UCHWAŁA NR 28

RADY DYDAKTYCZNEJ DLA KIERUNKÓW STUDIÓW CHEMIA, CHEMIA (CHEMISTRY), CHEMIA MEDYCZNA, CHEMICZNA ANALIZA INSTRUMENTALNA, CHEMIA STOSOWANA, CHEMIA JĄDROWA I RADIOFARMACEUTYKI, RADIOGENOMIKA

z dnia 26 listopada 2025 r.

w sprawie zmian w programie studiów na kierunku chemia (Chemistry), studia II stopnia.

Na podstawie § 12 pkt 1 Zarządzenia nr 71 Rektora Uniwersytetu Warszawskiego z dnia 9 kwietnia 2020 r. w sprawie określenia trybu postępowania w sprawach dotyczących utworzenia kierunku studiów oraz zmian w programie studiów na Uniwersytecie Warszawskim (t. j. Monitor UW z 2023, poz. 54), Rada Dydaktyczna Wydziału Chemii postanawia, co następuje:

§ 1

Wyraża się pozytywną opinię w sprawie propozycji zmian w programie studiów II stopnia na kierunku chemia (Chemistry). Wniosek o zmianę w programie studiów stanowi załącznik do uchwały.

§ 2

Uchwała wchodzi w życie z dniem podjęcia.

Przewodniczący Rady Dydaktycznej: *M. Chotkowski*

PART II

AMENDED PROGRAMME OF STUDIES

Name of the field of study	chemia (Chemistry)
Name of the field of study in English / in the language of instruction	Chemistry
Language of instruction	english
Level of education	Master degree
Level in the PQF	7
Studies profile	general academic
Number of semesters	4
Number of ECTS credits to graduate	120
Form of studies	stationary
Professional title awarded to the graduates (name of the qualification in its original wording, PQF level)	Master degree (higher education, level 7 PRK)
Number of ECTS credits that the student needs to obtain for the classes conducted with direct participation of academic teachers and/or other tutors	98
Number of ECTS credits for the classes in the area of humanities and/or social sciences (not less than 5 ECTS)	5

The studies prepare to practice as a teacher	
Title of the first course:	
Title of the second course:	

Assignment of the field of study to a given area of study and academic disciplines

Area of study	Academic discipline	Percentage share of the academic disciplines	Leading academic discipline (more than a half of the learning outcomes)
Natural and Physical Sciences	Chemical Sciences	100%	Chemical Sciences
Total:	-	100%	-

Learning outcomes defined for the field of study by reference to the descriptors of 2nd degree in the Polish Qualification Framework for qualifications at level 6–7 obtained within the framework of the Higher Education and Science System after obtaining full qualification at level 4 of the PQF

Learning outcomes symbol for the field of study	Learning outcomes	Reference to PQF 2nd degree descriptors
Knowledge: the graduate knows and understands		

K_W01	Has an extended knowledge of the place of chemistry within the system of natural and physical sciences, and of its significance for the development of humanity.	P7S_WG
K_W02	Knows the fundamentals of biochemistry and understands the importance of chemical phenomena in processes occurring in living organisms.	P7S_WG
K_W03	Knows the fundamentals of nuclear chemistry and understands the significance of radioactivity in science, technology, and medicine.	P7S_WG
K_W04	Has knowledge of the design and operation of modern measuring instruments used to support scientific research in chemistry.	P7S_WG
K_W05	Possesses advanced knowledge and skills in a selected field of chemistry, enabling independent research work.	P7S_WG
K_W06	Has mathematical knowledge necessary for the quantitative description of chemical phenomena and processes relevant to the given specialization.	P7S_WG
K_W07	Knows, understands, and can independently explain the mathematical description of fundamental chemical phenomena and processes.	P7S_WG
K_W08	Possesses advanced knowledge and skills in computational methods relevant to the given chemical specialization.	P7S_WG
K_W09	Has a good command of at least one software package for symbolic computation and one for statistical data analysis.	P7S_WG
K_W10	Has a good understanding of current trends and recent scientific discoveries in the chosen field of chemistry.	P7S_WG
K_W11	Possesses extended knowledge of occupational safety and health (OSH), particularly safe handling of chemicals, waste selection and disposal, and legal regulations related to chemical safety. Can apply this knowledge responsibly, including performing risk assessment.	P7S_WG, P7S_WK
K_W12	Has structured knowledge of legal and ethical conditions related to scientific and teaching activities.	P7S_WK
K_W13	Has basic knowledge of industrial property protection and copyright law, and is able to use patent information resources.	P7S_WK
K_W14	Knows general principles of creating and developing forms of individual entrepreneurship based on chemical knowledge.	P7S_WK
Skills: the graduate is able to		
K_U01	Is able to use biochemical techniques and apply simple biological processes in chemistry and technology.	P7S_UW
K_U02	Is able to analyze problems in the field of nuclear chemistry and assess its significance and potential risks for society.	P7S_UW

K_U03	Is able to apply appropriate methods, techniques, and research tools within a given chemical specialization to address a defined problem.	P7S_UW
K_U04	Has the ability to independently plan and conduct experiments within their chemical specialization.	P7S_UW,
K_U05	Has the ability to independently plan and perform theoretical research within their chemical specialization.	P7S_UW,
K_U06	Is able to critically evaluate the results of independently performed theoretical calculations within their chemical specialization.	P7S_UW
K_U07	Is able to critically evaluate the results of independently conducted experiments within their chemical specialization and discuss measurement errors.	P7S_UW
K_U08	Possesses advanced knowledge and skills enabling the use of professional literature, databases, and other information sources, and is able to assess the reliability of the obtained information.	P7S_UW
K_U09	Is able to apply acquired knowledge to related scientific disciplines and work effectively in interdisciplinary teams.	P7S_UW, P7S_UK, P7S_UO
K_U10	Is able to present research results in a self-prepared written report (paper, dissertation) including the aim, methodology, results, and discussion of their significance in comparison with other similar studies.	P7S_UW, P7S_UK
K_U11	Is able to discuss the place of chemistry within the system of natural and physical sciences and its importance for the development of civilization.	P7S_UW, P7S_UK
K_U12	Is able to clearly present, also to non-specialists, the results of major discoveries in chemistry and related sciences.	P7S_UK
K_U13	Is able to independently acquire knowledge and develop professional skills using various (written and electronic) sources, including foreign-language materials.	P7S_UW, P7S_UU
K_U14	Is able to use patent information resources.	P7S_UW, P7S_UK
K_U15	Has advanced skills in preparing written works in Polish or English on selected chemical topics, using basic theoretical approaches and various sources.	P7S_UW, P7S_UK
K_U16	Has the ability to prepare oral presentations in Polish and English on selected chemical topics, using basic theoretical approaches and various sources.	P7S_UW, P7S_UK
K_U17	Has knowledge of English sufficient to use basic professional literature in chemistry and related sciences (at the B2+ level).	P7S_UW, P7S_UK

K_U18	Continuously improves skills in communication, teamwork, organizational leadership, ethical standards, social behavior and attitudes, and individual and social awareness.	P7S_UO, P7S_UU, P7S_KO
Social competences: the graduate is ready to		
K_K01	Understands the need for and is aware of the possibilities for continuous learning. Is able to independently search for information in the literature (including foreign-language sources) and seek advice from experts.	P7S_KK, P7S_KR,
K_K02	Is able to work in a team and is aware of the responsibility for tasks performed jointly in a collaborative environment.	P7S_KK, P7S_KO
K_K03	Has the ability to organize both individual and team work when carrying out shared tasks and projects, and is able to critically assess the progress of such work. Independently undertakes and initiates basic research activities.	P7S_KK, P7S_KR
K_K04	Recognizes the importance of professional conduct and adheres to professional ethical standards.	P7S_KK, P7S_KR
K_K05	Is able to formulate opinions on professional issues and justify them in discussions with both specialists and non-specialists.	P7S_KK, P7S_KR
K_K06	Is able to think and act in a creative and entrepreneurial manner.	P7S_KK, P7S_KO

EXPLANATIONS

The learning outcomes symbol for the programme of study includes:

- letter K – to highlight the fact that the learning outcome refers to the programme of study
- _ (underscore),
- one of the letters W, U and/or K – to mark the category of learning outcomes (W – knowledge (Polish: wiedza), U – skills (Polish: umiejętności), K – social competences (Polish: kompetencje społeczne),
- learning outcome number in a given category, written in the form of two digits (precede the digits 1–9 with a 0).

Learning outcomes defined for the specialisation with a reference to the learning outcomes defined for the field of study

(to be completed if a specialisation is provided as part of the field of study; if several specialisations are available, provide a separate table for each of them)

Specialisation name:		
Symbol of the learning outcomes defined for the specialisation	**Learning outcomes defined for the specialisation**	**Symbol of learning outcomes defined for the field of study**
Knowledge: the graduate knows and understands		
Skills: the graduate is able to		
Social competences: the graduate is ready to		

EXPLANATIONS

The symbol for the learning outcome defined for the specialisation includes:

- letter S – to highlight the fact that the learning outcome refers to the learning outcomes defined for the specialisation (Polish: specjalność),
- _ (underscore),
- one of the letters W, U and/or K – to mark the category of the learning outcomes (W – knowledge (Polish: wiedza), U – skills (Polish: umiejętności), K – social competences (Polish: kompetencje społeczne),
- learning outcome number in a given category, written in the form of two digits (precede the digits 1–9 with a 0).

Classes and/or groups of classes assigned to a given term of studies

(provide a separate table for each semester/year of studies)

Semester/year of studies: first / I year

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Biochemistry	30				30				60	5	K_W01, K_W02, K_W04, K_W11, K_U01, K_U10	chemical sciences
Course Content	Understanding the molecular basis of functioning of living organisms by familiarizing themselves with the structure of chemical compounds, their components, their transformations, metabolic processes and role in energy processes. Basics of genetics and transmission of genetic information. Acquiring knowledge and skills in the field of laboratory techniques and methods of obtaining and testing biological materials for biochemical information. After completing the course in this subject, the student should know the mechanisms of action and regulation of protein and enzyme activity, learn the basic metabolic processes and mechanisms of their regulation and the processes of expression of genetic information												
Learning outcomes assessment	written exam, laboratory classes – entry test, written test											

Nuclear Chemistry	30				30				60	5	K_W03, K_W08, K_W10, K_W11, K_U02, K_U08, K_U10	chemical sciences
Course Content	The lecture presents the issues of modern nuclear chemistry from the discovery of radioactivity through nuclear reactions, the effects of nuclear radiation interaction with matter, radiometry, dosimetry to the isotopic methods used in chemistry, biology, medicine and industry. As part of the laboratory, students acquire skills in working with radioactive isotopes and become familiar with basic isotopic techniques. They learn about the practical application of isotopes in selected areas of chemistry.											
Learning outcomes assessment	written exam											
Crystallography	10				20				30	3	K_W10, K_U08, K_U09, K_U12, K_U13, K_U16, K_U17	chemical sciences
Course Content	The aim of **the lecture** is to present the information that will allow students to use and understand scientific literature on the structures of small molecules determined by X-ray diffraction. The basic information about the structure of crystals, symmetry and its properties, properties of X-rays and diffraction theories are presented The aim of **the laboratory** is to familiarize students with X-ray structural analysis and sample preparation methods. Students learn about both the equipment and software used in the crystallographic laboratory. Interpretation of the crystal and molecular structure based on crystallographic databases. Analysis of obtained data and analysis of structural data based on crystallographic databases is also practiced.											
Learning outcomes assessment	written exam, laboratory classes – entry test, written test, presentations											

Physical chemistry	30				30				60	4,5	K_W10, K_U07, K_K01	chemical sciences
Course Content	Lecture: The aim of the lecture is to deepen the student's knowledge of thermodynamics, chemical kinetics, and interfacial electrochemistry, as well as the models describing the phenomena involved. Laboratory: The exercises are intended to illustrate the content discussed during the lecture.											
Learning outcomes assessment	written exam, laboratory classes - entrance test, reports											
Instrumental analysis	15				30				45	4,5	K_W04, K_U07, K_K02	chemical sciences
Course Content	**Instrumental Analysis** is a course devoted to the measurement capabilities of modern analytical methods using various instrumental, spectral, and electrochemical techniques, often combined with prior chromatographic separation. Instrumental methods are widely used in chemical laboratories related to industry, as well as in clinical, environmental, and food analysis research. The Laboratory is dedicated to the practical use of discussed during lecture modern instrumental analysis techniques in the research of selected objects.											
Learning outcomes assessment	written exam, laboratory classes - entrance test, reports											
Organic Chemistry	30								30	3	K_W05, K_W10, K_K01	chemical sciences
Course Content	The lecture aims to provide the student with in-depth knowledge of the main types of organic compounds, classified according to their characteristic functional groups, methods of their synthesis, reactivity, and reaction mechanisms.											
Learning outcomes assessment	written exam											

Data analysis	15								15	1	K_W06, K_W07, K_W09, K_U06,	chemical sciences
Course Content	The classes aim to deepen the student's knowledge of methods for describing and presenting experimental data.											
Learning outcomes assessment	The course is passed based on a final test at the end of the course.											
Molecular spectroscopy	15				15				30	3	K_W04, K_W10, K_U04, K_U07, K_K01	chemical sciences
Course Content	Lecture: The aim of the lecture is to deepen the student's knowledge of modern fundamental spectroscopic techniques and to present models describing the phenomena used in spectroscopy. Laboratory: The exercises are intended to illustrate the content discussed during the lecture.											
Learning outcomes assessment	Lecture: written exam Laboratory: based on entry quizzes, participation during classes, and laboratory reports.											
Occupational health and safety	4								4	0,5	K_W11	
Course Content	Occupational Health and Safety (OHS) in Higher Education Institutions: Legal foundations, responsibilities of the university, responsibilities of students, accidents during student activities. First aid: basic pre-medical assistance. Hazards: chemical substances and preparations, harmful factors present at the Faculty of Chemistry. Safe work practices: OHS during student laboratory classes; handling chemical substances and preparations. Fire protection: fire hazards, responsibilities for fire prevention, basic firefighting equipment, rules for alarm and evacuation procedures.											
Learning outcomes assessment	Test, course credit											

Introduction to intellectual property management	4								4	0,5	K_W11, K_W12, K_W13, K_W14, K_U14, K_K04, K_K05	Legal sciences
Course Content	During the lecture, the following issues will be discussed: - definition of law, sources of law, intellectual property (IP). - review of legal acts regarding the protection of IP - copyright and related rights - definitions, procedures, protection - trademark - definitions, procedures, protection - the patent, design - definitions, procedures, protection - competition law and consumer protection law - definitions, procedures, protection - IP management at University of Warsaw											
Learning outcomes assessment	written exam											

Total number of ECTS credits (per year/semester):**30**
Total number of class hours (per year/semester): **338**
Total number of class hours specified in the programme of study for every field of study, level and profile (for the entire cycle):**1348**

Semester/year of studies: second / I year

Course title		Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
		Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Spectroscopic Identification of Organic Compounds		15				30				45	4,5	K_W05, K_U03, K_U08, K_U13, K_K01	chemical sciences
Course Content		This course introduces the fundamental and advanced principles of spectroscopic techniques used in the characterization of organic molecules. Lectures will emphasize the practical aspects of theory, while proseminars will focus on developing problem-solving skills for structure determination with progressively increasing levels of difficulty.											
Learning outcomes assessment		Lecture: Exam Proseminar: pass with a grade											
Organic Synthesis - Laboratory	**A**					60				60	6	K_W05, K_W10, K_U03, K_U08, K_U13, K_K02, K_K03	chemical sciences
	B					90				90	9		
Course Content		The laboratory program includes a theoretical and practical introduction to modern methods of organic synthesis and familiarization with advanced techniques used in the synthetic laboratory. The topics covered in the labs reflect the											

	research conducted in the research groups. During the labs, students perform selected exercises from a proposed list of topics.											
Learning outcomes assessment	Pass with a grade											
Enviromental analysis	15				30				45	4,5	K_W04, K_W05, K_W10; K_U03, K_U06, K_U11, K_K01, K_K04	chemical sciences
Course Content	Lecture: Understanding the methodological basics of environmental sample handling (in accordance with good practice and relevant standards). Developing the ability to design a monitoring scheme and to select appropriate analytical procedures to meet research objectives and monitoring (including biomonitoring) needs, as well as becoming familiar with the concept of environmental banking. Laboratory: Carrying out laboratory exercises in the following areas: field sampling, sample decomposition, and analysis using selected analytical techniques. Additionally, becoming acquainted with the process of procedure validation and the use of chemometrics in the evaluation and interpretation of results.											
Learning outcomes assessment	Lecture: oral exam Laboratory: entrance tests and reports											
Physicochemistry of new materials	20								20	2	K_W05, K_U03 K_U12, K_K05	chemical sciences
Course Content	The objectives of this course are to get understanding of the basic ideas and concepts related to investigations, usage, modifications and devising of physicochemical properties for selected classes of novel organic and inorganic materials.											

Learning outcomes assessment	written exam											
Polymers and their contemporary applications	15				30				45	4,5	KW_04, K_U07	chemical sciences
Course Content	Lecture: The aim of the lecture is to deepen the student's knowledge of polymer materials, including homopolymers, copolymers, and polymer nanocomposites, as well as methods of identification, processing techniques, and the applications of polymers in technology and everyday life. Laboratory: The exercises are intended to illustrate the content discussed during the lecture.											
Learning outcomes assessment	Lecture: written exam Laboratory: based on entry quizzes and laboratory reports.											
Students' Project I *					75				75	6	K_W04, _W05, K_U03, K_U07, K_U08, K_U10, K_K01, K_K02, K_K04	chemical sciences
Course Content	The project is intended to involve the student in research work within a team of scientists. The project topics reflect the research areas that are of interest to the researchers.											
Learning outcomes assessment	The course is passed on the basis of a report summarizing the completed project.											
General university courses[$]									30	2,5		
Course Content	The student participates in university-wide courses to acquire or deepen knowledge and skills in scientific areas not related to their field of study, corresponding to their individual interests or needs, and to acquire or improve competencies such as social, entrepreneurial, digital, and those supporting the green transition.											

	University-wide courses contribute to achieving learning outcomes in the area of general skills, e.g., independent planning and undertaking lifelong learning, and, depending on the student's choice, may also contribute to learning outcomes in the area of knowledge, e.g., understanding selected fundamental dilemmas of contemporary civilization, or in the area of social competences, e.g., readiness to fulfill social responsibilities, co-organize activities for the benefit of the community, or think and act in an entrepreneurial manner.
Learning outcomes assessment	

- **The project cannot be part of master's thesis**

$ During studies, the Student is required to obtain: no less than 6 ECTS and no more than 8 ECTS for subjects not related to the field of study (general university courses), including general university courses in the humanities or social sciences at a minimum of 5 ECTS.

Total number of ECTS credits (per year/semester):**30**
Total number of class hours (per year/semester): **320**
Total number of class hours specified in the programme of study for every field of study, level and profile (for the entire cycle):**1348**

Semester/year of studies: third / II year

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Master Seminar I (oral presentation)	30								30	3	K_W01, K_W10, K_W12 K_U03, K_U07, K_U08, K_U09, K_U11, K_U12, K_U13, K_U16, K_U17, K_U18, K_K01, K_K02, K_K04, K_K03, K_K05, K_K06	chemical sciences
Course Content	In the course of the seminar students report the literature search concerning their Master projects and are acquainted with the topics of other projects carried out in the same research group (laboratory).											

Learning outcomes assessment	Presentation											
Master,s Laboratory I					120				120	10	K_W01, K_W05, K_W09, K_W10, K_W11, K_W12 K_U03, K_U04, K_U05, K_U06, K_U07, K_U08, K_U10, K_U11, K_U13, K_U15, K_U17, K_U18 K_K01, K_K02, K_K04, K_K03, K_K05, K_K06	chemical sciences
Course Content	Preliminary scientific research necessary for preparation of a master project. In the course of the laboratory students complete preliminary work connected with their Master project. This includes necessary experiments and computer simulations.											
Learning outcomes assessment	project											

Students' Project II *					75				75	6	K_W04, _W05, K_U03, K_U07, K_U08, K_U10, K_K01, K_K02, K_K04	chemical sciences
Course Content	The project is intended to involve the student in research work within a team of scientists. The project topics reflect the research areas that are of interest to the researchers.											
Learning outcomes assessment	The course is passed on the basis of a report summarizing the completed project.											
Electives **	75								75	7		chemical sciences
Course Content	Extension and deepening of knowledge acquired during the completion of core curriculum subjects, necessary for pursuing the student's chosen development path in the fundamental areas of chemistry.											
Learning outcomes assessment	Depending on the chosen course											
General university courses[$]									45	4		
Course Content	The student participates in university-wide courses to acquire or deepen knowledge and skills in scientific areas not related to their field of study, corresponding to their individual interests or needs, and to acquire or improve competencies such as social, entrepreneurial, digital, and those supporting the green transition. University-wide courses contribute to achieving learning outcomes in the area of general skills, e.g., independent planning and undertaking lifelong learning, and, depending on the student's choice, may also contribute to learning outcomes in the area of knowledge, e.g., understanding selected fundamental dilemmas of contemporary civilization, or in the area of social competences, e.g., readiness to fulfill social responsibilities, co-organize activities for the benefit of the community, or think and act in an entrepreneurial manner.											

Learning outcomes assessment	

*** The project cannot be part of master's thesis**
**** Elective courses selected by the student (from the list of monographic and specialization lectures available in English given on Website of Department of Chemistry, updated each academic year).**
$ During studies, the Student is required to obtain: no less than 6 ECTS and no more than 8 ECTS for subjects not related to the field of study (general university courses), including general university courses in the humanities or social sciences at a minimum of 5 ECTS.

Total number of ECTS credits (per year/semester):**30**
Total number of class hours (per year/semester): **345**
Total number of class hours specified in the programme of study for every field of study, level and profile (for the entire cycle):**1348**

Semester/year of studies: fourth / II year

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Programme of study learning outcomes	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Master Seminar II (oral presentation)	30								30	3	K_W01, K_W10, K_W12 K_U03, K_U07, K_U08, K_U09, K_U11, K_U12, K_U13, K_U16, K_U17, K_U18, K_K01, K_K02, K_K04, K_K03, K_K05, K_K06	chemical sciences
Course Content	In the course of the seminar students report on their Master projects and are acquainted with other projects carried out in the same research group (laboratory).											

Learning outcomes assessment	Presentation											
Master,s Laboratory II					240				240	20	K_W01, K_W05, K_W09, K_W10, K_W11, K_W12 K_U03, K_U04, K_U05, K_U06, K_U07, K_U08, K_U10, K_U11, K_U13, K_U15, K_U17, K_U18 K_K01, K_K02, K_K04, K_K03, K_K05, K_K06	chemical sciences
Course Content	In the course of the laboratory students work on their Master project. This includes necessary experiments and computer simulations.											
Learning outcomes assessment	project											

Electives **	75								75	7		chemical sciences
Course Content	Extension and deepening of knowledge acquired during the completion of core curriculum subjects, necessary for pursuing the student's chosen development path in the fundamental areas of chemistry.											
Learning outcomes assessment	Depending on the chosen course											

**** Elective courses selected by the student (from the list of monographic and specialization lectures available in English given on Website of Department of Chemistry, updated each academic year).**

Total number of ECTS credits (per year/semester):**30**
Total number of class hours (per year/semester): **345**
Total number of class hours specified in the programme of study for every field of study, level and profile (for the entire cycle):**1348**

Classes and/or groups of classes as part of the specialisation assigned to a given term of studies

(the table refers to the field of study at which the specialisation is being conducted; provide a separate table for each semester/year of studies and for each specialisation

Semester/Year of studies: first (in words)

Course title	Form of classes – number of hours								Total: number of class hours	Total: ECTS points	Learning outcomes for the specialisation	Academic discipline(s) related to the course
	Lecture	Seminar classes	Seminar	Practical classes	Laboratory classes	Workshops	Project work	Other				
Courses common for all the specialisations												
Course A title(classes and/or a group of classes)												
Course content												
Assessmsnt of learning outcomes	E.g. oral exam, written exam, test, essay, project, annual thesis, diploma thesis											
Course B title (classes and/or a group of classes)												

Course content	
Assessment of learning outcomes	E.g. oral exam, written exam, test, essay, project, annual thesis, diploma thesis
Courses pertinent for a given specialisation	
Course C title (classes and/or a group of classes)	
Course content	
Learning outcomes assessment	E.g. oral exam, written exam, test, essay, project, annual thesis, diploma thesis
Course D title (classes and/or a group of classes)	
Course content	
Learning outcomes assessment	E.g. oral exam, written exam, test, essay, project, annual thesis, diploma thesis

Total number of ECTS credits (in a year/semester):

Total number of class hours (per year/semester):
Total number of class hours specified in the programme of study for every field of study, level and profile (for the entire cycle):

Percentage share of the number of ECTS credits in the total number of credits for each of the disciplines the field of study has been assigned to.

Area of study	Academic discipline	Percentage share of the number of ECTS credits in the total number of ECTS credits for each academic discipline