

CARD OF THE PROGRAM OF STUDIES

Name of the program of the education (field of study): **Food Technology and Human Nutrition**

Name of the Faculty: **FACULTY OF PRODUCTION AND LOGISTICS ENGINEERING**

Education programme	Resolution of the Council from	24.04.2019r.
	Is in force for an academic year	2019/2020
Level of training (first-cycle/second-cycle degree)		first-cycle degree
In the educational profile (general academic/ practical)		general academic
The date and the number of a senate resolution accepting directional effects of the education		29.05.2019r resolution nr 322
Form of the studies (full-time / part-time)		full-time
Assigning the education to area or areas		1) Field of engineering and technical sciences. Discipline - mechanical engineering. 2) Field of agricultural sciences. Discipline - food and nutrition technology.
Showing fields (of science and art.) and scientific disciplines (or artistic) which learning outcomes for the program refer to (to underline leading)		<u>Discipline - mechanical engineering.</u> Discipline - food and nutrition technology.
duration (in semesters)		7
Number of ECTS points		210
Professional title received by the graduate		inżynier (in english language Engineer)
ISCED classification		
Connection with the mission of the University and her development strategy		Education in a given field combines the best traditions of technical thought with the tasks of today and the challenge of rapid technological changes in the modern world. In the educational and research-related activities of the faculty, this combines the need to shape modern thought in the face of economic transformations and economic prospects of the country with the creation of ethical values of the world of science and technology. Teachers, students, researchers and administration staff are also focused around this mission representatives of the school's economic and social environment. The basic components of such a

	perceived mission include: education, scientific research and social service. This favors the integration and development of science, as well as stimulates creativity and strengthens social ties with the region.	
Cells of the education and the job opening and the continuation of studies	Studies in the field are to ensure the education of specialists who, based on the acquired knowledge in the field of basic sciences (mathematics, physics, chemistry) and engineering sciences and practical skills, will get a basis for work in the field of issues related to the studied direction, for technical and technological purposes, economic and ecological satisfaction of social needs. Graduates of engineering studies (first-cycle) may continue their studies at the second-cycle Master's studies	
Preliminary requirements- expected competences of a candidate (particularly in case of second degree studies)	Candidates with technical interests, analytical skills and knowledge in the areas of mathematics, physics and chemistry are preferred. The candidate should also have the ability to solve problems and be oriented to work in a group. Interest in science and nature as well as issues of human nutrition and dietetics as well as food technology are welcome.	
Principles of the recruitment (in accordance with the recruitment resolution)	The basis for admission to studies are the results of the matriculation examination (secondary school) of a modern foreign language, and 2 subjects selected from the group of subjects: mathematics, physics, chemistry, computer science, biology, Polish language.	
Differences in the ratio to other programs about similarly defined cells and effects of the education led at the Opole University of Technology	No education programs with similarly defined goals and effects were found at the Opole University of Technology.	
Ways of the verification of established effects of educating	The assumed learning outcomes for the course formulated in Annex 15 to the University Education Quality Assurance System, i.e. in the reference table of directional effects to area effects, will be verified in the manner specified in the individual subject description tabs (Annex 1 to the University Education Quality Assurance System), forming an integral part of the education program	
Summary indicators being characteristic of a program of the education including:	Total numbers of ECTS points, with which the student must get university teachers requiring the direct participation as part of classes	190
	Total number of points of ECTS which the student must get as part of classes of the level in basic sciences to which effects of educating the education for the specific program refer, and the profile of the education	51
	For the practical profile total number of ECTS points assigned for the classes	120

	associated with practical vocational education, For the general academic profile total number of ECTS points assigned for classes associated with conducted researches in field of science or art associated with direction	
	Number of ECTS points which the student must get as part of classes in areas of humanities or the social science	6
	in the case of full-time or full-time master's studies, the number of hours of physical education classes	60
	Percentage share of number of ECTS points for the area of the education „and” in the total number OF ECTS points – necessary to determine for every area of the education, in case of the program studies for the program of educating the education assigned to more than one area	1. 75% 2. 25%

Study program approved by the faculty student self-government body

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Signature of the faculty representative of
the student self—government body

.....
date, Dean's signature and stamp

The Table of Major-Related Learning Outcomes

Education program (field of studies): Food Technology and Human Nutrition	
The Level of Education : First-Level Degree	
Educational Profile: General Academic	
Symbols of Major-related Learning Outcomes	Learning Outcomes (content)
KNOWLEDGE	
TZiZC_K1_W01	The graduate has knowledge of chemistry, mathematics and physics as well as related disciplines of science requisite to understand phenomena and processes taking place in food processing
TZiZC_K1_W02	The graduate has general knowledge of the biological basics of production and technical engineering issues applicable to technology of food processing
TZiZC_K1_W03	The graduate has in-depth knowledge of food processing and conservation technologies
TZiZC_K1_W04	The graduate knows issues involving engineering design with the use of computer graphics
TZiZC_K1_W05	The graduate knows principles of energy economy in the context of using the potential of food processing base
TZiZC_K1_W06	The graduate knows the principles of identifying threats of industrial safety and occupational hygiene as well as ergonomics in the area of food technology
TZiZC_K1_W07	The graduate has knowledge of applying food law, norms and directives for designing and exploitation of technical facilities used for production safety and food conservation
TZiZC_K1_W08	The graduate has knowledge of materials engineering, mechanics and fluid mechanics requisite to designing technical equipment for food production
TZiZC_K1_W09	The graduate has knowledge from the range of economy, law and social science referring to the area of food technology and human nutrition
TZiZC_K1_W10	The graduate has knowledge from functioning business organizations, their management, supervision, logistics, control and certifying with regard to food technology
TZiZC_K1_W11	The graduate knows the rules of sustainable development, environmental protection and organic production, as well as their influence on the quality and safety of food production
TZiZC_K1_W12	The graduate knows statistical methods and IT tools for analysis and evaluation of phenomena and processes occurring in food production
TZiZC_K1_W13	The graduate knows and understands concepts and principles concerning protection of intellectual property
TZiZC_K1_W14	The graduate knows and understands theories and terminology in a foreign language enabling to use a foreign language at B2 level of Common European Framework of Reference for Languages. The graduate knows Polish and English terminology related to food production and human nutrition
TZiZC_K1_W15	The graduate has knowledge of human anatomy and physiology with particular focus on the digestive system including digestion and absorption processes
TZiZC_K1_W16	The graduate knows, understands and can use the knowledge in general biochemistry, food chemistry, general and food microbiology, as well as toxicology
TZiZC_K1_W17	The graduate knows the technology of dishes at an advanced level
TZiZC_K1_W18	The graduate presents advanced knowledge of the principles of healthy eating, as well as causes and effects of eating disorders
TZiZC_K1_W19	The graduate has advanced knowledge of food biotechnology
TZiZC_K1_W20	The graduate knows principles and methods of assessing food quality and safe production at an advanced level
TZiZC_K1_W21	The graduate has advanced knowledge concerning human nutrition, dietetics as well as

	gastronomic technology
TZiZC_K1_W22	The graduate has advanced knowledge concerning technology of plant and livestock products
TZiZC_K1_W23	The graduate knows methods, techniques, tool and materials used for solving engineering tasks regarding food technology and conservation
SKILLS	
TZiZC_K1_U01	The graduate can apply Information Technology to obtain, process, analyse and use data regarding food technology
TZiZC_K1_U02	The graduate can make a preliminary synthesis and economic analysis of undertaken engineering activities
TZiZC_K1_U03	The graduate can independently plan and implement the process of lifelong learning. The graduate can prepare in the Polish language and in a foreign language well-documented analysis of problems concerning the studied engineering discipline
TZiZC_K1_U04	The graduate can use a foreign language at B2 level of Common European Framework of Reference for Languages. The graduate has ability to communicate with the use of different techniques in professional environment focusing on the issues of food technology and human nutrition.
TZiZC_K1_U05	The graduate can make presentations in the Polish language and a foreign language about specific issues of the studied engineering discipline
TZiZC_K1_U06	The graduate has ability to retrieve, interpret and assess suitability of data related to technology of food production and human nutrition
TZiZC_K1_U07	The graduate can recognise biological, chemical and physical threats as well as their environmental sources and technical equipment for food production and processing used by the preparer
TziZC_K1_U08	The graduate is able to carry out risk and benefit analysis and is able to formulate guidelines for quality management and safety of use of technical means in food technology
TZiZC_K1_U09	The graduate is able to prepare documented source studies on safe use and service of technical equipment in food production
TZiZC_K1_U10	The graduate is able to assess and plan the scope of tasks related to the recycling of technical equipment and consumables, as well as sewage and waste management including integrated environmental management and sustainability criteria
TZiZC_K1_U11	The graduate has the ability to perform observations and measurements, determine the value and assess the accuracy of measurements in relation to biological, chemical and physical quantities associated with the use of technical equipment in food production and the assessment of the quality of raw materials and food products
TZiZC_K1_U12	The graduate is able to perform research tasks related to the identification of the quality of materials and changes occurring during their processing
TZiZC_K1_U13	The graduate is able to plan and carry out chemical analysis related to food assessment, uses mathematical – statistical and IT methods to describe and analyse phenomena in technological processes of food production
TZiZC_K1_U14	The graduate has the ability to apply knowledge in the field of information processing for improving the exploitation of technical infrastructure of food technology
TZiZC_K1_U15	The graduate is able to determine and assess the value of implementing innovative solutions aimed at improving work effectiveness of the technical means in food production
TZiZC_K1_U16	The graduate is able to assess existing operations and unit processes and propose alternative solutions, including quality improvement, safety of use of technical equipment and efficiency of technological processes in food production
TZiZC_K1_U17	The graduate has the ability to independently interpret the obtained empirical data and draw conclusions
TziZC_K1_U18	The graduate is able to conduct a nutrition survey and evaluate nutritional status
TZiZC_K1_U19	The graduate is able to calculate individual energy demand, define nutrients and energy value of diets
TZiZC_K1_U20	The graduate is able to deal with dietary recommendations and food standards

TZiZC_K1_U21	The graduate is able to assess food quality with regard to microbiological and toxicological hazards
SOCIAL COMPETENCES	
TZiZC_K1_K01	The graduate is aware of social, professional and ethical responsibility for ensuring safe use of food technology equipment
TZiZC_K1_K02	The graduate is aware of risk and is able to evaluate results of maintaining equipment in food technology
TZiZC_K1_K03	The graduate understands the need for continuous learning and upgrading professional and personal skills as well as acting in an entrepreneurial way
TZiZC_K1_K04	The graduate is able to identify professional problems and prioritise solutions of them. The graduate is prepared for the critical evaluation of acquired knowledge
TZiZC_K1_K05	The graduate is able to work and solve problems independently
TZiZC_K1_K06	The graduate is able to co-operate, work in a team and play different roles in it
TZiZC_K1_K07	The graduate is sensitive to aesthetics, authenticity, quality and safety of action undertaken in food technology development with preservation of natural environment welfare
TZiZC_K1_K08	The graduate understands the importance of providing adequate working conditions while handling technical equipment and follow the rules of work hygiene

Symbols

The symbol of the outcome contains:

- letter K – characteristics denoting the major-related outcomes,
- number 1 – undergraduate studies,
- symbol_ (underscore),
- letters: W, U and K – denote the categories of the outcomes (W – knowledge, U – skills, K – social competences),
- 01, ... - number of outcome in a given category, expressed by two digits (numbers 1-9 are preceded by 0).

PLANY I PROGRAMY STUDIÓW
STUDY PLANS AND PROGRAMS

KIERUNEK STUDIÓW - *FIELD OF STUDY*****

- FOOD TECHNOLOGY AND HUMAN NUTRITION
- ***FOOD TECHNOLOGY AND HUMAN NUTRITION***

***Studia stacjonarne
pierwszego stopnia
- wg specjalności***

First Cycle Programme - Full-Time Studies

CHARAKTERYSTYKA OGÓLNA

kierunek studiów: FOOD TECHNOLOGY AND HUMAN NUTRITION

specjalność: QUALITY AND FOOD SAFETY

profil: OGÓLNOAKADEMICKI

nazwa wydziału: WYDZIAŁ INŻYNIERII PRODUKCJI I LOGISTYKI

plan studiów	uchwała Rady Wydziału z dnia	24.04.2019
	obowiązuje od roku akademickiego	2019/2020
forma studiów (stacjonarne / niestacjonarne)	stacjonarne	
poziom studiów (I stopnia / II stopnia)	I-go stopnia	
czas trwania (w sem.)	7	
tytuł zawodowy otrzymywany przez absolwenta	inżynier	
liczba punktów ECTS	210	

PLAN STUDIÓW – STUDY PLAN

POLITECHNIKA OPOLSKA WYDZIAŁ INŻYNIERII PRODUKCJI I LOGISTYKI	OPOLE UNIVERSITY OF TECHNOLOGY FACULTY OF PRODUCTION ENGINEERING AND LOGISTICS
Kierunek studiów: FOOD TECHNOLOGY AND HUMAN NUTRITION	Field of study: FOOD TECHNOLOGY AND HUMAN NUTRITION
STUDIA STACJONARNE PIERWSZEGO STOPNIA – INŻYNIERSKIE	
FIRST CYCLE PROGRAMME - FULL-TIME STUDIES (Engineer's degree)	

SPECJALNOŚĆ – SPECIALIZATION:
QUALITY AND FOOD SAFETY - QUALITY AND FOOD SAFETY

SEMESTR: 1 (1 st Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot Subject unit – semester curricular	W (Lecture)	C (Practical classes)	L (Laboratory classes)	P (Project)	S (Seminar)		
1.1	Mathematics - I Matematyka - I	30E	30	-	-	-	5	P
1.2	Physics for engineers - I Fizyka dla inżynierów - I	15	-	-	-	-	2	P
1.3	General chemistry - I Chemia ogólna - I	15	15	-	-	-	2	P
1.4	Basis of ecology Podstawy ekologii	30	-	-	-	-	3	P
1.5	Descriptive geometry Geometria wykreślna	30	15	-	-	-	3	P
1.6	Information system and technologies Technologie informacyjne	30	-	-	-	-	2	KO
1.7	Ergonomics and industrial safety Ergonomia i bezpieczeństwo pracy	30	-	-	-	-	2	KO
1.8	General theory of machines Maszynoznawstwo ogólne	30E	-	-	-	-	4	Kr
1.9	Technologies and industrial apparatus Technologie i urządzenia przemysłowe	30	-	-	-	-	2	Kr
1.10	The science of man - human anatomy and physiology Nauka o człowieku-anatomia i fizjologia człowieka	15	15	-	-	-	2	Kr
1.11	Energy logging techniques Techniki pozyskiwania energii	30E	-	-	-	-	3	Ko
Liczba godzin w semestrze (Number of hours in a semester)		285	75	-	-	-	30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		360						

SEMESTR: 2 (2 nd Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot Subject unit – semester curricular	W (Lecture)	C (Practical classes)	L (Laboratory classes)	P (Project)	S (Seminar)		
2.1	Mathematics - II Matematyka - II	15E	15	-	-	-	4	P
2.2	Physics for engineers - II Fizyka dla inżynierów - II	15E	-	30	-	-	3	P

2.3	General chemistry - II	15	-	15	-	-	2	P
	Chemia ogólna - II							
2.4	Engineering graphics	15	30	-	-	-	4	P
	Grafika inżynierska							
2.5	Elements of informatics and computer science techniques	30	-	30	-	-	5	KO
	Elementy informatyki i technik komputerowych							
2.6	Materials science	30	-	-	-	-	2	Ko
	Materiałoznawstwo							
2.7	Technical mechanics and fluid movement	15	15	-	-	-	4	Ko
	Mechanika ogólna i ruch płynów							
2.8	Basic of agriculture and forestry production	15E	15	-	-	-	2	Kr
	Podstawy produkcji surowców roślinnych							
Przedmioty bloku humanistyczno-społecznego – wymagana liczba p. ECTS w semestrze (Optional units – compulsory ECTS in a semester)							4	
2.9	Elective subject I - Culture of language	30	-	-	-	-	(2)	HS
	Moduł wybieralny I - Kultura języka							
2.9	Elective subject I - History of technique	30	-	-	-	-	(2)	HS
	Moduł wybieralny I - Historia techniki							
2.10	Elective subject II - Basis of business entities economy	30	-	-	-	-	(2)	HS
	Moduł wybieralny II - Podstawy ekonomii podmiotów gospodarczych							
2.10	Elective subject II - Philosophy and ethics elements	30	-	-	-	-	(2)	HS
	Moduł wybieralny II - Filozofia z elementami etyki							
Liczba godzin w semestrze (Number of hours in a semester)		210	150				30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		360						

SEMESTR: 3 (3 rd Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot	W	C	L	P	S		
		Subject unit – semester curricular	(Lecture)	(Practical classes)	(Laboratory classes)	(Project)	(Seminar)	
3.1	Physical chemistry	15	-	-	-	-	3	P
	Chemia fizyczna							
3.2	Physical education	-	30	-	-	-	0	KO
	Wychowanie fizyczne							
3.3	Foreign language	-	-	30	-	-	2	KO
	Język obcy							
3.4	Analysis and assessment of food quality	15E	-	30	-	-	3	Kr
	Analiza i ocena jakości żywności							
3.5	Food law	15	-	-	-	-	1	Ko
	Prawo żywnościowe							
3.6	Computer Aided Design	15	-	30	15	-	4	Ko
	Komputerowe wspomaganie projektowania							
3.7	Machines and apparatuses of food industry	15E	-	-	15	-	3	Kr
	Maszyny i aparaty przemysłu spożywczego							
3.8	Fundamentals of technology and storage foods	15E	-	30	-	-	4	Kr
	Podstawy technologii i przechwalnictwa żywności							
3.9	Fundamentals of food biotechnology	30E	15	-	-	-	4	Kr
	Podstawy biotechnologii żywności							
3.10	Food preservation	15	-	15	-	-	3	Kr
	Utrwalanie żywności							
3.11	Systems of economy accountancy	15	-	-	30	-	3	Kr
	Systemy rachunkowości gospodarki ekonomicznej							

Liczba godzin w semestrze (Number of hours in a semester)	150	45	135	60	–	30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)	390						

SEMESTR: 4 (4 th Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot Subject unit – semester curricular	W (Lecture)	C (Practical classes)	L (Laboratory classes)	P (Project)	S (Seminar)		
4.1	Environmental Protection Ochrona środowiska	15	–	–	–	15	2	P
4.2	Physical Education Wychowanie fizyczne	–	30	–	–	–	0	KO
4.3	Foreign language Język obcy	–	–	30	–	–	2	KO
4.4	Technical metrology Metrologia techniczna	15E	15	–	–	–	3	Ko
4.5	Technical mechanics and fluid movement Mechanika ogólna i ruch płynów	15	–	15	–	–	2	Ko
4.6	Storage and transport Magazynowanie i transport	15	–	–	30	–	3	Ko
4.7	Foods toxicology Toksykologia żywności	15	–	15	–	–	2	Kr
4.8	Processes and unit operations Procesy i operacje jednostkowe	15	–	30	–	–	3	Kr
4.9	Thermal-diffusion processes Procesy cieplno-dyfuzyjne	15	15	15	15	–	2	Kr
4.10	Basic of human nutrition Podstawy żywienia człowieka	15E	15	–	–	–	3	Kr
4.11	Foods biotechnology Biotechnologia żywności	15E	–	15	–	–	4	Kr
4.12	Gastronomic technology Technologia gastronomiczna	15E	–	30	–	–	3	Kr
4.13	Management and marketing Zarządzanie i marketing	15	–	–	–	–	1	Kr
Liczba godzin w semestrze (Number of hours in a semester)		165	75	150	45	15	30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		450						

SEMESTR: 5 (5 th Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot Subject unit – semester curricular	W (Lecture)	C (Practical classes)	L (Laboratory classes)	P (Project)	S (Seminar)		
5.1	Foreign language Język obcy	–	–	30	–	–	2	KO
5.2	Design technology Projektowanie technologiczne	–	–	–	30	–	4	Ko
5.3	Process metrology Metrologia procesowa	15	–	15	–	–	2	Kr
5.4	Process and unit operation Procesy i operacje jednostkowe	30E	15	15	–	–	3	Kr
5.5	Machines and apparatuses of food industry Maszyny i aparaty przemysłu spożywczego	15	–	–	15	–	2	Kr
5.6	Production organisation Organizacja produkcji	15	–	–	–	–	1	Kr

5.7	Introduction to research with the general statistics	15	-	15	-	-	2	K
	Wprowadzenie do badań naukowych ze statystyką ogólną							
5.8	Quality of animals products	15	15	-	-	-	2	K
	Jakość produktów pochodzenia zwierzęcego							
5.9	General biochemistry	30E	15	30	-	-	6	K
	Biochemia ogólna							
5.10	Dietetics and supplement	15E	-	30	-	-	3	K
	Dietetyka i suplementacja							
5.11	Technology processing of plant and animal products	15	-	15	-	-	3	K
	Technologia przetwarzania produktów roślinnych i zwierzęcych							
Liczba godzin w semestrze (Number of hours in a semester)		165	45	150	45	-	30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		405						

SEMESTR: 6 (6 th Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot Subject unit – semester curricular	W (Lecture)	C (Practical classes)	L (Laboratory classes)	P (Project)	S (Seminar)		
6.1	Foreign language	(E)	-	30	-	-	2	KO
	Język obcy							
6.2	Project	15	-	-	30	-	3	Kr
	Praca przejściowa							
6.3	Cost accounting for engineers	15	30	-	-	-	2	Kr
	Rachunek kosztów dla inżynierów							
6.4	Quality of animals products	15	15	-	30	-	3	K
	Jakość produktów pochodzenia zwierzęcego							
6.5	Work safety	15	-	-	30	-	3	K
	Bezpieczeństwo pracy							
6.6	Biological fundamentals of production plant and animal raw materials	30	-	30	-	-	4	K
	Biologiczne podstawy produkcji surowców roślinnych i zwierzęcych							
6.7	Technical microbiology	30E	-	30	-	-	4	K
	Mikrobiologia techniczna							
6.8	Principles of safe food production	15	-	15	-	-	2	K
	Zasady produkcji bezpiecznej żywności							
6.9	Heat exchange processes in food technology	15	15	-	-	-	2	K
	Procesy wymiany ciepła w technologii żywności							
6.10	Technology processing of plant and animal products	15	15	-	-	-	3	K
	Technologia przetwarzania produktów roślinnych i zwierzęcych							
Przedmioty bloku humanistyczno-społecznego – wymagana liczba p. ECTS w semestrze (Optional units – compulsory ECTS in a semester)							2	
6.11	Elective subject III - Negotiation in business	30	-	-	-	-	(2)	HS
	Moduł obieralny III - Negocjacje w biznesie							
6.11	Elective subject III - Public communication	30	-	-	-	-	(2)	HS
	Moduł wybieralny III - Komunikacja społeczna							
Liczba godzin w semestrze (Number of hours in a semester)		195	270				30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		465						

SEMESTR: 7 (7 th Semester)		Liczba godzin zajęć w semestrze; E – egzamin Working time (hours) a semester; E – Exam					ECTS	TYP
Nr	Przedmiot	W	C	L	P	S		
	Subject unit – semester curricular		(Lecture)	(Practical classes)	(Laboratory classes)	(Project)	(Seminar)	
7.1	Protection of intellectual property Ochrona własności intelektualnej	15	–	–	–	–	1	KO
7.2	Graduate seminary Seminarium dyplomowe	–	–	–	–	30	2	Ko
7.3	Diploma work (Engineering project) Praca dyplomowa (Projekt inżynierski)	E - godziny niekontaktowe (un-contact hours)					15	Ko
7.4	Organic agriculture Rolnictwo ekologiczne	15	–	–	30	15	4	K
7.5	Food chemistry Chemia produktów rolno - spożywczych	15E	–	30	–	–	3	K
7.6	Practice Praktyka (4 tygodnie)	godziny niekontaktowe (un-contact hours)					5	---
Liczba godzin w semestrze (Number of hours in a semester)		45	–	30	30	45	30	
Razem godzin/ECTS w semestrze (Total hours/ECTS in a semester)		150						

PLAN STUDIÓW RAZEM (TOTAL STUDY PLAN)		ECTS
Łącznie godzin kontaktowych/ECTS w planie studiów		2580
Total contact hours/ECTS in study plan		
		210

STATYSTYKA PROGRAMU KSZTAŁCENIA			
Typ	Przedmioty - p. ECTS razem	wg planu	udział
P	Podstawowe	30	14.29 %
KO	Kształcenia ogólnego	11	5.24 %
Kr	Kierunkowe ramowe	61	29.05 %
Ko	Kierunkowe ogólne	43	20.48 %
KO	Kształcenia ogólnego	7	3.33 %
HS	Humanistyczno - społeczne	6	2.86 %
K	Kierunkowe	44	20.95 %
P	Podstawowe	3	1.43 %
---	bez określonego typu	5	2.38 %
Łącznie:		210	100.00 %

Program kształcenia dostosowany do wydziałowych efektów uczenia się dla kierunku studiów FOOD TECHNOLOGY AND HUMAN NUTRITION (studia pierwszego stopnia)

Plan i program studiów:

- uchwalony przez Radę Wydziału Inżynierii Produkcji i Logistyki w dniu 24.04.2019
- zaopiniowany przez wydziałowy organ samorządu studenckiego.