SZKOŁA GŁÓWNA GOSPODARSTWA WIEJSKIEGO

W WARSZAWIE

Study programme

VETERINARY MEDICINE

Long-cycle Master's degree programme

Warszawa, 2022

1.	Field of studies:	Veterinary Medicine
2.	Level of study:	Long-cycle Master's degree programme
3.	Profile of study:	general academic
4.	Form of study:	intramural
5.	Duration of degree programme:	11 semesters (5.5 YEAR)
6.	The total number of ECTS required	
	for graduation:	360
7.	Professional title:	lekarz weterynarii
		(eq. of: veterinary surgeon doctor of veterinary medicine)
8.	ISCED code for study programme	0841

9. Study programme is assigned to following discipline/disciplines:

LP	Discipline	Leading discipline (YES/NO)	Percentage of learning outcomes related to discipline
1.	WETERYNARIA (VETERINARY MEDICINE)	YES	100%
Total:			100%

10. LEARNING OUTCOMES

taking into account the universal first-degree characteristics defined in the Act of 22 December 2015 on the Integrated Qualification System and the second-degree characteristics of the learning outcomes for qualifications at level 7 of the PRK typical for qualifications obtained within the system of higher education and science after obtaining a full qualification at level 4.

§ 1 of the Regulation of the Minister of Science and Higher Education of 17 July 2019 on the standard of education preparing for the profession of veterinary surgeon (Journal of Laws of 2019, item 1364) establishes general and specific learning outcomes.

Specific learning outcomes are achieved through the following groups of activities:

A. Classes in the basic sciences,

B. Activities in the field of direction: B1. clinical sciences B2. animal production B3. food hygiene,

C. Complementary classes.

11. General characteristics of level 7 of the PRK and			Learning outcomes
qualifications at level 7 of the PRK		Symbo of learning outcomes	Learning outcomes referenced to specific categories and areas
		KNOWLE	DGE - the graduate KNOWS AND UNDERSTANDS
P7U_W	selected facts, theories, methods and complex interrelationships between them, also in connection with other fields, in an in-depth manner		
	the various, complex conditions and axiological contexts of the activities carried out		

e s	in-depth - selected facts, objects	A.W1.	morphology of the animal organism: cells, tissues, organs and systems;
 ang ship	and phenomena as well as related		
d n oni	methods and theories explaining	A.W2.	structure, functions, regulatory mechanisms and integration of the systems of the animal
an lati	complex interrelationships between		organism (respiratory, gastrointestinal, cardiovascular, urinary, nervous, reproductive, endocrine,
oth I re	them, constituting advanced general		immune and skin);
De	knowledge in the area of scientific		
ve ,	or artistic disciplines which provides A.W3.	A.W3.	development of organs and the whole organism in relation to the adult organism;
ecti	theoretical foundations, ordered		
sbe	and theoretically supported	A.W4.	metabolic processes on the molecular, cellular, organ and organism level;
iəd	knowledge covering key issues and		
ive	selected issues from the area of	A.W5.	mechanisms of homeostasis, water management and acid-base balance;
mit	advanced detailed knowledge -		
603	appropriate to the programme of	A.W6.	basic chemical reactions in water solutions;
of	study, and in the case of degree		
ess	programmes with a practical profile	A.W7.	laws of hydrodynamics and factors influencing vascular blood flow;
ten	- also practical applications of this	4.14/0	
ple	knowledge in professional activities	A.W8.	physical-chemistry regarding sensory functions;
'uc	related to the field of study	A 14/0	
ŭ	the main development trends of the	A.W9.	mechanisms of neuronormonal regulation, reproduction, ageing and death;
	the main development trends of the	A \A/10	machanisms underlining animal booth disasses and their thereasy from the collular lovel, through
	which the field of study is assigned	A.W10.	argans, organism, hard to the whole population of animals:
	in the case of degree programmes		organs, organism, herd to the whole population of animals,
	with an overall academic profile	Δ \//11	relationship between factors influencing homeostasis of biological processes and physiological
		A.WII.	and nathological changes:
		A.W12.	pathophysiological changes in the organs and systems, biological mechanisms (including
			immunological) and therapeutical actions facilitating recovery:
		A.W13	biology of infectious agents inducing diseases transmitted between animals, animals and
			humans, including mechanisms of the disease transmission and organism defence systems;
		A.W14.	genetic mechanisms, genetic disorders and bases of the genetic engineering;
		A.W15.	basics of microbiological diagnostics;

A.W16.	mechanisms of drug action, their fate in the organism, adverse actions and drug-to-drug interactions of veterinary pharmaceuticals in target animal species;
A.W17.	the uses of anti-microbial and anti-parasitic chemotherapy;
A.W18.	mechanisms of antibiotic resistance, including multi-antibiotic resistance by microorganisms and cancer cells;
A.W19.	procedures and elements required to issue prescription for veterinary pharmaceuticals;
A.W20.	English and Latin medical nomenclature;
A.W21.	types of animal poisonings, diagnostic and therapeutic strategies in poisoning cases;
B.W1.	disorders on the cellular, tissue, organ, system and organism levels occurring in the course of the disease;
B.W2.	mechanisms of the organ and system pathologies;
B.W3.	causes and symptoms of pathomorphological changes, procedures for therapy and prevention in the particular diseases;
B.W4.	diagnostic (including differential diagnostics) and therapeutic procedures;
B.W5.	rules of clinical evaluation and animal health monitoring;
B.W6.	how to interpret clinical data, results of the laboratory tests and other diagnostics techniques;
B.W7.	appropriate law regulations, rules governing issuing of the verdicts and official opinions for the law courts, state, local and veterinary administration;
B.W8.	official epizootic procedures in case of the law-regulated diseases;
B.W9.	conditions of animal welfare;
B.W10.	the interaction between parasite and host, general symptoms and pathomorphological changes induced by parasites in the host organism;

	B.W11.	breeds within animal species, describes rules of animal husbandry and breeding;
	B.W12.	rules for animal selection for breeding, methods of breeding, reproductive biotechnology and husbandry selection;
	B.W13.	rules of animal feeding according to the species specifics and age;
	B.W14.	elaborate and analyse diet compositions;
	B.W15.	conditions for appropriate utilisation and disposal of animal by-products and management of waste from animal production;
	B.W16.	functioning of the State Veterinary Service, also in the aspect of public health prevention;
	B.W17.	rules of consumers health protection by the appropriate organ responsible for the production of foods of animal origin;
	B.W18.	HACCP (Hazard Analysis and Critical Control Points) procedures;
	B.W19.	procedures of ante-mortem and post-mortem examination of animals;
	B.W20.	conditions of hygiene and technology of animal production;
	C.W1.	nomenclature and grammatic structure of at least one foreign language, considered a language of international communication on the minimal level of B2+ (Common European Framework of Reference for Languages, CEFR), including specialised nomenclature required for professional veterinary practice;

P7_WK Context lants, effects	fundamental dilemmas of contemporary civilization economic, legal, ethical and other conditions of various professional	A.W22. A.W23.	code of ethics of veterinary surgeon; laws governing intellectual property;
Determin	activities related to the field of study, including the principles of	B.W21. B.W22.	rules of animal production economics;
	copyright	C.W2.	functioning of institutions associated with veterinary profession and social role of veterinary surgeon;
	developing various forms of entrepreneurship	C.W3.	occupational health and safety regulations in veterinary practice.
			SKILLS – the graduate is able to
		-	
P7U_U	perform tasks and formulate and solve problems using new knowledge, also from other fields.		
	plan their own lifelong learning and guide others to do the same.		
	communicate with a range of different audiences and give reasons for their views.		

a e N	use their knowledge	A.U1.	utilise knowledge of physics to explain the influence of external factors (temperature,
۰n_ me	- Formulate and solve complex and		pressure, electromagnetic force, ionizing radiation) on animal organism;
75 wili	non-typical problems and perform		
her Per	tasks in an innovative manner in	A.U2.	utilise basic laboratory techniques, such as: qualitative analysis, titration, colorimetry, pH
of	unpredictable conditions by:		measurement, chromatography and protein, and nucleic acid electrophoresis;
lse tas	- appropriate selection of sources		
וח ר	and information from them, making A.U3.	calculate molar and percent concentration of substances and compounds in the iso-osmotic	
a p	judgements,		solutions;
olve	Critical analysis, synthesis, creative		
s sc	assessment, critical analysis,	A.U4.	describe changes in the function of the organism occurring upon alteration of homeostasis;
i ma	synthesis, creative interpretation		
oldc	and presentation of this	A.U5.	predict direction of biochemical processes depending on the energetic status of the cell;
Pro	information,		
	- selecting and applying appropriate	A.U6.	describe anatomical bases of veterinary evaluation regarding inter-species variations;
	methods and tools, including		
	advanced ICT techniques,	A.U7.	define physiological status of the animal as an adaptive process to environmental
	 adapt existing methods and tools 		variability;
	or develop new ones A.U8		
		A.U8.	under optical microscopy, differentiate and describe histological structures characteristic
	use their knowledge		to organs, tissues and cells, relate their structure to function regarding inter-species
	 formulate and solve problems and 		variations;
	perform tasks typical of professional		
	activity related to the field of study	A.U9.	analyse genetic crosses and individual trait pedigrees from different species;
	for degree programmes with a		
	practical profile	A.U10.	conduct basic microbiological evaluation;
	formulate and test hypotheses	A.U11.	select and implement rational, direct and conceptual antimicrobial chemotherapy
	related to simple research problems		regarding target animal species;
	- in the case of degree programmes with a general academic profile B.U		
		B.U1.	handle animals in safe and humane way, and instructs others to do alike;
	for an electric state of the second state of the second	B 112	
	formulate and test hypotheses	B.U2.	conduct anamnesis in order to acquire precise information on animal or group of animals
	connected with simple		(heard), and their environment;
	Implementation problems - in the	B 112	and the second
	case of degree programmes with a	в.03.	carry out full clinical evaluation;
	practical profile	D 114	norfern first old procedures for all animal species for becomerchage used a second state
		в.04.	disorders, evel and ear injuries, loss of consciousness, solvering, human tissue injuries
			disorders, eye and ear injuries, loss of consciousness, canexia, burns, tissue injuries,

		internal injuries and heart block:
	B.U5.	evaluate nutritional state of the animal and ordains information on proper animal nutrition;
	B.U6.	collect and safeguard the biological material, conduct basic laboratory analyses, properly evaluate and interpret results of laboratory analyses;
	B.U7.	use diagnostic devices including x-ray, ultrasound, endoscopy, according to its manuals and health and safety regulations concerning animals and humans, interpret the results obtained from those diagnostic devices;
	B.U8.	implement according official epizootic procedures in case of the law-regulated diseases;
	B.U9.	acquire and use information on registered veterinary pharmaceuticals;
	B.U10.	prescribe and use veterinary pharmaceuticals and medical materials, including their safe storage and utilisation;
	B.U11.	use methods of safe sedation, general and local anaesthesia, and methods for pain evaluation and relief;
	B.U12.	monitor patient status during surgery and intensive care upon the basic life parameters;
	B.U13.	chose the treatment adequate for the diagnosed disease;
	B.U14.	implement rules of aseptic and antiseptic surgery procedures, and use proper methods of tools sterilisation;
	B.U15.	evaluate the need for euthanasia, properly informs the owner of the animal and carry out the euthanasia procedure according to rules and obligations of professional ethics and proper care and utilisation of the body;
	B.U16	carry out pathomorphological examination, prepare proper protocol, collect samples and safeguard them for transport;
	B.U17	conduct ante-mortem and post-mortem examination of animals;
	B.U18.	evaluate quality of the products of animal origin;
1		

	B.U19.	conduct epizootic investigation to establish onset and source of the infectious disease on farm before its diagnosis, identification of other involved farms, routes of communication of people, animals, and farm implements that may facilitate disease transmission to or from the affected farm;
	B.U20.	use documentation of the health, welfare and, in certain cases, the productivity of animals (herd);
	B.U21.	prepare the preventive schemes according to the species specifics;
	B.U22.	evaluate the risk of chemical and biological contamination of foods of animal origin;
	B.U23.	collect samples for monitoring of presence of prohibited substances, chemical, biological, pharmaceutical and radioactive traces from animals, their secretions and excretions, tissues, products of animal origin, food, feed and water;
	B.U24.	evaluate the conditions of slaughter animal protection concerning various slaughter systems;
	B.U25.	evaluate the risk and prepare the procedures minimising the risk of contamination, cross- species infection and accumulation of the disease agents in veterinary facilities and the environment.

a s, F	communicate on specialist subjects	A.U12.	effectively communicate with clients and veterinary surgeons;
ent ent ing uag	to a varied audience		
P7 tem d us ang		A.U13.	listen and explain in the language that is understandable and appropriate for the situation;
sta: anc gn li	debate	A 1114	formulate clear case studies and how to create documentation according to the current
ing ent irei	use a foreign language at B2+ level	A.U14.	laws and regulations in the form understandable for the owner of the animal and clear for
fc	on the Common European		other veterinary surgeons:
pro	Framework of Reference for		
nd en	Languages and a range of specialist	C.U1.	use at least one foreign language, considered a language of international communication,
ig a tific	terminology		to formulate and understand written and spoken expression of both general and veterinary
ivir			nature on the minimal level of B2+ (Common European Framework of Reference for
a sc			Languages, CEFR), including specialised nomenclature required for professional veterinary
n - I			practice;
atio		C.U2.	critically analyse veterinary literature and formulate conclusions based on available
nica			literature;
knc			
Com		C.U3.	utilise computer systems and current sources of veterinary knowledge for effective use and
inat			process of information;
məş		C 114	effectively communicate with authorities of control offices and local and national
diss		0.04.	government.
しょよ	lead the work of the team	A.U15.	operate in the interdisciplinary team;
N NO		A 1116	
P7. P7.	interact with others as part of	A.010.	appropriately interpret responsibility of the veterinary surgeon towards animal, its owner,
tion Id te	teamwork and take a lead role in		society and the environment;
nisa g ar	teams	A 1117	evaluate toxicological risk related to various technological directions of animal production:
ninç		A.017.	
lan.			
d			

JU at rs	plan and implement their own	A.U18.	evaluates economical and sociological implications of the veterinary practice;
P7S_L Learnin ent and th of othe	lifelong learning and guide others to do so	A.U19	implement professional skills in order to enhance the quality of veterinary care, animal welfare and public health;
i developme		A.U20.	organise and maintain veterinary practice, calculate fees, issue official invoices, maintain fiscal records and use computer systems for effective communication, accumulation, processing, analysis and propagation of information;
umo Am		A.U21.	understand the need of continuous education for professional development;
ning		A.U22.	adapt professional offer to the dynamically changing situation on the work market;
Plan		A.U23.	use the professional advice and help of the specialists or specialised units in difficult cases;
		1	COMPETENCES - the graduate IS READY TO
P7U_K	create and develop role models for appropriate behaviour in the working and living environment		
	take initiatives, critically evaluate themselves and the teams and organisations they participate in		
	lead a group and take responsibility for it		
S_KK 'itical 'oach	to critically appraise their knowledge and perceived content	KS.1	demonstrate responsibility for their decisions towards people, animals and the environment
P7 Iluations/cr appr	recognise the importance of knowledge in solving cognitive and practical problems and to seek	KS.2	demonstrate an attitude in line with ethical principles and undertake actions based on the code of ethics in professional practice and to demonstrate tolerance towards attitudes and behaviours resulting from different social and cultural backgrounds
Evc	advice from experts when having difficulty solving problems	KS.3	participate in conflict resolution, as well as demonstrate flexibility in responses to social changes
	independently	KS.4	use objective sources of information

	fulfil social obligations inspire and				
P7S_KC Responsibility onsibilities in the public interes	organise activities for the social	VCE	formulate conclusions from their own measurements or observations		
	organise activities for the social	K3.5			
	environment				
		KS.6	formulate opinions on various aspects of professional activity		
	initiate actions in the public interest				
		KS.7	to use knowledge and skills in order to improve their knowledge and skills; to deepen their		
sbe	think and act entrepreneurially		knowledge and skills; to improve their knowledge and skills in order to		
re					
Fulfilling social		KS.8	improve their knowledge and skills:		
		KS.9			
			communicate with colleagues and share knowledge;		
		KS.10	operate under conditions of uncertainty and stress;		
KR ole hos ent	the responsible performance of				
	professional roles taking account of	KS.11	co-operate with other professions in the field of public health		
al i et	changing poods in society including				
d pu	changing needs in society, including	KS.12	engage in professional and self-governmental organisations.		
Professi independence a deve	- developing the achievements of				
	the profession,				
	- uphold the ethos of the profession,				
	 observing and developing the 				
	principles of professional ethics and				
	acting in order to unhold such				
	principles				

11. DESCRIPTION OF THE CONCEPT OF EDUCATION

The concept and education aims for veterinary medicine are direct representation of:

- A) European regulations regarding veterinary medicine education i.e. Directive 2005/36 /WE of the European Parliament and the European Council from 7th of September 2005 on the recognition of professional qualifications (OJ L 255, 30.9.2005, p. 22);
- B) Ordinance of the Minister of Science and Higher Education from 17th of July 2019 on the standard of education preparing for the profession of veterinary surgeon (Journal of Laws of 2019, item 1364);
- C) Requirements of the EAEVE (European Association of Establishments for Veterinary Education) described in the European System of Evaluation of Veterinary Training (ESEVT SOP 2019, Upsala 30 May 2019);
- D) University quality of education policy adopted on January 27, 2020 by the SGGW Senate in Warsaw (Resolution 67-2019/2020 introducing the new - third edition of the university's Internal System for Ensuring and Improving the Quality of Education at the Warsaw University of Life Sciences)
- E) Resolution 76 2020/2021 of the Senate of the Warsaw University of Life Sciences of 22 February 2021 on the guidelines for the creation and revision of curricula for first-cycle, second-cycle and uniform master's degree programmes starting from the academic year 2021/2022;
- F) Faculty quality of education policy presented in the document: Faculty Quality Assurance and Improvement System for Education issued by the Team for the Quality of Education and the FVM Program Council February 17th 2021.

Education on the veterinary faculty is subject to strict legal regulations contained in the above-mentioned normative acts of a higher order (points A-D), which is also reflected in the Resolution of the Senate of the Warsaw University of Life Sciences 76 - 2020/2021 of 22 February 2021, whose § 1, paragraph 23 states that "<u>The curriculum preparing for the pursuit of the profession of veterinary surgeon shall take into account the educational standards which shall be defined, by way of an ordinance, by the minister responsible for higher education and</u>

science in consultation with the minister responsible for agriculture".

Study offering in veterinary medicine at the Faculty of Veterinary Medicine, WULS-SGGW formulates an answer to current social situation and challenges of global professional market. Mission of the Faculty is to conduct actions promoting social development through state-of-the-art scientific research and constant development of professional staff. Furthermore, study offering for veterinary medicine reflects fluctuating needs and changes of the professional market through permanent collaboration with the socio-economic environment in the field of teaching and research activities.

Study offering for veterinary medicine through the careful and competent selection of programme content provides students of long-cycle Master's degree programme with:

- knowledge required to describe rules and mechanisms underlining animal health, disease and therapy, from the cellular level, through tissue, organ, organism to the whole animal population and ecosystem;
- competence in analysis and interpretation of clinical symptoms, pathomorphology changes, and results of laboratory and supplementary diagnostics;
- competence in disease diagnosis (with specific impact on differential diagnostics);
- skills in therapeutic and prophylactic actions;
- competences in soft skills: problem solving, accumulation, elaboration and propagation of knowledge, working in the multidisciplinary team.

This concept predicts that graduate is at a basic competence level to conduct scientific and analytical tasks, and knows how to utilise acquired competences to adapt to the constantly changing global professional market in both private and public sectors.

ORGANIZATION OF THE EDUCATION

According to the Regulation of the Ministry of Science and Higher Education from July 17th 2019, regarding education standards for veterinary profession (Dz. U. z 2019, poz. 1364), veterinary education is realised through the student participation in three distinct types of classes: lectures; practical classes; clinical rotations and work practices. Basic and directional subjects are taught as mandatory and elective modules.

The education process is carried out in the form of classes or groups of classes preparing for the profession of a veterinarian within classes A-E:

- A. basic knowledge (physics, chemistry, biochemistry, animal and plant biology, microbiology, anatomy with histology and embryology, physiology, genetics, pharmacology, pharmacy, toxicology, immunology, epidemiology, applied mathematics of biological sciences, professional ethics);
- B. professional education
 - clinical sciences (obstetrics, pathology with pathological anatomy, parasitology, general surgery with anaesthesiology, laboratory and clinical diagnostics, clinical classes on internal and infectious diseases, surgery and reproduction of domestic animals, diseases of poultry and other animals, prevention, radiology, reproduction and reproductive disorders, organization and functioning of the veterinary inspection, public health, veterinary legislation, forensic medicine, therapeutic procedure, propaedeutics),
 - animal production (technologies in animal production, animal nutrition, agronomy, agricultural economics, animal husbandry, veterinary hygiene, ethology and animal protection)
 - food hygiene (inspection and control of feed and foodstuffs of animal origin, food hygiene and technology, practical training, including practical training in slaughterhouses and food processing plant of animal origin);
- C. supplementary classes (especially foreign languages and information technology)
- D. clinical rotations
- E. work practices

Theoretical and practical education in individual groups of classes is distributed, balanced and coordinated in such a way that the acquired knowledge and skills allow the veterinarian to fulfil all the tasks entrusted to him.

Studies conducted at the Faculty of Veterinary Medicine at the Warsaw University of Life Sciences SGGW have an general-academic profile, i.e. the study program includes classes and groups of classes related to scientific activity in the veterinary discipline, to which ECTS points have been assigned in a dimension greater than 50% of the number of ECTS points necessary to complete studies , and takes into account the participation of students in classes preparing for conducting scientific activity or participation in this activity.

MINIMAL AMOUNT OF CLASSES AND ECTS POINTS

Groups of classes in which detailed	Hours	ECTS points
learning outcomes are achieved		
A. Basic knowledge	1170	90
B. Professional education	1870	135
B1. clinical sciences		
B2. Animal production		
B3. Food hygiene		
C. Supplementary Classes	150	15
D. Clinical rotations	360	22
E. Work practices	560	15
IN TOTAL	4110	277

CLINICAL ROTATIONS AND WORK PRACTICES IN THE EDUCATION PROGRAMME OF VETERINARY SCIENCES

12. Minimal clinical rotations included in the Ministry of Science and Higher Education regulations:

The clinical internship is carried out under the direct supervision of an academic teacher or another person conducting classes who has the right to practice the profession of a veterinarian.

Type of the rotation	Period	Hours
Avian diseases	after 9 th semester	40
Farm animal diseases	after 9 th semester	120
Dog and cat diseases	after 9 th semester	120
Equine diseases	after 9 th semester	90

Farm animal diseases rotation and Equine diseases rotation are realised within single modules of respectively 120 and 90 curricular hours, similarly Avian diseases rotation is realised as a single module of 40 hours. Exceeding Ministry regulations, following consultations with external stakeholders, the Rotation – laboratory class of parasitology was introduced with 15 curricular hours and Rotation – veterinary laboratory diagnostics 15 hours. All rotations excluding Rotation – veterinary laboratory diagnostics at 11th semester) are scheduled for 10th semester.

13. Work practices:

Work practices are oriented towards practical aspects of functioning and the role of veterinarian on animal production/reproduction farms, veterinary clinics, slaughterhouses and food of animal origin production facilities.

Type of work practice	Period	Time	
		weeks	Hours
Husbandry practice	after 4 th semester	2	80
Clinical practice (1)	after 8 th semester	4	160
Vet. inspection practice (1)	after 8 th semester	2	80
Clinical practice (2)	after 10 th semester	4	160
Vet. inspection practice (2)	after 10 th semester	2	80

Considering the weight of the subject, the clinical practices received 19 ECTS points, according to the following pattern:

- husbandry practice (after 4th semester) 3 ECTS points
- clinical practice (after 8th semester) 5 ECTS points
- vet. inspection, slaughter house (after 8th semester) 3 ECTS points
- clinical practice (after 10th semester) 5 ECTS points
- vet. inspection, meat hygiene (after 10th semester) 3 ECTS points

All work practices are realised by external stakeholders. During work practice, student is obliged to fill in the summer practice diary, which must be authenticated by the external stakeholder. Within first two weeks of semester following the summer work practice, student undergoes examination with designated University teachers to obtain the grade.

14 Quantitative indicators

- 1) completion of classes in the humanities and/or social sciences
- sem. 1 3 ECTS
- sem. 2 2 ECTS
- sem. 3 4 ECTS

sem. 4 - 4 ECTS sem. 5 - 2 ECTS sem. 7 – 1ECTS total: 16 ECTS

2) 61% of the number of ECTS credits allocated to the programme of study shall be allocated to courses taught with the direct participation of academic staff or other instructors

Contact ECTS - 219 ECTS

Attachments:

- 15. Attachment 1 study offering
- 16. Attachment 2 learning outcomes matrix
- 17. Attachment 3 Opinion of the Discipline council
- 18. Attachment 4 Opinion of the student council
- 19. Attachment 5 general description of the modules