

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRARIAN UNIVERSITY**

**EDUCATIONAL AND PROFESSIONAL PROGRAM
"CRAFT TECHNOLOGIES AND GASTRONOMIC INNOVATIONS"**

FIELD OF STUDY 18 "Production and technology"

SPECIALTY 181 "Food Technologies"

HIGHER EDUCATION LEVEL First (bachelor's degree)

«APPROVED BY»

Rector of Sumy National Agrarian

University, Academician of NAASU,

Doctor of Science, Professor

V.I. Ladyka



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**LETTER OF AGREEMENT
EDUCATIONAL AND PROFESSIONAL PROGRAM**

Vice-Rector for Academic Activity
of Sumy National Agrarian University,
Ph.D. in Economic Sciences, Professor



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Director of the educational Department



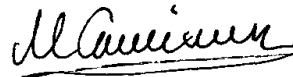
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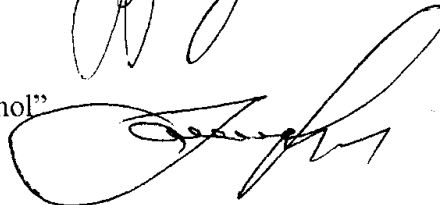
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(Brewery-bar "Veselyi khokhol")



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INTRODUCTION

The educational and professional program "Craft Technologies and Gastronomic Innovations" for the preparation of applicants for higher education at the first (bachelor's) level in the specialty "Food Technology" contains 240 ECTS credits required to obtain the appropriate degree of higher education; list of competencies of the graduate; normative content of training of higher education seekers, formulated in terms of learning outcomes; forms of certification of applicants for higher education.

The project team consists of:

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1. Profile of the educational program "Craft Technologies and Gastronomic Innovations" in the specialty 181 "Food Technologies"

1 - General information	
Full name of the higher educational institution and structural unit	Sumy National Agrarian University Faculty of Food Technology
Degree of higher education and title of qualification in the original language	Degree of higher education - Bachelor Qualification - Bachelor of Food Technology Degree of higher education - Bachelor Specialty – 181"Food Technology"
The official name of the educational program	"Craft Technologies and GastronomicInnovations"
Type of diploma and volume of the educational program	Bachelor's degree, single, 240 ECTS credits, term of study 3 years and 10 months Bachelor's degree, single, 120 ECTS credits, term of study 1 year and 10 months on the basis of a bachelor's degree (EQL of a junior specialist) To provide EC and FC with ECTS credits provided by the VO-130 standard
Availability of accreditation	Accredited for the first time
Cycle / level	NQF of Ukraine – level 6, FQ-EHEA – the first cycle, EQF-LLL - level 6
Prerequisites	Complete general secondary education, bachelor's degree
Language of instruction	Ukrainian
Validity period of the educational program	until 2025
Link to the educational program	http://docs.snau.edu.ua/documents/education/programs/food/181_Harchovi_tehnology_Bakalavr.pdf
2 – The purpose of the educational program	
Training of highly qualified specialists in food production and restaurant technologies, able to solve complex specialized problems and practical problemstaking into account the specifics of the functioning of mini-enterprises of the food industry;to introduce innovations in the industry;develop culture of nutrition.	
3 – Characteristics of the educational program	
Description of the subject area	Object: craft food technology. Purpose of training: formation of higher education students' competencies required for professional activity in the field of production and management of food quality and safety, introduction of gastronomic innovations. Theoretical content of the subject area: basic

	<p>concepts and principles of design and operation of craft food enterprises and restaurants, food quality and safety management system, essence and parameters of technological processes of craft food production, principles of development of new and improvement of existing craft food technologies, rules of application of current legislation and regulations and a system of analysis of marketing activities in production conditions; study of the patterns of formation of the range of craft food products, determining the prospects for its development. Methods, techniques and technologies to be mastered by the applicant for higher education in practice: a set of organizational and technological measures to improve the efficiency of craft enterprises and restaurants, methods and techniques of quality control and safety of craft food products, planning and calculation of the need for material, financial and labor resources.</p> <p>Tools and equipment: modern technological and laboratory equipment and devices, computer equipment and software.</p>
Orientation of the educational program	<p>Educational and professional. Based on modern scientific and practical knowledge in the field of food technology. The program is focused on training a competitive specialist to improve the efficiency of mini-enterprises of the food industry and restaurants with a methodology for quality control and food safety, planning and calculating the need for material, financial and labor resources, soft skills, software application</p>
The main focus of the educational program and specialization	<p>Special education in the field of craft food production; acquisition of theoretical knowledge and practical skills in the field of restaurant technology, gastronomy; practical training at the leading enterprises for the production of craft products; dual education.</p> <p>Key words: craft production, craft products, restaurant technologies, gastronomy, innovative technologies, gastronomic creativity, competitiveness.</p>
Peculiarities of the program	<p>The bachelor's degree program provides in-depth knowledge and a critical approach to the organization and control of food production, by making effective professional decisions, solving current problems and problems of the industry.</p>
4 – Graduates' eligibility to employment and further education	
Employment eligibility	<p>Bachelor of Food Technology has a high level of practical training, special knowledge, in-depth</p>

	specialized training and can hold the following positions: head of a mini-enterprise for food production;restaurant manager;specialist in the food and processing industry;technician-technologist for food production;a professional in the field of restaurant business;restaurant specialist;hospitality specialist;
Further training	Graduates have the right to continue their studies toobtain higher education at the second (master's) level ofhigher education, to acquire additional qualifications inthe system of postgraduate education
5 – Teaching and assessment	
Teaching and learning	Student-centered problem-oriented learning. Classes areheld in the form of lectures, laboratory, practicalclasses, consultations, self-study. Lectures have aninteractive scientific and cognitive nature. Practical andlaboratory classes are conducted using commonmethods (situational tasks, business games, presentations preparation using modern professional software). Educational and methodological support and counseling of individual work is carried out through the university information and educational environment Moodle.
Assessment	Assessment of the quality of mastering within theeducational-professional program includes current andfinal control of knowledge and final certification.Current assessment in lectures, seminars, practical, laboratory classes (oral examination or written express - control). Student speeches when discussing issues, reports on laboratory work, tests), test control, reports on practice, presentations, essays, etc. Final control - exam, test (assessment based on the results of current control). Final certification - fulfillment and defense of the bachelor's project (work)
6 – Program competencies	
Integral competence (IC)	Ability to solve complex specialized problems andpractical problems of technical and technologicalnature, characterized by complexity and uncertainty of conditions in the production conditions of food andrestaurant enterprises and in the learning process, which involves the application of theoretical foundations and methods of food technology.
General Competences (GC)	C01. To know and understand the subject area and professional activity C02. Ability to learn and master modern knowledge C03.Ability to show initiative andentrepreneurial spirit. C04. Skills in the use of information and

	<p>communication technologies</p> <p>C05. Ability to search and analyze information from various sources</p> <p>C06. Ability to evaluate and ensure the quality of work performed.</p> <p>C07. Ability to work in a team.</p> <p>C08. Ability to work independently.</p> <p>C09. Safety skills.</p> <p>C10. The desire to preserve the environment</p> <p>C11. Ability to communicate in the national language both orally and in a written form</p> <p>C12. Ability to communicate in a foreign language</p> <p>C13. The ability to realize their rights and responsibilities as a member of society, to realize the values of civil society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.</p> <p>C14. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies to ensure a healthy lifestyle</p>
Professional competencies of the specialty	<p>C15. Ability to implement in the production of craft food technology based on an understanding of the essence of the transformations of the main components of food raw materials during the technological process.</p> <p>C16. Ability to manage technological processes using hardware and software.</p> <p>C17. Ability to arrange and control the quality and safety of raw materials, semi-finished products and food products using modern methods.</p> <p>C18. Ability to ensure the quality and safety of craft products on the basis of relevant standards and within food safety management systems during their production and sale.</p> <p>C19. Ability to develop new and improve existing craft food technologies taking into account the principles of nutrition, resource saving and intensification of technological processes.</p> <p>C20. Ability to compile business documentation and perform technological and economic calculations.</p> <p>C21. Ability to select and operate technological equipment, to compile hardware-technological schemes</p>

	<p>for the production of craft food products.</p> <p>C22. Ability to conduct research in specialized laboratories to solve applied problems.</p> <p>C23. Ability to design new or upgrade existing production (production sites).</p> <p>C24. Ability to develop draft regulations using current legislation and reference materials.</p> <p>C25. Ability to develop and implement effective methods of work organization, to be responsible for the professional development of individuals and / or groups of individuals.</p> <p>C26. Ability to form a communication strategy in the field of food technology, to lead a professional discussion.</p> <p>C27. Ability to increase production efficiency, implement modern management systems.</p> <p>C28. Ability to generate new ideas (creativity), to show initiative in the modern restaurant industry.</p> <p>C29. Ability to perform professional activities in accordance with quality standards and requirements of the food safety management system (FSMS).</p> <p>C30. Ability to analyze the effectiveness of customer service.</p>
7 -Program learning outcomes (PLO)	
	<p>PLO1.To know and understand the basic concepts, theoretical and practical problems in the field of craft food technology, restaurant technology.</p> <p>PLO2. To show creative initiative and improve professional level by means of unremitting education and self-learning.</p> <p>PLO3. To be able to apply information and communication technologies for information support of professional activity and conducting research of applied nature.</p> <p>PLO 4. To find and process research and technical information from various sources and use it to solve specific technical and technological problems.</p> <p>PLO 5. To know the scientific basis of technological processes of craft food production and the laws of physicochemical and microbiological transformations of the main components of food raw materials during technological processing.</p> <p>PLO 6. To know and understand the main factors influencing the synthesis and metabolism of food components and the role of nutrients in human nutrition.</p>

	<p>PLO 7. To arrange, control and manage technological processes when processing raw materials into food products, including the use of technical means of automation and control systems.</p> <p>PLO 8. Be able to develop or improve food technology of high nutritional value, taking into account global trends in the industry.</p> <p>PLO 9. To be able to develop draft specifications and technological instructions for food.</p> <p>PLO 10. To implement food safety management systems.</p> <p>PLO 11. To determine the compliance of quality indices of raw materials, semi-finished products and finished products with regulatory requirements using modern methods of analysis (or control).</p> <p>PLO 12. To be able to design new and modernize existing enterprises, shops, production sites using computer-aided design systems and software.</p> <p>PLO 13. To choose modern equipment for technical tools of new or reconstructed enterprises (production units), to know the principles of its operation and rules of operation, to make hardware and technological schemes for the production of food products of the designed range.</p> <p>PLO 14. To increase production efficiency by introducing resource-saving and competitive technologies, to analyze the state and dynamics of demand for food products.</p> <p>PLO 15. To introduce modern enterprise management systems.</p> <p>PLO 16. To keep to safety rules and take technical and organizational measures to arrange safe working conditions during production activities.</p> <p>PLO 17. To arrange the process of waste disposal and ensure environmental cleanliness of production.</p> <p>PLO 18. To have basic skills in conducting theoretical and / or experimental research performed individually and / or as part of a research team.</p> <p>PLO 19. To increase work efficiency by combining independent and team work.</p> <p>PLO 20. To be able to conclude business documentation in the national language.</p> <p>PLO 21. To be able to present the results of activity to a professional audience and the general public in order to present ideas, problems, solutions and personal experience in the field of food technology.</p>
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	<p>PLO 22. To carry out business communications in the professional sphere in Ukrainian and foreign languages.</p> <p>PLO 23. To have the skills to arrange the work of individual production units of the enterprise and coordinate their activity.</p> <p>PLO 24. To carry out technological, technical, economic calculations in the development and introduction of food products to the consumer market, to keep records of material resource costs.</p> <p>PLO 25. To identify creative initiative on market transformation of the economy.</p> <p>PLO 26. To form and defend the worldview and public position, to act socially responsibly and consciously.</p> <p>PLO 27. To preserve and increase the achievements and values of society, lead a healthy lifestyle.</p> <p>PLO28. Be able to implement craft technologies in the production activities of restaurants.</p> <p>PLO29 Be able to develop gastronomic brands taking into account the culture of food or beverage consumption, features of the national cuisine of Ukraine and the world.</p> <p>PLO30 Use creative approaches and eco-technologies in food production.</p>
Form of certification	<p>Certification is carried out in the form of public defense of the qualification paper, which involves independent solution of a specialized task of design or research nature. There can be no academic plagiarism, falsification or cheating in the qualification paper. Qualification paper should be posted on the website of the higher educational establishment or its structural unit, or in the repository of the higher educational establishment</p>
8 - Resource support for program implementation	
Academic staff	<p>Academic staff of the Faculty of Food Technologies of SNAU allows to train applicants for higher education and meets regulatory requirements</p>
Logistics	<p>Material and technical support of the Faculty of Food Technologies of SNAU allows to train applicants for higher education and meets regulatory requirements. To ensure the educational process we use: library; laboratories: "Interdepartmental scientific-practical laboratory of chemical and microbiological researches of foodstuff", "Educational-scientific laboratory of Innovative technologies and safety and quality of foodstuff", "Educational-scientific laboratory of the equipment of food productions", "Educational-scientific</p>

	laboratory of designing of new kinds of foodstuff" ," Training laboratory of food technology ", which are equipped with technical means and specialized equipment, research and industrial installations and devices, production equipment, inventory and utensils; offices; sports complex; food factory; computer classes; hostel; medical centre
Information and training support	The educational process of training of higher education applicants is fully provided with methodical and informational materials of lectures, practical classes, seminars, laboratory classes, term projects (papers), tasks for individual work of students, questions for current and final control, programs and bases for practice , as well as the availability of reading rooms, textbooks, manuals, professional periodicals.
9 - Academic mobility	
National credit mobility	National credit mobility of students, post-graduates, PhD students, research and teaching staff of the University, including training, internships, academic and practical training, research, teaching and advanced training is organized on the basis of partnership agreements between the University and universities of Ukraine in accordance with the Regulations on the implementation of the right of students of Sumy National Agrarian University to academic mobility
International credit mobility	The University has concluded agreements on international academic mobility with the following universities: Weihenstephan-Triesdorf University of Applied Sciences (Germany), Warsaw University of Life Sciences (Poland), Xi'an University of Technology, Hezhou University, Guizhou University, Zhejiang Agriculture and Forestry University, Henan Institute of Science and Technology, Gansu Agricultural University (China).
Training of foreign applicants for higher education	It is possible for foreign citizens to study provided that the student has previously studied the Ukrainian language.

2. List of components of the educational and professional program and their logical sequence

2.1. List of EP components

Code a / d	Components of the educational program (academic disciplines, term projects (papers), practices, qualification paper)	Number of credits	Form of final control
Mandatory components of the EP			
I. Set of general training subjects			
MC1.	Historical and philosophical studies	5,0	Examination
MC2.	Business Ukrainian	5,0	Examination
MC3.	Foreign language for professional communication	10,0	Examination
MC4.	Higher mathematics	5,0	Examination
MC5.	Informatics and information technologies	5,0	Examination
MC6.	Civil education	5,0	Differential credit
II. Set of professional training subjects			
MC7.	Theoretical foundations of food production	5,0	Examination
MC8.	Gastronomic innovations	5,0	Examination
MC9.	Food commodity research	5,0	Differential credit
MC10.	Food microbiology	5,0	Examination
MC11.	Methods of food control	5,0	Examination
MC12.	Fundamentals of physiology and food hygiene	5,0	Examination
MC13.	Chemistry	5,0	Examination
MC14.	Biochemistry	5,0	Examination
MC15.	Processes and devices of food production	5,0	Examination
MC16.	Engineering and computer graphics	5,0	Differential credit
MC17.	Work safety	5,0	Examination
MC18.	Technological equipment and craft food production equipment (term project)	10,0	Examination, fulfillment and defense of TP
MC19.	Craft technologies of milk and dairy products	10,0	Examination
MC20.	Craft technology of meat products and fish processing	10,0	Examination
MC21.	Restaurant technologies	5,0	Differential credit
MC22.	Craft technologies of bakery and confectionery	5,0	Differential credit
MC23.	Craft technologies of vegetable oils, canned vegetables and fruits	5,0	Differential credit
MC24.	Craft technologies of alcoholic and soft drinks	5,0	Differential credit
MC25.	Ecotechnologies in food production	5,0	Differential credit
MC26.	Food safety management according to the	5,0	Examination

	principles of the FSMS system		
MC27.	Design of craft food enterprises (term project)	5,0	Examination, fulfillment and defense of TP
MC28.	Economics and management of food production	5,0	Examination
MC29.	Practical training		
	- educational	5,0	Differential credit
	- production	5,0	Differential credit
	- undergraduate	5,0	Differential credit
MC30.	State certification: fulfillment and defense of qualification paper	5,0	Certification by the examination board
Total volume of mandatory components:		180 ECTS credits	
Optional EP components			
<i>Optional subject of HEE</i>			
OC1.	General university subject 1	5,0	Credit
OC2.	General university subject 2	5,0	Differential credit
OC3.	General university subject 3	5,0	Differential credit
OC4.	General university subject 3	5,0	Differential credit
<i>Optional subjects of research and professional direction of the applicant</i>			
OC 5.	Optionalsubject 1	5,0	Differential credit
OC 6.	Optionalsubject 2	5,0	Differential credit
OC 7.	Optionalsubject 3	5,0	Differential credit
OC 8.	Optionalsubject 4	5,0	Examination
OC 9.	Optionalsubject 5	5,0	Differential credit
OC 10.	Optionalsubject 6	5,0	Examination
OC 11.	Optionalsubject 7	5,0	Differential credit
OC 12.	Optionalsubject 8	5,0	Examination
Total volume of optional components:		60 ECTS credits	
TOTAL VOLUME OF EDUCATIONAL PROGRAM		240 ECTS credits	

2.2. Structural and logical scheme of EP

A brief description of the logical sequence of studying the mandatory components of EP

	I. The cycle of general disciplines training	II. Cycle of disciplines of professional training	Elective components of the EPP
I course	1 semester	Business Ukrainian Higher mathematics Foreign language for professional communication Informatics and information technologies Historical and philosophical studies	Chemistry Physical education / Classes in sections
	2 semester	Foreign language for professional communication Civil education Historical and philosophical studies	Biochemistry Food microbiology Practical training (educational) General university subject 1 Physical education / Classes in sections
II course	3 semester	Foreign language for professional communication	Theoretical foundations of food production Fundamentals of physiology and food hygiene Work safety Engineering and computer graphics Physical education / Classes in sections General university subject 2
	4 semester	Foreign language for professional communication	Gastronomic innovations Processes and devices of food production Methods of food control Food commodity research Physical education / Classes in sections General university subject 3
III course	5 semester		Craft technologies of milk and dairy products Craft technology of meat products and fish processing Craft technologies of vegetable oils, canned vegetables and fruits Technological equipment and craft food production equipment Restaurant technologies Craft technologies of alcoholic and soft drinks
	6 semester		Craft technologies of bakery and confectionery Ecotechnologies in food production Practical training (production)
IV course	7 semester		Practical training (undergraduate) Economics and management of food production Design of craft food enterprises Food safety management according to the principles of the FSMS system Optional subject 4 Optional subject 6
	8 semester		State certification: fulfillment and defense of qualification paper Optional subject 1 Optional subject 2 Optional subject 3 Optional subject 5 Optional subject 7 Optional subject 8

Mandatory components of the EP
 Selective components of EP
 Practical training

3. Form of certification of applicants for higher education

Certification of applicants of the first (Bachelor's) level according to the educational program " Craft Technologies and GastronomicInnovations" is carried out in the form of public defense of qualification paper and finishes with the issuance of a standard document on awarding a qualification "Bachelor of Food Technology".

5. Matrix of correspondence of program competences to components of the educational program

	MC1	MC2	MC3	MC4	MC5	MC6	MC7	MC8	MC9	MC10	MC11	MC12	MC13	MC14	MC15	MC16	MC17	MC18	MC19	MC20	MC21	MC22	MC23	MC24	MC25	MC26	MC27	MC28	MC29	MC30		
C01				+			+	+	+	+	+	+	+	+	+			+								+	+		+	+		
C02		+	+	+	+	+	+				+					+												+	+	+		
C03	+					+		+																				+		+		
C04					+	+									+	+			+									+				
C05		+			+	+										+												+	+		+	
C06				+				+			+						+									+		+	+	+		
C07	+		+	+		+		+				+																+		+		
C08	+	+	+	+		+		+																				+		+	+	
C09								+	+	+			+	+	+		+	+														
C10							+	+							+		+	+								+	+	+				
C11	+	+																													+	
C12	+		+																													
C13	+	+				+																										
C14	+	+				+		+				+								+	+	+	+	+	+	+					+	
C15							+		+	+			+	+	+			+	+	+	+	+	+	+	+		+			+	+	
C16					+										+	+		+	+	+	+	+	+	+	+					+	+	
C17							+		+	+	+	+	+	+					+	+	+	+	+	+	+					+		
C18								+	+	+	+	+	+	+					+	+	+	+	+	+	+					+		
C19										+			+	+	+			+	+	+	+	+	+	+	+	+	+	+		+	+	
C20		+		+	+			+	+										+	+	+	+	+	+	+		+	+		+	+	
C21															+			+	+	+	+	+	+	+	+		+			+	+	
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C28	+																			+	+	+	+	+	+			+	+	+	+	
C29											+	+																+			+	
C30	+					+														+	+	+	+	+	+	+		+	+	+		

5. Matrix of providing program learning outcomes (PLO) with the relevant components of the educational program

	MC1	MC2	MC3	MC4	MC5	MC6	MC7	MC8	MC9	MC10	MC11	MC12	MC13	MC14	MC15	MC16	MC17	MC18	MC19	MC20	MC21	MC22	MC23	MC24	MC25	MC26	MC27	MC28	MC29	MC30		
PLO1							+					+								+	+	+	+	+	+				+	+	+	
PLO 2	+	+	+	+		+																								+		+
PLO 3			+		+										+	+															+	+
PLO 4			+		+																											+
PLO 5							+			+	+		+	+	+					+	+	+	+	+	+					+	+	
PLO 6							+			+		+	+	+																		
PLO 7					+										+			+	+	+	+	+	+	+	+					+		
PLO 8									+			+	+	+						+	+	+	+	+	+						+	
PLO 9											+									+	+	+	+	+	+		+			+		
PLO 10											+		+				+										+			+		
PLO 11										+	+	+	+							+	+	+	+	+	+							
PLO 12				+	+											+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PLO 13															+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
PLO 14															+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	
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PLO 27	+					+		+				+																				
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PLO 29	+		+					+	+			+								+	+	+	+	+	+			+	+	+		
PLO 30							+																			+		+	+	+		

The list of normative documents EPP is based on

1. Law of Ukraine dated 01.07.2014 № 1556-VII "On Higher Education" [Access mode: <https://zakon.rada.gov.ua/laws/show/1556-18>];
2. Law of Ukraine dated 05.09.2017 "On Education" - [Access mode: <http://zakon5.rada.gov.ua/laws/show/2145-19>];
3. Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2015 № 266 "On approval of the list of fields of knowledge and specialties in which the training of higher education applicants is carried out" [Access mode: <http://zakon4.rada.gov.ua/laws/show/266-2015-n>];
4. Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 № 1187 "On approval of the License conditions for educational activities of educational institutions" [Access mode: <http://zakon4.rada.gov.ua/laws/show/1187-2015-p/page>];
5. Resolution of the Cabinet of Ministers of Ukraine dated 23.11.2011 № 1341 "On approval of the National Qualifications Framework" [Access mode: <http://zakon4.rada.gov.ua/laws/show/1341-2011-p>];
6. National Classifier of Ukraine: «Classifier of professions DK 003: 2010DK 003: 2010 [Access mode: <http://www.dk003.com>];
7. Standard of higher education in the specialty 181- "Food Technology" in the field of knowledge 18 - "Production and Technology" for the first (Bachelor's) degree of higher education. Approved and put into effect by the order of the Ministry of Education and Science of Ukraine dated 18.10. 2018 № 1125 [Access mode: <https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/12/21/181-kharchovi-tekhnologii-bakalavr.pdf>];
8. Regulations on educational programs at Sumy National Agrarian University dated October 15, 2019 [Access mode: <https://snau.edu.ua/wp-content/uploads/2019/12/%D0%9F%D0%BE%D0%BB%D0%BE%D0%B6%D0%B5%D0%BD%D0%BD%D1%8F-%D0%BF%D1%80%D0%BE-%D0%9E%D1%81%D0%B2%D1%96%D1%82%D0%BD%D1%96-%D0%BF%D1%80%D0%BE%D0%B3%D1%80%D0%B0%D0%BC%D0%B8-%D0%A1%D0%9D%D0%90%D0%A3-1.pdf>];

9. Standards and recommendations for quality assurance in the European Higher Education Area (ESG) [Access mode: http://ihed.org.ua/images/doc/04_2016_ESG_2015.pdf];
10. International Standard Classification of Education (ISCED 2011): UNESCO Institute for Statistics [Access mode: <http://www.uis.unesco.org/education/documents/isced-2011-en.pdf>];
11. ISCED Fields of Education and Training 2013 (ISCED-F 2013): UNESCO Institute for Statistics [Access mode: <http://www.uis.unesco.org/Education/Documents/isced-fields-of-education-training-2013.pdf>].
12. Methodical recommendations for the development of standards of higher education, approved by the order of the Ministry of Education and Science of Ukraine dated 01.06.2017 № 600 (as amended by the order of the Ministry of Education and Science of Ukraine dated 21.12.2017 № 1648), approved by the sector of higher education Methodical Council of the Ministry of Education and Science of Ukraine (Minutes dated March 29, 2016 № 3);
13. Development of educational programs. Methodical recommendations [Access mode: http://ihed.org.ua/images/doc/04_2016_rozroblennya_osv_program_2014_tempus-office.pdf];
14. National Education Glossary: Higher Education [Access mode: http://ihed.org.ua/images/doc/04_2016_glossariy_Visha_osvita_2014_tempus-office.pdf];
15. Development of the quality assurance system of higher education in Ukraine: information-analytical review [Access mode: http://ihed.org.ua/images/doc/04_2016_Rozvitok_sisitemi_zabesp_yakosti_VO_UA_2015.pdf];
16. European credit transfer savings system : User's Guide [Access mode: http://ihed.org.ua/images/doc/04_2016_ECTS_Users_Guide-2015_Ukrainian.pdf].
17. EQF-LLL - European Qualifications Framework for Lifelong Learning [Access mode: https://ec.europa.eu/ploteus/sites/eac-eqf/files/brochexp_en.pdf];
18. QF-EHEA - Qualification Framework of the European Higher Education Area [Access mode: <http://www.ehea.info/article-details.aspx?ArticleId=67>];

19. Rashkevych YM Bologna process and a new paradigm of higher education [Access mode: file: /// D: / Users / Dell / Downloads / BolonskyiProcessNewParadigm HE.pdf];

20. TUNING (for acquaintance with special (professional) competences and examples of standards [Access mode: <http://www.unideusto.org/tuningeu/>]).

21. Regulations on the organization of the educational process at Sumy National Agrarian University;

22. SNAU Development Strategy for 2020-2025;

23. Strategic plan for internationalization of SNAU for 2020-2025.