industry implies staying within the plant facilities with artificial light systems, increased noise levels, different temperature regimens and presence of unpleasant smells.

# 4.3 Specific requirements for employment

- Passed a hygienic minimum in accordance with the Law on Population Protection from Contagious Diseases ("Official Gazette of Republika Srpska", No. 14/10) and the Book of Rules on the content and manner of implementing specific training ("Official Gazette of Republika Srpska", No. 128/10);
- Passed a professional exam for working in the Republika Srpska Administration in accordance with the Law on Public Servants.