

Description of learning outcomes**Name of the field of study:**

FOOD TECHNOLOGY AND HUMAN NUTRITION

Level of study:

FIRST-CYCLE studies

Study profile:

GENERAL ACADEMIC

Scientific discipline to which the learning outcomes apply:

field of science AGRICULTURAL SCIENCES

discipline of science FOOD AND HUTRITION TECHNOLOGY

The description of learning outcomes takes into account the universal characteristics of the first degree for level 6 specified in the Act of 22 December 2015 on the Integrated Qualifications System (Journal of Laws of 2016, items 64 and 1010, as amended) and the characteristics of the second degree learning outcomes for level 6 qualifications specified in the regulations issued on the basis of Art. 7 sec. 3 of this Act.

Description of learning outcomes for qualifications at level 6 of the Polish Qualifications Framework

Learning outcomes symbols for the field of study	Directional learning outcomes	Reference to the characteristics of the second degree of PRK
	KNOWLEDGE a graduate knows and understands:	
TZ1A_W01	issues in the field of chemistry, biochemistry, biology, and related sciences at an advanced level in the scope adapted to the needs of the business of a food technologist and human nutrition	P6S_WG
TZ1A_W02	issues in the field of biophysics, mathematics, and related sciences at an advanced level in the scope adapted to the needs of the business of a food technologist and human nutritionist	P6S_WG
TZ1A_W03	basic economic, technical, ecological, ethical, legal, and social aspects of food production, running the production process and economic activity, principles of intellectual and industrial property protection	P6S_WK
TZ1A_W04	principles of conducting technological processes, operations, and unit processes at an advanced level in sustainable food production, has knowledge of process parameters and understands the cause-and-effect relationships related to	P6S_WG

	them, knows process control techniques, and has knowledge of research tools in food technology	
TZ1A_W05	issues related to the chemical composition of raw materials and foodstuffs, microorganisms, properties of food ingredients, mechanisms of their transformations and interactions in terms of food safety and quality	P6S_WG
TZ1A_W06	the impact of the storage method, processing parameters (technological process parameters) on the properties and quality of raw materials for production and the finished product, its nutritional value and food safety	P6S_WG
TZ1A_W07	rules for planning and implementing project work on foodstuffs and technological processes, taking into account factors relevant to food safety and quality at the level of the enterprise and the bioeconomy sphere	P6S_WG P6S_WK
TZ1A_W08	various issues related to the systemic management of food quality and safety in the food supply chain, taking into account current legal, social, and economic conditions	P6S_WK
TZ1A_W09	basic conditions for designing production and organizing work in a food company, taking into account the principles of ergonomics, sanitary and hygienic requirements in food production and their impact on food quality and safety	P6S_WK
TZ1A_W10	the composition and energy and nutritional value of food products and the factors shaping them, including technological and storage processes, knows the role of nutrients in proper human nutrition, has knowledge about the digestion and absorption of nutrients, and understands the mechanisms responsible for their metabolism in the human body.	P6S_WG
	SKILLS a graduate is able to:	
TZ1A_U01	obtain substantive information from adequately selected sources, integrate and interpret it, process it using information technology, draw conclusions and give opinions, prepare and present (in written and/or verbal form) substantive studies of problems and tasks in the field of food technology and nutrition (in Polish or foreign language)	P6S_UW P6S_UK P6S_UU
TZ1A_U02	conduct research on food and technological processes using standard methods and research and measurement equipment, plan and carry out a standard research task (experiment) regarding the assessment of food quality (raw materials, products) document them, and interpret the results and formulate conclusions	P6S_UW P6S_UO
TZ1A_U03	design a food product, technological process, develop documentation of quality assurance system, identify and evaluate the impact of technological processes (phenomena) on the product, develop specifications, procedures, instructions for sustainable food production and nutrition with the use of information technology, evaluate the consumption, composition, energy and nutritional values of foods	P6S_UW P6S_UK
TZ1A_U04	plan, execute and supervise complex processes and technological operations in conditions that are not fully predictable, control the production process, its parameters, take appropriate actions to identify, control the effects and	P6S_UW P6S_UO P6S_UK

	causes of non-compliance, demonstrate the ability to solve complex and unusual technological problems	
TZ1A_U05	use a foreign language at B2 level of the Common European Framework of Reference for Languages, communicate in oral and written form in a foreign language using specialist terminology, read non-complex specialised texts with understanding	P6S_UK
	SOCIAL COMPETENCE a graduate is ready to:	
TZ1A_K01	constant deepening and updating of knowledge and skills, critical evaluation, training and professional development, sharing knowledge, undergoing procedures for verifying competences and skills in the field of food technology and nutrition	P6S_KK
TZ1A_K02	teamwork, communication, and cooperation, assuming the role of a contractor or manager, taking into account the criteria and priorities regarding food technology and nutrition	P6S_KR
TZ1A_K03	taking social, professional, and ethical responsibility for the quality of the food produced, including planning and taking long-term actions to improve it	P6S_KR P6S_KK
TZ1A_K04	have a conscious and responsible impact on food production and human nutrition, taking into account current social and legal aspects, care for the natural environment, food safety, and food security	P6S_KO P6S_KR