16th March 2022

DESCRIPTION OF THE STUDY PROGRAMME DESIGN

Study programme: **ARCHITECTURER**

Level: **1st CYCLE**

Profile: **GENERAL ACADEMIC**

1) discipline to which the study programme is assigned, or – where the study programme is assigned to more than one discipline – the leading discipline and the remaining disciplines together with the percentage of the ECTS points of each discipline in the total number of the ECTS points necessary for completing the programme at a given level:

   ARCHITECTURE AND URBAN SCIENCES (leading) – 91%, civil engineering and transport – 4%, fine arts and art conservation – 5%;

2) mode of study: **FULL TIME**
3) number of the semesters: **8**
4) total number of teaching hours provided by the university: **3460**
5) number of the ECTS points necessary for the study programme completion: **240**
6) number of the ECTS points the student must obtain for courses conducted with the direct participation of academic teachers or other individuals authorised to conduct classes: **142**
7) number of the ECTS points the student must obtain for courses from the field of humanities or social sciences: **11**
8) number of the ECTS points assigned to elective courses: **94**
9) number of the ECTS points assigned to courses related to the academic activity in the discipline or disciplines to which the study programme is assigned – applies to study programmes of the general academic profile: **214**
10) ~~number of the ECTS points assigned to courses developing practical skills – applies to study programmes of the practical profile:~~
11) for the first cycle full time study programmes – number of hours of the physical education: **60**
12) scope, principles and form of completing student work placements and the number of the ECTS points the student must obtain for their work placement: **600 h, 40 ECTS**
13) Verification and evaluation methods of the learning outcomes attained by the student throughout the whole study cycle:
    - Verification of the attained learning outcomes requires application of diverse forms of evaluating students' performance, adequate for the category of knowledge, skills or social competences to which the effects are related.
    - Attainment of the required learning outcomes in the category of knowledge is verified with the use of written or oral examinations, reviews, essays and presentations as well as by verification of diverse categories of design projects of various difficulty levels.

- Oral examinations are standardised and aimed at verification of knowledge at a higher level than mere knowledge of facts (the level of comprehension, the analytical, synthetical and problem solving skills).
- The forms of written examination include: essays, reports, short structured questions or multiple choice tests (MCQ – Multiple Choice Questions), multiple response tests (MRQ – Multiple Response Questions), Yes/No questions and response matching.
- Attainment of the required learning outcomes in the category of skills and in the category of social competences is verified by evaluation of design projects of diverse categories and various difficulty levels.
- Attainment of the required learning outcomes in the category of skills in the A course group is verified by evaluation of the completed design project, including the course and reviewed (staged) project, and the test-like project realised in class under supervision, as well as evaluation of the level of student's creativity demonstrated during the design process and direct individual and team review sessions performed by the supervisor in the "master-pupil" mode, as well as evaluation of the skill of presentation and defence of the completed design project.
- Attainment of the required learning outcomes in the category of knowledge, skills and social competences in the E course group is verified by evaluation of the knowledge acquired in seminars on scientific work methodology and the skill of its practical application in the design process, as well as by evaluation of the analytical-descriptive and design-graphic aspects of the diploma project; and the level of scientific, design and aesthetic creativity of the student and the value of the architectural solutions developed by them, as well as their skill of public presentation and defence thereof.

14) The professional title awarded to graduates: INŻYNIER ARCHITEKT (*Bachelor in Engineering – Architect*)

16th March 2022

Table for the description of the learning outcomes for the study programme
of the first cycle leading to obtaining competences in the field of art

Cracow University of Technology in Cracow

Name of Faculty or Faculties: Faculty of Architecture

Name of the study course: Architecture

Level of study: first cycle, full time mode of study

Profile of studies: general academic

Field or fields of study:[1] engineering and technology, art

Scientific/artistic discipline or disciplines with the percentage of learning outcomes for each discipline:[1] the leading discipline: Architecture and Urban Sciences – 91%; the remaining disciplines: civil engineering and transport – 4%; fine arts and art conservation – 5%.

Polish Qualification Framework level:[2] 6 PQF

Learning outcomes symbols	**STUDY PROGRAMME LEARNING OUTCOMES** **Applicable to the study cycles commencing in the academic year 2022/23 and following years**	Reference to			
		first PQF[3] level universal characteristics	second PQF[4] level learning outcomes characteristics	second PQF level learning outcomes characteristics allowing attainment of engineering competences[5]	second PQF level learning outcomes characteristics allowing attainment of competences in the field of art[6]
1	2	3	4	5	6
	KNOWLEDGE: THE GRADUATE KNOWS AND UNDERSTANDS	Description component code	Description component code	Description component code	Description component code
O.W1	structural, building and engineering problems related to building design;	P6U_W	P6S_WG	P6S_WG	-
O.W2	problems referring to architecture and urban sciences involved in solving simple design problems	P6U_W	P6S_WG	P6S_WG	-
O.W3	problems referring to architecture and urbanc sciences useful in designing architectural objects and urban ensembles in the context of social, cultural, natural, historic, economic, legal and other extra-technical conditions of engineering activities, integrating the knowledge acquired during their studies;	P6U_W	P6S_WG P6S_WK	P6S_WG	P6S_WG
O.W4	problems of physics, technology and functions of buildings in the scope enabling ensuring the comfort of their use and protection against adverse weather conditions	P6U_W	P6S_WG P6S_WK	P7S_WG P6S_WK	-
O.W5	relations between humans and architecture and between architecture and its surrounding environment, as well as the needs to adjust architecture to human needs and human scale;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-

O.W6	legal provisions and procedures necessary to execute building designs;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
O.W7	methods and means of implementing environmentally responsible sustainable design, as well as of protection and conservation of the surrounding environment;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
O.W8	principles of cost estimation and project management, methodology of cost control and principles of a construction project execution;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
O.W9	history and theory of architecture and art, technology and humanities in the extent necessary for correct execution of architectural designs;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	P6S_WG
O.W10	principles, solutions, structures and building materials applied in completing simple engineering tasks within the scope of architectural and urban design;	P6U_W	P6S_WG	P6S_WG	-
O.W11	problems referring to architecture and urban sciences in the context of the multi-professional character of architectural and urban design;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
O.W12	principles of information collection and interpretation for the needs of preparing a design concept;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
O.W13	the main principles of professional presentation of architectural and urban concepts;	P6U_W	P7S_WG	P7S_WG	-
O.W14	character of the architectural profession and its role in the society	P6U_W	P6S_WK	P6S_WK	-
A.W1	simple tasks in architectural design, in particular: simple objects catering for the basic needs of its users, single- and multi-family residential development, facilities to house services in residential development ensembles, public utility buildings in an open landscape or within an urban environment;	P6U_W	P6S_WG	P6S_WG	-
A.W2	simple tasks in urban design, in particular: small development ensembles, local land use plans taking into account the local conditions and connections, as well as predicting the processes of transformation of the settlement structure in urbanised and rural areas;	P6U_W	P6S_WG	P6S_WG	-
A.W3	provisions of local land use plans within the scope necessary for architectural design;	P6U_W	P6S_WG	P6S_WG	-
A.W4	the principles of universal design, including the idea of designing spaces and buildings accessible for all users, in particular for persons with disabilities, in architecture, urban design and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to ensure full functionality of the designed space and objects for all users, in particular for persons with disabilities;	P6U_W	P6S_WG	P6S_WG	-
B.W1	theory of architecture and urban sciences useful in formulation and solution of tasks in architectural and urban design and spatial planning;	P6U_W	P6S_WG	P6S_WG	-
B.W2	history of architecture and urban design, contemporary architecture and heritage protection in the extent necessary in architectural, urban and planning creative work;	P6U_W	P6S_WG	P6S_WG	-
B.W3	significance of the natural environment in architectural and urban design as well as in spatial planning;	P6U_W	P6S_WK	P6S_WG	-
B.W4	mathematics, spatial geometry, statics, strength of materials, shaping, construction and dimensioning of structures in the extent necessary for formulation and solving of tasks in architectural and urban design;	P6U_W	P6S_WG	P6S_WG	-
B.W5	problems of construction, building technologies and installations, building structure and physics, including the key problems in architectural, urban and planning design, as well as problems related to the fire protection of buildings;	P6U_W	P6S_WG	P6S_WG	-

B.W6	construction project economics and organisation methods as well as progress of the design and construction processes; basic principles of design and execution quality management in the construction process;	P6U_W	P6S_WK	P6S_WK	-
B.W7	ways of communicating ideas of architectural, urban and planning designs as well as ways of development thereof;	P6U_W	P6S_WG	P7S_WG	-
B.W8	role and application of the graphic art, drawing and painting as well as information technologies in the process of architectural and urban design;	P6U_W	P6S_WG	-	P6S_WG
B.W9	principles of occupational health and safety;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	-
C.W1	styles in art and their related creative traditions as well as the process of execution of art works related to architecture;	P6U_W	P6S_WG	P6S_WG	P6S_WG
C.W2	conditions of architectural and urban design resulting from the psychophysical capabilities of humans;	P6U_W	P6S_WG	P6S_WG	-
C.W3	vocabulary ang grammatical structures of a foreign language which is a language of international communication necessary for creating and comprehension of written and oral statements referring to architecture, as well as the necessity to use the foreign language efficiently;	P6U_W	P6S_WG	P6S_WG	-
D.W1	basic methods,techniques, tools and materials used in completing engineering tasks within the scope of architectural and urban design;	P6U_W	P6S_WG	P6S_WG	-
D.W2	problems of maintenance of buildings and systems typical of architectural design;	P6U_W	P6S_WG	P6S_WG	-
D.W3	principles of an architectural studio functioning in the context of work organisation at individual stages of the design process;	P6U_W	P6S_WG	P6S_WG	-
D.W4	norms and standards in architectural and urban design useful in performing auxiliary works;	P6U_W	P6S_WG	P6S_WG	-
D.W5	methods of organisation and progress of the design and construction processes, as well as the role of architect in this process;	P6U_W	P6S_WK	P6S_WK	-
E.W1	problems referring to architecture and urban sciences in the extent adequate for solving design problems;	P6U_W	P6S_WG	P6S_WG	-
E.W2	problems referring to architecture and urban sciences useful in designing architectural objects and urban ensembles in the context of social, cultural, natural, historic, economic, legal and other extra-technical conditions of engineering activities, integrating the knowledge acquired during their studies;	P6U_W	P6S_WG P6S_WK	P6S_WG P6S_WK	P6S_WG
E.W3	principles, solutions, structures and building materials used in completing engineering tasks within the scope of architectural and urban design;	P6U_W	P6S_WG	P6S_WG	-
E.W4	problems referring to architecture and urban sciences in the context of the multi-professional character of architectural and urban design and the need to cooperate with other specialists;	P6U_W	P6S_WG	P6S_WG	-
E.W5	principles of professional presentation of architectural and urban concepts;	P6U_W	P6S_WG	P6S_WG	-
	SKILLS: THE GRADUATE IS ABLE TO	**Description component code**	**Description component code**	**Description component code**	**Description component code**
O.U1	use the experience gained during their studies in order to perform a critical analysis of the conditions and to formulate conclusions for designing in a complex interdisciplinary context;	P6U_U	P6S_UW P6S_UO	P6S_UW	-

O.U2	design an architectural object or a simple urban ensemble meeting the aesthetic and technical requirements;	P6U_U	P6S_UW	P6S_UW	-
O.U3	prepare a graphic, written and oral presentation of their own design concepts in the scope of architecture and urban design, meeting the requirements of professional transcript applicable to architectural and urban design;	P6U_U	P6S_UW P6S_UK	P6S_UW	-
O.U4	use analytical methods to formulate and solve design tasks;	P6U_U	P6S_UW P6S_UO P6S_UU	P6S_UW	-
A.U1	design an architectural structure, creating and transforming the space to bestow new values upon it – in compliance with the assigned programme meeting the requirements and catering for the needs of all its users**;**	P6U_U	P6S_UW	P6S_UW	-
A.U2	design a simple urban ensemble;	P6U_U	P6S_UW	P6S_UW	-
A.U3	develop planning concepts referring to land use and interpret them in the extent necessary for designing in the urban and architectural scale;	P6U_U	P6S_UW	P6S_UW	-
A.U4	perform a critical analysis of the conditions, including evaluation of the land use and development conditions;	P6U_U	P6S_UW	P6S_UW	-
A.U5	think and act in a creative way, using the professional skills necessary to maintain and expand the ability to execute artistic concepts in architectural and urban design;	P6U_U	P6S_UW	P7S_UW	P6S_UW
A.U6	integrate information obtained from various sources, interpret it and perform a critical analysis thereof;	P6U_U	P6S_UW	P6S_UW	-
A.U7	communicate with the use of various techniques and tools in the professional environment adequate for architectural and urban design and spatial planning;	P6U_U	P6S_UK	P6S_UW	-
A.U8	prepare the architectural-building documentation in appropriate scales in relation to the conceptual architectural design;	P6U_U	P6S_UW	P6S_UW	-
A.U9	implement the principles and guidelines of universal design in architecture, urban design and spatial planning;	P6U_U	P6S_UW	P6S_UW	-
B.U1	integrate knowledge from various fields of science, including history, history of architecture, history of art and cultural heritage protection, while solving engineering problems;	P6U_U	P6S_UW	P6S_UW	P6S_UW
B.U2	recognise the significance of extra-technical aspects and consequences of the architect's design activities, including their influence on the cultural and natural environment;	P6U_U	P6S_UW	P6S_UW	P6S_UW
B.U3	use appropriately selected computer simulations, analyses and information technologies aiding architectural and urban design;	P6U_U	P6S_UW	P6S_UW	-
B.U4	develop solutions for individual systems and compontents of buildings in the technological, structural and building materials aspect;	P6U_U	P6S_UW	P6S_UW	-
B.U5	perform a preliminary economic analysis of the planned engineering activities;	P6U_U	P6S_UW	P6S_UW	-
B.U6	adequately observe the standards and the provisions of law in the scope of architectural and urban design;	P7U_U	P7S_UW	P7S_UW	-
C.U1	obtain information from adequately selected sources, also in a foreign language which is a language of international communication, in order to use it in the design process;	P6U_U	P6S_UW P6S_UK	P6S_UW	-
C.U2	use at least one foreign language which is a language of international communication at the level B2 of the Common European Framework of Reference for Languages, including specialist terminology in architecture and urban sciences, necessary in the design	P6U_U	P6S_UW P6S_UK	P6S_UW	-

	activities;				
D.U1	assess the usefulness of typical methods and tools serving the purpose of solving a simple engineering task of a practical character, characteristic of architectural design;	P6U_U	P6S_UW	P6S_UW	-
D.U2	design a simple architectural object or or a fragment thereof, typical of architectural design, in compliance with the assigned specification;	P6U_U	P6S_UW	P6S_UW	-
D.U3	execute elements of architectural-building documentation in adequate scales, in cooperation with members of the design team;	P6U_U	P6S_UW	P6S_UW	-
E.U1	perform an analysis of the existing conditions, evaluate the conditions of land use and development and formulate conclusions for designing;	P6U_U	P6S_UW	P6S_UW	-
E.U2	design an architectural object or an urban ensemble, creating and transforming the space to bestow new values upon it – in compliance with the adopted programme, taking into consideration the extra-technical aspects and integrating the interdisciplinary knowledge and skills acquired during their studies**;**	P6U_U	P6S_UW	P6S_UW	-
E.U3	prepare an advanced graphic, written and oral presentation of their own design concepts in the scope of architecture and urban design, meeting the requirements of professional transcript applicable to architectural and urban design;	P6U_U	P6S_UW	P6S_UW	-
	SOCIAL COMPETENCES: GRADUATE IS PREPARED TO	**Description component code**	**Description component code**	**-**	**Description component code**
O.S1	observe the principles of professional ethics and take responsibility for undertaken actions;	P6U_K	P6S_KR	-	-
O.S2	respect diversity of opinions and cultures and display sensitivity to the social aspects of the profession;	P6U_K	P6S_KR P6S_KO	-	-
O.S3	take responsibility for the architectural and urban values in environmental and cultural heritage protection;	P6U_K	P6S_KR P6S_KO	-	-
O.S4	learn all life long, including undertaking education at a second-cycle study programme and postgraduate study programmes or participation in other forms of education;	P6U_K	P6S_KK	-	-
A.S1	think independently in order to solve simple design problems;	P6U_K	P6S_KK	-	-
A.S2	take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, country and Europe;	P6U_K	P6S_KO	-	P6S_KR P6S_KK
B.S1	formulate opinions on achievements of architecture and urban sciences, their conditions and other aspects of the architect's activities, as well as communicate information and opinions;	P6U_K	P7S_KO P7S_KR	-	-
B.S2	perform a reliable self-evaluation, formulate constructive criticism related to architectural and urban activities;	P6U_K	P6S_KR P6S_KO	-	-
D.S1	adapt to new changeable circumstances emerging in the course of performing the professional activities of creative character;	P6U_K	P6S_KK	-	-
D.S2	adequately define priorities of activities serving the purpose of completing a given task;	P6U_K	P6S_KO	-	-
D.S3	undertake work at a building site with responsibilities involving the problem area of architecture;	P6U_K	P6S_KR	-	

D.S4	practice the architectural profession, which is a profession of public trust, including correct identification and solution of problems related to design activities;	P6U_K	P6S_KK P6S_KO P6S_KR	-	-
E.S1	use imagination, intuition, creative attitude and independent thinking effectively, as well as creative work for solving design problems;	P6U_K	P6S_KK	-	P6S_KR P6S_KK
E.S2	accept criticism of the solutions presented by themselves and respond to it in a clear and factual manner;	P6U_K	P6S_KK	-	-
E.S3	use information technologies for integration with other participants in processes and undertakings, including presentation of designs and communication of opinions in a universally understandable way;	P6U_K	P6S_KK	-	-

Explanation of symbols:

1. Universal characteristics of PQF levels (first stage):

P = PQF level (6, 7)

U = universal characteristics

W = knowledge

U = skills

K = social competences

Examples:

P6U_W = PQF level 6, universal characteristics, knowledge

"*The graduate knows and understands at an advanced level – the facts, theories, methods and complex interrelations between them. The graduate knows and understands diverse complex conditions of the conducted activities."*

P7U_W = PQF level 7, universal characteristics, knowledge

"The graduate knows and understands in an in-depth manner selected facts, theories, methods and complex interrelationships between them, also in connection with other fields. The graduate knows and understands diverse complex conditions and the axiological context of the conducted activities."

2. PQF level characteristics typical of qualifications obtained in higher education (the second cycle):

P = PQF level (6, 7)

S = characteristics typical of qualifications obtained in higher education

W = knowledge
G = depth and scope
K = context

U = skills
W = use of knowledge
K = communication
O = work organisation
U = learning

K = social competences
K = critical evaluation
O = responsibility
R = professional role

Examples:

P6S_WG = PQF level 6, characteristics typical of higher education qualifications, knowledge - depth and scope.

"The graduate knows and understands at an advanced level – selected facts, objects and phenomena as well as methods related thereto and theories explaining complex interrelationships between them, constituting basic general knowledge within the scope of the scientific or artistic disciplines forming the theoretical basis and selected problems within the scope of detailed knowledge - appropriate for the educational programme, and in the case of the study programme of the practical profile – also practical applications of the said knowledge in the professional activities related to their programme."

P7S_WG = PQF level 7, characteristics typical of higher education qualifications, knowledge - depth and scope.

"The graduate knows and understands in an in-depth manner – selected facts, objects and phenomena as well as methods related thereto and theories explaining complex interrelationships between them, constituting advanced general knowledge within the scope of the scientific or artistic disciplines forming the theoretical basis, ordered and theoretically founded knowledge also including key problems and selected problems within the scope of detailed advanced knowledge - appropriate for the educational programme, and in the case of the study programme of the practical profile – also practical applications of the said knowledge in the professional activities related to their programme. The graduate

knows and understands the major development trends of the scientific or artistic disciplines to which the study programme is assigned – in the case of study programmes of the general academic profile."

3. Where there is no *Description Component Code*, enter a horizontal line.

The explanation of the symbols of learning outcomes compliant with the education standard for the programme Architecture (based on the Regulation of the Minister of Science and Higher Education of the 18th July 2019 on the education standard preparing for practising the architectural profession, Journal of Laws o 2019, item 1359).

GENERAL LEARNING OUTCOMES:

O.W – general learning outcomes in respect of the transferred knowledge

O.U – general learning outcomes in respect of the acquired skills

O.S – general learning outcomes in respect of the acquired social competences

DETAILED LEARNING OUTCOMES:

A.W – learning outcomes in respect of the knowledge transferred within the course group: A. Design

B.W – learning outcomes in respect of the knowledge transferred within the course group: B. Design context

C.W – learning outcomes in respect of the knowledge transferred within the course group: C. Supplementary courses

D.W – learning outcomes in respect of the knowledge transferred within the course group: D. Work placements

E.W – learning outcomes in respect of the knowledge transferred within the course group: E. Diploma project

A.U – learning outcomes in respect of the skills acquired within the course group: A. Design

V.U – learning outcomes in respect of the skills acquired within the course group: B. Design context

C.U – learning outcomes in respect of the skills acquired within the course group: C. Supplementary courses

D.U – learning outcomes in respect of the skills acquired within the course group: D. Work placements

E.U – learning outcomes in respect of the skills acquired within the course group: E. Diploma project

A.S – learning outcomes in respect of the social competences acquired within the course group: A. Design

B.S – learning outcomes in respect of the social competences acquired within the course group: B. Design context

D.S – learning outcomes in respect of the social competences acquired within the course group: D. Work placements

E.S – learning outcomes in respect of the social competences acquired within the course group: E. Diploma project

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[1] Where there are more than one field of science/art or scientific/artistic displine, provide all of them, pursuant to the regulation of the Minister of Science and Higher Education of 20 September 2018 on fields of science and scientific disciplines and artistic disciplines (Journal of Laws of 2018, item 1818).

[2] Provide the appropriate level of the Polish Qualifications Framework in accordance with the Act of 22 December 2015 on the Integrated Qualifications System (Journal of Laws of 2018, item 2153, as amended).

[3] Description of the assumed learning outcomes for a study programme, level and profile takes into account all universal characteristics of the first level specified in the Act of 22 December 2015 on the Integrated Qualifications System, applicable to the given level of the Polish Qualifications Framework.

[4] All characteristics of the second level of learning outcomes specified in the Regulation of the Minister of Science and Higher Education of 14 November 2018 on the chcharacteristics of the second level of learning outcomes for qualifications at levels 6–8 of the Polish Qualification Framework (Journal of Laws of 2018, item 2218) – part I.

[5] Part III – characteristics of the second level of learning outcomes for qualifications at levels 6 and 7 of the Polish Qualifications Framework enabling obtaining engineering competences (developed descriptions included in part I) specified in the Regulation of the Minister of Science and Higher Education of 14 November 2018 on characteristics of the second level of learning outcomes for qualifications at level 6-8 of the Polish Qualifications Framework.

STUDY PROGRAMME CURRICULUM 16th March 2022
Faculty of Architecture
Study programme code: 0732T100 Presentation in the Slovenian education I and I of the Slovenian economy, University
Mode of study: full time Mode of study: part time, weekday, evening or weekend
Field of science: engineering and technology
Credits/Workload: 1 credit corresponds to 30 study hours – 10 % of the ECTS points number
Credits/Workload: civil engineering and framework – 2 % of the ECTS points number; five arts and art conservation – 5% of the total ECTS credits number;
Code of the study area:

Applicable since the academic year 2022/2023

No.	Course group	Course name	HIS	ZIS	Field of science	Num. hours TOTAL	TOTAL L	PC	Lab	CLAS	Dis	S	ECTS	Num.	1. L	PC	Lab	Dis	S	ECTS	Num.	2. L	PC	Lab	Dis	S	ECTS	Num.	3. L	PC	Lab	Dis	S	ECTS	Num.	4. L	PC	Lab	Dis	S	ECTS	Num.	5. L	PC	Lab	Dis	S	ECTS	Num.
1.	A.1.1 Design	MODULE 1.A: INTRODUCTION TO DESIGN			6	120	0	0	0	0	120	0	6	0				120	6																												
2.	A.1.2 Design	MODULE 1.B: INTRODUCTION TO ARCHITECTURAL AND CONSTRUCTION DESIGN			2	30	0	0	0	0	30	0	2	0				30	2																												
3.	A.1.3 Design	MODULE 2.A: PRELIMINARY ARCHITECTURAL AND URBAN DESIGN			6	120	0	0	0	0	120	0	6	0															120	0	6															
4.	A.1.4 Design	MODULE 2.B: INTRODUCTION TO ARCHITECTURAL AND CONSTRUCTION DESIGN			2	30	0	0	0	0	30	0	2	0															30	0	2															
5.	A.1.5 Design	MODULE 5.A: DESIGN IN A LOW-DENSITY SINGLE-FAMILY DEVELOPMENT HUSEMAN II			7	7	105	0	0	0	0	105	0	7	0															105	0	7															
6.	A.1.6 Design	MODULE 2.B: ARCHITECTURAL AND CONSTRUCTION DESIGN: GENERAL CONSTRUCTION			2	30	0	0	0	0	30	0	2	0															30	0	2															
7.	A.1.7 Design	MODULE 5.A: DESIGN IN A HIGH-DENSITY SINGLE-FAMILY DEVELOPMENT HUSEMAN II			7	7	105	0	0	0	0	105	0	7	0																																
8.	A.1.8 Design	MODULE 2.B: ARCHITECTURAL AND CONSTRUCTION DESIGN: GENERAL CONSTRUCTION AND BUILDING INSTALLATIONS (SERVICE SYSTEMS)			2	30	0	0	0	0	30	0	2	0																																
9.	A.1.9 Design	MODULE 6.A: SERVICES BUILDINGS DESIGN			7	7	105	0	0	0	0	105	0	7	0																																
10.	A.1.10 Design	MODULE 9.B: URBAN PLANNING: DESIGN OF PUBLIC SPACES			2	30	0	0	0	0	30	0	2	0																																
11.	A.1.11 Design	MODULE 7.A: PUBLIC UTILITY BUILDINGS DESIGN			7	7	105	0	0	0	0	105	0	7	0																																
12.	A.1.12 Design	MODULE 7.B: ARCHITECTURAL AND CONSTRUCTION DESIGN: GENERAL CONSTRUCTION AND BUILDING INSTALLATIONS (SERVICES SYSTEMS) II			2	30	0	0	0	0	30	0	2	0																																
13.	A.1.13 Design	MODULE 5.A: DESIGN OF A MULTI-FAMILY RESIDENTIAL BUILDING IN URBAN DEVELOPMENT			7	7	105	0	0	0	0	105	0	7	0																																
14.	A.1.14 Design	MODULE 9.B: DESIGN IN THE CONTEXT OF SPATIAL AND DESIGN PLANNING REGULATIONS			2	30	0	0	0	0	30	0	2	0																																
15.	A.1.15 Design	MODULE 9.A: URBAN DESIGN			7	7	105	0	0	0	0	105	0	7	0																																
16.	A.1.16 Design	MODULE 9.B: URBAN REVITALIZATION			1	15	0	0	0	0	15	0	1	0																																
17.	A.1.17 Design	MODULE 9.C: URBAN INFRASTRUCTURE: TRANSIT			1	15	0	0	0	0	15	0	1	0																																
18.	A.1.18 Design	MODULE 10.A: PUBLIC UTILITY BUILDINGS DESIGN II			7	7	105	0	0	0	0	105	0	7	0																																
19.	A.1.19 Design	MODULE 10.B: ARCHITECTURAL AND CONSTRUCTION DESIGN: BUILDING STRUCTURES			2	30	0	0	0	0	30	0	2	0																																
20.	A.2.1 Design	MODULE 3.B: INTERIOR DESIGN			3	45	0	0	0	0	45	0	3	0																																
21.	A.2.2 Design	MODULE 4.A: RURAL DESIGN AND SPECIALIST DESIGN: RURAL AREAS REVITALIZATION			6	90	0	0	0	0	90	0	6	0																																
22.	A.3.1 Design content	THEORY OF ARCHITECTURAL AND URBAN DESIGN: FUNDAMENTALS OF DESIGN			2	30	30	0	0	0	0	0	2	1	30																																
23.	A.3.2 Design content	HISTORY OF URBANISATION			1	15	15	0	0	0	0	0	1	0	15																																
24.	A.3.3 Design content	HISTORY OF ARCHITECTURE	4		4	60	60	0	0	0	0	0	4	1	60																																
25.	A.3.4 Design content	CONTEMPORARY ARCHITECTURE			2	30	30	0	0	0	0	0	2	1							30	0	2																								
26.	A.3.5 Design content	LANDSCAPE ARCHITECTURE			1	15	15	0	0	0	0	0	1	0							15	0	1																								
27.	A.3.6 Design content	ELECTIVE COURSES: GROUP NO. DESIGN CONTEXT / HISTORY			6	90	45	0	0	0	0	45	6	0							14	0	1						30	0	2															
28.	A.4.1 Design content	THEORY OF ARCHITECTURAL AND URBAN DESIGN: PRINCIPLES OF DESIGN			2	30	30	0	0	0	0	0	2	1							30	0	2																								
29.	A.4.2 Design content	THEORY OF ARCHITECTURAL AND URBAN DESIGN: DESIGN CONDITIONS			2	30	30	0	0	0	0	0	2	1							30	0	2																								
30.	A.4.3 Design content	THEORY OF URBAN DESIGN			2	30	30	0	0	0	0	0	2	1										30	0	2																				
31.	A.4.4 Design content	THEORY AND PRINCIPLES OF CITY DESIGN			1	15	15	0	0	0	0	0	1	0										15	0	1																				
32.	A.4.5 Design content	URBAN AREAS REVITALISATION			1	15	15	0	0	0	0	0	1	0										15	0	1																				
33.	A.4.6 Design content	CULTURAL HERITAGE AND HISTORIC ARCHITECTURE PROTECTION	1		1	15	15	0	0	0	0	0	1	0																																
34.	A.4.7 Design content	CULTURAL STUDIES	1		1	15	15	0	0	0	0	0	1	0																																
35.	A.4.8 Design content	LAW, ECONOMICS, ETHICS AND MANAGEMENT	1		1	15	15	0	0	0	0	0	1	1																																
36.	A.4.9 Design content	ENVIRONMENT PROTECTION AND ECOLOGY			1	15	15	0	0	0	0	0	1	0																																
37.	A.4.10 Design content	ELECTIVE COURSES: GROUP NO. DESIGN CONTEXT: THEORY			2	30	15	0	0	0	0	15	2	0																																
38.	A.4.11 Design content	BIOCLIMATICS AND OCCUPATIONAL HEALTH AND SAFETY IN ARCHITECTURE			2	30	30	0	0	0	0	0	2	0																																
39.	A.4.12 Design content	ELECTIVE COURSES: GROUP NO. DESIGN CONTEXT: CONDITIONS			2	30	15	0	0	0	0	15	2	0																																
40.	A.5.1 Design content	GENERAL CONSTRUCTION AND MATERIALS SCIENCE			4	60	60	0	0	0	0	0	4	1	60																																
41.	A.5.2 Design content	STATICS AND MECHANICS OF BUILDINGS			4	60	30	30	0	0	0	0	4	1							30	30																								
42.	A.5.3 Design content	GENERAL CONSTRUCTION AND PHYSICS OF BUILDINGS			2	30	30	0	0	0	0	0	2	1							30	0	2																								
43.	A.5.4 Design content	BUILDING INSTALLATIONS (SERVICE SYSTEMS) AND URBAN INFRASTRUCTURE			2	30	15	15	0	0	0	0	2	1										30	0	2																				
44.	A.5.5 Design content	BUILDING STRUCTURES			4	60	60	0	0	0	0	0	4	1																																
45.	A.5.6 Design content	URBAN INFRASTRUCTURE: ENGINEERING PROBLEMS: MID-LENGTH TRANSIT			2	30	30	0	0	0	0	0	2	1										30	0	2																				
46.	A.5.7 Design content	ELECTIVE COURSES: GROUP NO. DESIGN CONTEXT / TECHNIQUE AND TECHNOLOGY			2	30	15	0	0	0	0	15	2	0																																
47.	A.6.1 Design content	DESCRIPTIVE GEOMETRY				45	0	0	45	0	0	0	0	1	45																																
48.	A.6.2 Design content	INTRODUCTION TO COMPUTER AIDED DESIGN				30	0	0	30	0	0	0	0	1							30																										
49.	A.6.3 Design content	BASIC TOOLS OF ARCHITECTURAL PRESENTATION: DRAWING, PAINTING, MODELLING AND SCULPTURE			4	60	0	0	60	0	0	0	0	1	30																																
50.	A.6.4 Design content	MATHEMATICS				45	0	45	0	0	0	0	0	1							45																										
51.	A.6.5 Design content	BASIC PROBLEMS OF COMPUTER AIDED DESIGN				30	0	0	30	0	0	0	0	1							30																										
52.	A.6.6 Design content	MODULE 6.C: INTEGRATED TOOLS OF ARCHITECTURAL PRESENTATION I			2	30	0	0	0	30	0	0	2	0															30	0	2															
53.	A.6.7 Design content	ELECTIVE COURSES: GROUP NO. COMPUTER TECHNIQUES			2	30	15	0	0	0	0	15	2	0															30	0	2															
54.	A.6.8 Design content	MODULE 6.C: INTEGRATED TOOLS OF ARCHITECTURAL PRESENTATION II			2	30	0	0	0	30	0	0	2	0																																
55.	A.6.9 Design content	ELECTIVE COURSES: GROUP NO. DESIGN CONTEXT / TECHNIQUES OF ARCHITECTURAL PRESENTATION			2	30	0	0	0	30	0	0	2	0																																
56.	A.6.10 Design content	DESIGN PROCESS ILLUSTRATION			2	30	0	0	0	30	0	0	2	0																																
57.	A.7 Supplementary courses	FOREIGN LANGUAGE			6	120	0	120	0	0	0	0	0	1	30							30							30																	
58.	A.8 Supplementary courses	FUNDAMENTALS OF AESTHETICS WITH ELEMENTS OF PHILOSOPHY	1			15	15	0	0	0	0	0	1	0																																
59.	A.8 Supplementary courses	FUNDAMENTALS OF ART HISTORY	1			15	15	0	0	0	0	0	1	0																																
60.	A.8 Supplementary courses	FUNDAMENTALS OF ENVIRONMENTAL PSYCHOLOGY	1			15	15	0	0	0	0	0	1	0																																
61.	A.8 Supplementary courses	FUNDAMENTALS OF SOCIOLOGY	1			15	15	0	0	0	0	0	1	0																																
62.	A.9 Supplementary courses	ELECTIVE COURSES (NO GROUP)			2		30	0	0	0	0	0	30	2	0																																
63.	A.10 Work placements	DRAWING PRACTICE				3	30	0	0	0	0	0	0	30	2	0																																
64.	A.11 Work placements	URBAN SURVEYOR'S BASIC PRACTICE (WORK PLACEMENT)				4	60	0	0	0	0	0	0	60	4	0																																
65.	A.12 Work placements	ARCHITECTURAL INVENTORY: BASIC PRACTICE (WORK PLACEMENT)				4	60	0	0	0	0	0	0	60	4	0																																
66.	A.13 Work placements	WORK PLACEMENT				30	450	0	0	0	0	0	0	450	30	0																																
67.	B.1 Diploma (priority)	DIPLOMA DESIGN (PROJECT)		17	17	0	0	0	0	0	0	0	0	17	0																																
68.	B.2 Diploma (priority)	DIPLOMA (PROJECT) SEMINAR		3	3	45	0	0	0	0	0	0	0	45	0	3																																
69.	B.3 Diploma (priority)	SPECIALIST CONSULTATIONS		1	1	0	0	0	0	0	0	0	0	1	0																																
70.	C Physical Education	Physical Education				60	0	60	0	0	0	0	0	0	60																																
		Total	34	60	300	4800	1005	225	255	30	1005	180	300	60	300	30	30	30	30	30	60	300	30	30	30	30	30	60	300	30	30	30	30	30	60	300	30	30	30	30	30	60	300	30	30	30	30	30	60
		Number of implementations					30	30	30	30	30	30	30		30	30	30	30	30	30		30	30	30	30	30	30		30	30	30	30	30	30		30	30	30	30	30	30		30	30	30	30	30	30	

Credits: 1 - 10 for final subject teacher's examination
Class: L - Lectures; PC - Practical classes; Lab - Laboratory; CLab - Computer Laboratory; Dis - Design; S - Seminar
Form of study: P - Foreign; S - Foreign; V - Foreign; Internat. - EU; Mobility - Erasmus; M - Mentorship; Internship; S - Work placements; D - Diploma or project; Physical Education

Number of Points	L	PC	Lab	CLab	Dis	S	ECTS	Num.
A1	120	0	0	0	0	120	0	6
A2	120	0	0	0	0	120	0	6
B1	120	0	0	0	0	120	0	6
B2	120	0	0	0	0	120	0	6
B3	120	0	0	0	0	120	0	6
C	120	0	0	0	0	120	0	6
D	120	0	0	0	0	120	0	6
E	120	0	0	0	0	120	0	6
F,S,-	120	0	0	0	0	120	0	6

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/23
at the Faculty of Architecture

A course group	**A.2 – DESIGN** **Rural design, interior design and specialist design resulting from local conditions**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The A2 course group – rural design, interior design and specialist design resulting from local conditions complement the A1 Design classes. The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group A2 – Design at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

A.W1. architectural design for the implementation of simple tasks, in particular: simple facilities taking into account the basic needs of users, single- and multi-family housing development, service facilities in residential ensembles, public utility facilities in an open landscape or in an urban environment;

A.W2. urban design in the scope of implementation of simple tasks, in particular: small building ensembles, local spatial development plans, taking into account local conditions and connections, as well as forecasting the processes of transformations in the settlement structure of cities and villages;

A.W3. provisions of local spatial development plans to the extent necessary for architectural design;

A.W4. principles of universal design, including the ideas of designing spaces and buildings accessible to all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, and ergonomic principles, including ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, especially for people with disabilities.

In respect of skills, the graduate is able to:

A.U1. design an architectural object by creating and transforming the space so as to give it new values - in accordance with a given program that takes into account the requirements and needs of all users;

A.U2. design a simple urban ensemble;

A.U3. prepare planning studies documentation concerning spatial development and interpret it to the extent necessary for designing on an urban and architectural scale;

A.U4. make a critical analysis of the conditions, including the valorisation of the land development and building conditions;

A.U5. think and act creatively, using the workshop skills necessary to maintain and expand the ability to implement artistic concepts in architectural and urban design;

A.U6. integrate information obtained from various sources, interpret and critically analyse it;

A.U7. communicate using various techniques and tools in a professional environment appropriate for architectural and urban design;

A.U8. prepare architectural and construction documentation in appropriate scales in relation to the conceptual architectural design;

A.U9. implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.

In respect of social competences, the graduate is prepared for:

A.S1. independent thinking to solve simple design problems;

A.S2. taking responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, country and Europe

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
MODUŁ A					
MODUŁ 4.A: RURAL DESIGN AND SPECIALIST DESIGN RURAL AREAS REVITALISATION	3	6	C	p/90	90
MODUŁ B					
MODUŁ 3.B: INTERIOR DESIGN	3	3	C	p/45	45

The course outline

Course	Course contents
MODULE A	
MODULE 4.A: RURAL DESIGN AND SPECIALIST DESIGN RURAL AREAS REVITALISATION	**YEAR 2, sem. 3** *Notes:* – *The course is integrated with the course: MODULE 4.B: Architectural and construction design: general construction 1 – sem. 3* – *The course is integrated with the course: MODULE 4.C: Integrated tools of architectural presentation 1 – sem. 3* Objectives:

	The aim of the course is to deepen the student's knowledge of the specificity of rural areas and the shaping of the residential function in the rural context. Detailed objectives: – the ability to carry out a planning and architectural analysis of a selected rural town in the regional context, based on documents and a local vision, with particular emphasis on the ability to find archetypal features of regional architecture and use them in the project; – the ability to analyse the local spatial development plan and to make adjustments to it resulting from the analysis and knowledge of the area; – developing the ability to comprehensively think and design on a variety of scales, from planning to architectural scale; – developing the ability to design homestead architecture and architecture with other functions occurring in rural areas in correlation with the provisions of the plan; – sensitising to spatial chaos and developing the ability to introduce spatial order; – the ability to argue the adopted design solutions based on the knowledge obtained in the field of contemporary trends in the development of rural space. Topics: The program of the course covers planning and architectural issues related to the shaping of contemporary rural development of various functions and scale. The subject of the design study is the concept of a farm development with a residential and production or service function based on the analysis of local and planning conditions, together with a concept of land development. The project covered by the project complements the existing rural tissue - it is related to a specific rural spatial, functional and cultural context - including the adjacent buildings. Scope of the study: – spatial and location conditions analyses, documented by photos (including archetype) and planning; – land development plan; – conceptual design of the selected compound (projections, sections, frontages); – technical detail in the form of a cross-section of the building wall from the foundation to the ridge; – essay and technical description. Study on an architectural and urban / planning scale, depending on the subject matter and complexity.
MODULE B	
MODULE 3.B: INTERIOR DESIGN	**YEAR 2, sem. 3** *Notes:* *The course integrated with the course: MODULE 3.A: Design in a low-density single-family development complex – sem. 3* Objectives: Developing the student's skills in the field of: – creating concepts of interior architecture and their design; – principles of architectural interior composition, functional relationships and ergonomics; – the possibility of using finishing materials and elements of interior design; – analysing the individual needs of the interior user; – improvement of the architect's professional workshop in the field of interior design; – ability to carry out the design process in terms of architectural interior and its presentation. Topics:

	Architectural design of a single interior in a building, taking into account spatial and functional conditions as well as the specificity of the scope of the project. The scope of the study: The scope of the study includes relevant drawings in the scope resulting from the specifics of the project subject, developed in scales appropriate for an unambiguous presentation of the project (taking into account both elements of architectural and material presentation, technical solutions as well as elements of portable and built-in equipment). The text part is an integral part of the study to the extent necessary to complete the information contained in the drawings.

Teaching methods:

Design exercises, sketches and conceptual and architectural drawings, computer drawing, essay, discussion, consultations, presentations and project defence, individual and group work.

Methods of learning outcomes verification and evaluation:

Attainment of the required learning outcomes is checked using various forms of student assessment, including: verbal and written reviews, test-like projects realised in class under supervision, examination (if the program assumes it) as part of the project defence; by assessing the completed project work, including course and review (transitional) work; assessment of the level of the student's creativity demonstrated during the design process and direct individual and team corrections carried out using the "master-student" method; by assessing the ability to present and defend the project.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).

E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/2023
at the Faculty of Architecture

A course group	**B.1 – DESIGN CONTEXT** **Theory and history of architecture and urban planning, landscape architecture, heritage protection, cultural studies, environmental protection and ecology, economics of the investment process, law in the investment process, ergonomics**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group **B1 – Design context** at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

B.W1. theory of architecture and urban planning useful for formulating and solving simple tasks in the field of architectural and urban design as well as spatial planning;

B.W2. history of architecture and urban sciences, contemporary architecture, protection of heritage, to the extent necessary for architectural, urban and planning creativity;

B.W3. the importance of the natural environment in architectural and urban design and spatial planning;

B.W6. economics of investment and methods of organisation as well as the course of the design and investment process; basic principles of design and implementation quality management in the building process;

B.W7. ways of communicating the idea of architectural, urban and planning projects and their development;

B.W9. principles of occupational health and safety.

In respect of skills, the graduate is able to:

B.U1. integrate knowledge from various areas of science, including history, history of architecture, history of art and protection of cultural assets in solving engineering tasks;

B.U2. recognise the importance of non-technical aspects and effects of the architect's design activity, including its impact on the cultural and natural environment;

B.U5. make a preliminary economic analysis of the planned engineering activities;

B.U6. properly apply standards and legal regulations in the field of architectural and urban design.

In respect of social competences, the graduate is ready for:

B.S1. formulating opinions on the achievements of architecture and urban planning, their determinants and other aspects of the architect's activity, as well as providing information and opinions;

B.S2. reliable self-assessment, formulating constructive criticism regarding architectural and urban planning activities.

Form of classes, number of hours in one semester:

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
THEORY OF ARCHITECTURAL AND URBAN DESIGN – INTRODUCTION TO DESIGN	1	2	E	L/30	30
HISTORY OF URBAN SCIENCES	1	1	C	L/15	15
HISTORY OF ARCHITECTURE	1	4	E	L/60	60
CONTEMPORARY ARCHITECTURE	2	2	E	L/30	30
LANDSCAPE ARCHITECTURE	2	1	C	L/15	15
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: HISTORY	2 4 5	2 2 2	Z Z Z	L/15, s/15 L/15, s/15 L/15, s/15	30 30 30
THEORY OF ARCHITECTURAL AND URBAN DESIGN – PRINCIPLES OF DESIGN	3	2	E	L/30	30
THEORY OF ARCHITECTURAL AND URBAN DESIGN – DESIGN CONDITIONS	3	2	E	L/30	30
THEORY OF URBAN DESIGN	5	2	E	L/30	30
THEORY AND PRINCIPLES OF CITY DESIGN	5	1	C	L/15	15
URBAN AREAS REVITALISATION	5	1	C	L/15	15
CULTURAL HERITAGE AND HISTORIC ARCHITECTURE PROTECTION	6	1	C	L/15	15
CULTURAL STUDIES	6	1	C	L/15	15
LAW, ECONOMICS, ETHICS AND MANAGEMENT	6	1	E	L/15	15

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
ENVIRONMENT PROTECTION AND ECOLOGY	6	1	C	L/15	15
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: THEORY	6	2	C	L/15 s/15	30
ERGONOMICS AND OCCUPATIONAL HEALTH SAFETY IN ARCHITECTURE	8	2	C	L/30	30
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: CONDITIONS	8	2	C	L/15 s/15	30

The course outline:

Course	Course contents
THEORY OF ARCHITECTURAL AND URBAN DESIGN – INTRODUCTION TO DESIGN	**YEAR 1 sem. 1** *Notes:* – *The course constitutes a theoretical foundation for the course: MODULE 1.A: Introduction to design – sem. 1* – *The course constitutes a theoretical foundation for the course: MODULE 2.A: Preliminary architectural and urban design – sem. 2* Topics: The subject matter of the lectures is the theoretical basis introducing the issues related to the specificity of architectural and urban design: it is used to present the basic principles, definitions, tools of architectural and urban design, basic legal issues (laws, regulations, standards), mastering theoretical knowledge and learning the ideas of architecture and principles of contemporary urban design. The presentations also show the relationship between design tools and the matter of architecture. The lectures present basic knowledge related to architectural and urban design, cover issues related to the theory of form construction as well as architectural and urban composition, principles of sustainable design, principles of building an application program from the scale of a single object to small urban ensembles, as well as - the basics of the analysis of the built environment. The selection of the subject matter of the lectures was adjusted to the specificity of the project exercises, their degree of difficulty and program advancement.
HISTORY OF URBAN SCIENCES	**YEAR 1 sem. 1** Topics: The aim of the course is to provide students with knowledge of the history of city building in the world and in Poland, the elements that make up these urban systems and their mutual functional and spatial relations. The curriculum of the course covers the issues of ancient, medieval, modern, 19th-century and early 20th-century town planning. As part of the course, students learn the basic concepts of the history of urban planning, the factors of the formation and development of cities, as well as trends and stylistic changes related to the development of urban centres in various historical periods..
HISTORY OF ARCHITECTURE	**YEAR 1 sem. 1** *Notes:* – *The course is ultimately integrated thematically with the course: Contemporary architecture – sem. 2* – *The course is ultimately integrated thematically with the course: Cultural heritage and historic architecture protection – sem. 6* Topics: The course is designed to provide knowledge about the historical development of architecture, architectural creativity, the chronology of its

	forms and style features from Antiquity, through the Middle Ages, the Modern Age, the nineteenth century, up to the beginning of the twentieth century - including various types and forms of buildings, architectural details, techniques and building materials, based on the analysis of selected representative examples and characteristic architectural forms. An essential element of the lectures is to show the history of architecture in the context of the style changes of individual epochs and the cultural background.
CONTEMPORARY ARCHITECTURE	**YEAR 1 sem. 2** *Notes:* – *The course is ultimately integrated thematically with the course: History of architecture – sem. 1* – *The course is ultimately integrated thematically with the course: Cultural heritage and historic architecture protection – sem. 6* Topics: The course is designed to provide knowledge on the development of contemporary architecture, from the second half of the nineteenth century to the present, taking into account trends in the visual arts and culture and their impact on changes in architecture. Awakening the critical sense, including the ability to: analyse architectural objects from the above-mentioned period in the context of cultural heritage; synthesis of reflection. The knowledge acquired in the course is intended to be integrated with design items to the extent necessary in architectural and urban creation - both in the context of the latest trends and trends in the development of architecture, and in the historical context.
LANDSCAPE ARCHITECTURE	**YEAR 1 sem. 2** Topics: The issues discussed in the lectures include, among others, the following issues: landscaping and garden art from antiquity to the present day; green areas: typology, functions, systems and standards; vegetation in the landscape; landscape typology. Landscape composition. Valuation and methods of landscape assessment; avant-garde concepts and a new tradition of landscape planning: including green infrastructure and urban planning, urban landscape planning.
THEORY OF ARCHITECTURAL AND URBAN DESIGN – PRINCIPLES OF DESIGN	**YEAR 2 sem. 3** *Notes:* – *The course constitutes a theoretical foundation for the course: MODULE 3.A: Design in a low-density single-family development complex – sem. 3* – *The course constitutes a theoretical foundation for the course: MODULE 5.A: Design in a high-density single-family development complex – sem. 4* – *The course constitutes a theoretical foundation for the course: MODULE 8.A: Design of a multi-family residential building in urban development – sem. 5* Topics: The substantive scope of the lectures includes familiarisation with the theoretical foundations of design and urban and architectural composition of single-family residential ensembles, including the issues of universal design. Issues from the theory of architecture are also presented: notation of space, concrete architecture, rules of building a single-family house, legal conditions in a specific area, drawings of a single-family house, typology, case studies illustrating the presented theories and model solutions in the field of location/context, form and matter. The student learns the principles of building an architectural form and different views on aesthetics (as a general theory of beauty in works of art and natural objects). They become familiar with the principles of shaping a sustainable housing environment. They learn about contemporary trends in shaping urban planning and architecture of single-family housing ensembles from different locations, as well as the issues of universal (architectural and urban) design.
THEORY OF ARCHITECTURAL AND URBAN DESIGN	**YEAR 2 sem. 3** *Notes:*

– DESIGN CONDITIONS	– *The course constitutes a theoretical foundation for the course: MODULE 6.A: Service buildings design – sem. 4* – *The course constitutes a theoretical foundation for the course: MODULE 7.A: Public utility buildings design 1 – sem. 5* – *The course constitutes a theoretical foundation for the course: MODULE 10.A: Public utility buildings design 2 – sem. 6* Topics: As part of the lectures, the student receives basic knowledge about the theory and principles of architectural design of service facilities in residential buildings and public utility facilities, including cultural, commercial, and service facilities, office and industrial buildings, sports and recreation facilities, and collective housing. The subject matter of the lectures is a sequence of the knowledge passed on, from general knowledge related to the principles of designing public utility facilities, places of work and recreation and collective housing, to specialist knowledge regarding architectural, construction, technological solutions, fire safety, evacuation and communication services.
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: HISTORY	**YEAR 1 sem. 2, YEAR 2 sem. 4, YEAR 3 sem. 5** Topics: The subject matter of the course includes knowledge of the history of architecture and urban planning. During the course, historical forms and objects in architecture as well as architectural creativity are analysed. The main issue of the course is to understand the principles of building construction and architectural details, characteristic for a given era, and to show the continuity of architectural development. The differences between the architecture of different regions are analysed. The conducted analyses of historical objects are intended to explain the integrity of the structure, functions and aesthetic features developed during a given stylistic epoch. The thematic differentiation of classes in individual semesters results from the student's knowledge in the subject area and is an extension of the topics signalled/discussed in the courses carried out in the preceding semesters.
THEORY OF URBAN DESIGN	**YEAR 3 sem. 5** *Notes:* – *The course constitutes a theoretical foundation for the course: MODULE 9.A: Urban design – sem. 6* Topics: The subject of the course is to learn about the role and meaning of urban design as an element of the planning process, indispensable in shaping spatial order and harmony in the relations between buildings and the open space defined by them. As part of the course, the student masters the basic knowledge of: – contemporary processes of transformation of central-city areas and shaping public spaces of the city; – definitions of basic concepts (city, central-city area, public space, transformation, revitalisation, urban composition); – strategies and mechanisms used in the processes of transformation and shaping of central-city areas; – the role and importance of urban public spaces in ensuring a high-quality living environment; – solutions for communication accessibility systems; – public green areas and recreation zones; – the concept of shaping the functional structure of central-city areas; – the principles of shaping the relationship of contemporary buildings and urban ensembles to the existing cultural, spatial and natural environment context.
THEORY AND PRINCIPLES OF CITY DESIGN	**YEAR 3 sem. 5** Topics: As part of the course, the student acquires basic knowledge of the principles of city design, taking into account the conditions of spatial planning and local conditions. They become familiar with the latest theories in the field of

	shaping the spatial structures of cities and the trends in the contemporary design of central-city areas. The lectures cover the following issues: – Definitions of terms used in urban design and spatial planning; urban planning as the art of building a city. – Principles of urban composition in the light of contemporary conditions for the development of urban spatial structures, urban composition (streets, squares, parks and other public spaces; quarters; passages and galleries, integrated transport nodes and other types of contemporary public spaces); – Traditions of spatial and urban planning. Historical conditions for the development of urban doctrines. CIAM Congresses. The New Athens Charter. New Urbanism; classic and avant-garde approaches to urban form and structure; – City design and contemporary urban planning. Problems of balancing and harmonising development. Designing the city in accordance with the principles of sustainable development; The Leipzig Charter; problems of suburbanisation and metropolisation; – Methodology of spatial planning and urban design. Designer / planner - client relations. Conflicts and their resolution in the participation process. Designing the city - instruments of spatial policy. – Principles of urban design and the issue of the study of the conditions and directions of spatial development and the local spatial development plan; – Doctrinal aspects in urban design and spatial planning; – Historical, legal, and philosophical aspects of spatial policy.
URBAN AREAS REVITALISATION	**YEAR 3 sem. 5** *Notes: The course constitutes a theoretical foundation for the course: MODULE 9.B: Urban revitalisation* Topics: – Theoretical foundations for the formulation and implementation of a revitalisation strategy for degraded central-city areas, post-industrial, post-military and post-railway areas; – Revitalisation programs and projects, their methodological foundations and their relationship with the spatial policy of local governments; – The attractiveness of public space as a criterion for the evaluation of an urban revitalisation project; – Counteracting the crisis phenomena which the urban tissue is subject to in the above-mentioned types of degraded areas; – Case studies on public and private revitalisation activities with an emphasis on flagship revitalisation projects in European metropolises and revitalisation projects in Polish metropolises supported by the European Structural Funds; – Theoretical foundations for the formulation and implementation of a revitalisation strategy for degraded central-city areas, post-industrial, post-military and post-railway areas.
CULTURAL HERITAGE AND HISTORIC ARCHITECTURE PROTECTION	**YEARf 3 sem. 6** *Notes:* – *The course ultimately integrated thematically with the course: History of architecture – sem. 1* – *The course ultimately integrated thematically with the course: Contemporary architecture – sem. 2* – *The course ultimately integrated thematically with the course: Diploma (project) design – sem. 8* Topics: The course is designed to provide knowledge on the development of conservation thought, based on the constant expansion of the area of protection, while accepting, apart from the traditional subject perception of heritage, also a subjective interpretation, which treats the monument not only as a material relic or document of the past, but also as a behaviorally interpreted medium of memory about the past.

	The topics of the lectures concern the genesis, evolution and shaping of contemporary intercultural doctrines for the protection of architectural and urban heritage, which must respond to the basic criteria of what, why and how we protect. The course provides knowledge on the development of conservation ideas based on the constant expansion of the area of protection - so as to present a wide spectrum of conservation and architectural solutions used in European and non-European countries, both in terms of aesthetic and artistic, functional and spatial as well as technical and technological aspects, against the background of fundamental principles and philosophical ideas**.**
CULTURAL STUDIES	**YEAR 3 sem. 6** Topics: The lectures will present the fundamental issues of culture and new media in art and architecture and their mutual relations. These issues concern the origins, history and nature of fundamental problems, concepts, models and strategies of media communication and social interaction. The student will be familiarised with the concepts, that is design, creation, message, message, symbol, sign, mass culture, visuality, authenticity, multimedia, new media, creative process, mass art, ontic nature of a work of art, originality, reproduction, popularisation of works of art, development, space, context of place and time, continuum.
LAW, ECONOMICS, ETHICS AND MANAGEMENT	**YEAR 3 sem. 6** *Notes:* – *The course ultimately integrated thematically with the course: Diploma (project) design – sem. 8* Topics: – Introducing the student to the fundamental issues in the field of law, economy and management in the investment process, as well as the professional conditions and the working environment - this is integrated with construction and architectural design. – Overview of specialist industry-specific determinants of an architectural design. Solutions and technical conditions necessary for the correct fulfilment of detailed requirements, that is fire protection, occupational health and safety and, in selected cases, sanitary and epidemiological conditions. – Verification of the applied technology of the facility in terms of correct compliance with detailed requirements, that is fire protection, occupational health and safety and, in selected cases, sanitary and epidemiological conditions, determination of legal, economic and organisational conditions in the simulated process of implementation of the designed facility.
ENVIRONMENT PROTECTION AND ECOLOGY	**YEAR 3 sem. 6** *Notes:* – *The course ultimately integrated thematically with the course: Projektowanie dyplomowe – sem. 8* Topics: Lectures introducing the subject of environmental protection and ecology provide students with information about the basic legal acts changing awareness of environmental protection. Definitions related to the subject of environmental protection and Polish legislation in the field of environmental protection are discussed. The "Environmental Protection Law" act is presented, as well as the rules for the preparation of environmental impact assessments. The lectures cover the topic of green areas in cities and their role in shaping the urban environment.
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: THEORY	**YEAR 3 sem. 6** Elective subjects are a continuation of the issues discussed in previous semesters and relate to the issues indicated in group B - Design context, in scope B.1, and relate to theoretical issues of architectural and urban design, for example: – Landscape architecture; – Revitalisation of urban areas;

	Topics: The subject of the classes is a link between research interests and issues related to the design context in theoretical terms, with particular emphasis on the following topics: the theory of architecture and town planning, spatial planning, or the importance of the natural environment in architectural and urban design and spatial planning.
ERGONOMICS AND OCCUPATIONAL HEALTH SAFETY IN ARCHITECTURE	**YEAR 4 sem. 8** Topics: The subject is designed to familiarise the student with the general principles and problems of accident studies and ensure a sense of well-being in human activity, with a broader introduction to the issues of anthropometry, noise conditions, and natural and artificial lighting, as well as familiarisation with the current challenges posed by the rapid development of modern civilisation technology of knowledge-based economies. The lectures cover the following issues: – General contextual information on the development of knowledge about man, including the genesis derived from the military, industrialisation and the modernist period; – Introduction to the science of ergonomics as a comprehensive, applied science dealing with interaction and interdependencies between humans, their activities and the environment in pursuit of physical, mental and social well-being; – Information on the basic physical and mental burdens in the professional activity of a human being; – Evolution of jobs from the industrial period to the implementation of artificial intelligence; – Introduction to and general definition of knowledge about accidents and occupational health and safety.
ELECTIVE COURSES GROUP B1: DESIGN CONTEXT: CONDITIONS	**YEAR 4 sem. 8** The elective courses are a continuation of the issues discussed in previous semesters and relate to the issues indicated in group B - Design Context, in scope B.1, and relate to issues determining architectural and urban design, for example: – Cultural studies; – Cultural heritage and historic architecture protection; – Law, economics, ethics and management – *Environment protection and ecology* Topics: The subject of the course is a link between research interests and issues related to the design context, including, among others, the issues indicated above, to the extent necessary in architectural, urban and planning creativity, as well as the importance of the natural environment in architectural and urban design and spatial planning, or the economics of investments and the methods of organisation and the course of the design and investment process or culture and new media in art and architecture and the relations between them.

Teaching methods:

Lectures, consultations, discussions, multimedia presentations, individual and group work.

Methods of learning outcomes verification and evaluation:

The attainment of the required learning outcomes in the knowledge category is tested through written or oral examinations, reviews, essays, and presentations. Oral exams are standardised and aimed at testing knowledge at a level higher than the mere knowledge of facts (level of understanding, ability to analyse, synthesise, solve problems). The forms of written exams are essays, reports, short structured questions or Multiple Choice Questions (MCQ), Multiple Response Questions (MRQ), Yes / No questions and matching tasks.
Evaluation of a study or task. The attainment of the requirements of learning outcomes in the knowledge category is verified by means of multimedia presentation, active participation in discussions at seminars, a critical essay or other study (for example a poster). The attainment of the required learning outcomes in the knowledge category is verified by means of a colloquium or a written or oral exam.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/2023
at the Faculty of Architecture

A course group	**B.2 – DESIGN CONTEXT** **Engineering, engineering techniques and technology: construction and materials science, building structures, building statics and mechanics, building physics, building systems and city infrastructure**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group B2 – Design context at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

B.W3. the importance of the natural environment in architectural and urban design and spatial planning;

B.W4. mathematics, space geometry, statics, material strength, shaping, construction and dimensioning of structures, to the extent necessary to formulate and solve tasks in the area of architectural and urban design;

B.W5. issues of construction, construction technologies and installations, construction and building physics, covering key issues in architectural, urban and planning design as well as issues related to fire protection of buildings;

B.W6. economics of investment and methods of organisation as well as the course of the design and investment process; basic principles of design and implementation quality management in the building process;

B.W8. the role and application of graphics, drawing and painting as well as information technologies in the process of architectural and urban design;

B.W9. principles of occupational health and safety.

In respect of skills, the graduate is able to:

B.U1. integrate knowledge from various areas of science, including history, history of architecture, history of art and protection of cultural assets in solving engineering tasks;

B.U2. recognise the importance of non-technical aspects and effects of the architect's design activity, including its impact on the cultural and natural environment;

B.U3. use properly selected computer simulations, analyses and information technologies, supporting architectural and urban design;

B.U4. develop solutions for individual systems and building elements in terms of technology, construction and materials;

B.U5. make a preliminary economic analysis of the planned engineering activities;

B.U6. properly apply standards and legal regulations in the field of architectural and urban design.

In respect of social competences, the graduate is ready for:

B.S1. formulating opinions on the achievements of architecture and urban planning, their determinants and other aspects of the architect's activity, as well as providing information and opinions;

B.S2. reliable self-assessment, formulating constructive criticism regarding architectural and urban planning activities.

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
GENERAL CONSTRUCTION AND MATERIALS SCIENCE	1	4	E	l/60	60
BUILDING STATICS AND MECHANICS	2	4	E C	l/30 pc/30	60
GENERAL CONSTRUCTION AND BUILDING PHYSICS	3	2	E	l/30	30
BUILDING INSTALLATIONS AND URBAN INFRASTRUCTURE	4	2	E	l/30	30
BUILDING STRUCTURES	5	4	E	l/60	60
URBAN INFRASTRUCTURE – ENGINEERING PROBLEMS INCLUDING TRANSPORTATION	5	2	E	l/30	30
ELECTIVE COURSES GROUP B2: DESIGN CONTEXT: TECHNIQUE AND TECHNOLOGY	8	2	C	l/15 s/15	30

The course outline

Course	Course contents
GENERAL CONSTRUCTION AND MATERIALS SCIENCE	**YEAR 1, sem. 1** *Notes:* *- The course constitutes a theoretical foundation for the course: MODULE 1.B: Introduction to architectural and construction design 1 – sem. 1 (course integrated with MODULE 1.A: Introduction to design – sem. 1)* *- The course constitutes a theoretical foundation for the course: MODULE 2.B: Introduction to architectural and construction design 2 – sem. 2 (course integrated with MODULE 2.A: Preliminary architectural and urban design – sem. 2)*

	Topics: Principles of presenting building elements in the convention of technical drawing. Design methods for building foundations, walls, ceilings, stairs and steep roofs. Basic building materials, their physical and aesthetic features and examples of applications in construction, material damage identification and repair technologies.
BUILDING STATICS AND MECHANICS	**YEAR 1, sem. 2** Topics (lectures): The topics of the lectures include the discussion of force systems in graphic and analytical form. Presentation of the basic systems of static and dynamic loads acting on a building. Explanation of the occurring internal forces on the examples of statically determinate beams, frames with rigid joints and trusses. Overview of the state of stress and strain in simple static systems. Discussion of the basic theory of material strength with a demonstration of the relationship between straight bending, shear and eccentric compression. The topics of the lectures end with a discussion of the phenomena of water pressure, soil pressure, friction and building stability. Topics (practical classes): In practical classes, computational examples of simple static systems in the form of statically determinate beams, frames with rigid joints, trusses and strength issues (stresses, strains, compression, cross-section core) will be discussed.
GENERAL CONSTRUCTION AND BUILDING PHYSICS	**YEAR 2, sem. 3** *Notes:* – *The course constitutes a theoretical foundation for the course: MODULE 4.B: Architectural and construction design: general construction 1 – sem. 3 (course integrated with MODULE 4.A: Rural design and specialist design – rural areas revitalisation – sem. 3)* – *The course constitutes a theoretical foundation for the course MODUŁ 5.B: Architectural and construction design: general construction and building installations 1 – sem. 4 (course integrated with MODULE 5.A: Design in a high-density single-family development complex – sem. 4)* – *The course constitutes a theoretical foundation for the course MODULE 7.B: Architectural and construction design: general construction and building installations 2 – sem. 5 (course integrated with MODULE 7.A: Public utility buildings design 1 – sem. 5)* *Topics:* Principles of designing flat roofs of buildings, windows and doors. Daylight issues in buildings. Light construction technologies, external and internal wall finishing systems, fire protection of buildings. Introduction to the physics of buildings. Thermal phenomena and principles of heat flow calculation. Humidity problems in buildings. Acoustic phenomena and methods of solving acoustic problems.
BUILDING INSTALLATIONS AND URBAN INFRASTRUCTURE	**YEAR 2, sem. 4** *Notes:* – *The course constitutes a theoretical foundation for the course MODULE 5.B: Architectural and construction design: general construction and building installations 1– sem. 4 (course integrated with MODULE 5.A: Design in a high-density single-family development complex - sem. 4)* – *The course constitutes a theoretical foundation for the course MODULE 7.B: Architectural and construction planning: general construction and building installations 2 – sem. 5 (course integrated with MODULE 7.A: Public utility buildings design 1 - sem. 5)* Topics: Principles of designing and basic components of water supply, sewage, heating, electric, mechanical, exhaust, supply and exhaust ventilation and air conditioning. Fire-fighting water devices, indoor thermal comfort.

	Energy performance of the building. Devices that collect heat from the environment. Boiler rooms. Basic elements of water supply, heating, electricity and sewage systems of domestic sewage and rainwater.
BUILDING STRUCTURES	**YEAR 3, sem. 5** *Notes:* – *The course constitutes a theoretical foundation for the course MODULE 10.B: Architectural and construction design: building structures – sem. 6 (course integrated with MODULE 10.A: Publick utility buildings design 2 – sem. 6)* Topics: The lectures cover the systematics of the selection of structural elements, the principles of preliminary design of the load-bearing system of buildings. Presentation of the basic assumptions and requirements included in the current PN-EN design standards (constructs reinforced concrete, steel, wood and masonry). Overview of the basic principles of soil mechanics, including the design of direct foundations (strip foundations and foundation footers) and heavy and light type retaining walls. Presentation of the basic and practical requirements for load-bearing structures of reinforced concrete, metal, wooden and unreinforced walls. The principles of application and selection of primary and secondary elements included in the load-bearing system of the structure are discussed on the basis of examples of simple objects..
URBAN INFRASTRUCTURE – ENGINEERING PROBLEMS INCLUDING TRANSPORTATION	**YEAR 3, sem. 5** *Notes:* – *The course constitutes a theoretical foundation for the course MODULE 9.C: Urban infrastructure: transportation – sem. 6 (course integrated with MODULE 9.A: Urban design – sem. 6)* Objectives: The aim of the course is to provide knowledge on the principles and practical problems related to planning, design and operation of systems in urban engineering on an urban scale. Topics: The topics of the classes include: - Introduction to planning technical infrastructure systems on the scale of an urban ensemble and particular plots; - issues of design and operation of water and sewage facilities and devices, gas engineering, heating of power systems, telecommunications, communication, drainage of urbanised areas and the relationship between them. - municipal engineering systems in land and plot development projects at the level of the implementation plan; relationships between water supply and wastewater systems. Applicable heating and power utility supply systems. - modern methods of execution and modernisation of municipal engineering systems in local conditions, as well as economic aspects of construction and operation of utility systems, basic planning of technical infrastructure systems on an urban scale. - types and forms of public transport in the city and modern urban ICT utilities.
ELECTIVE COURSES GROUP B2: DESIGN CONTEXT: TECHNIQUE AND TECHNOLOGY	**YEAR 4 sem. 8** Topics: The aim of the course is to provide knowledge in the field of technical and technological issues on any selected scale: architectural, urban or planning. The acquired knowledge may be useful during the development of a bachelor of engineering diploma project.

Teaching methods:

Lectures, presentations, seminars.

Methods of learning outcomes verification and evaluation:

Attainment of the required learning outcomes in the category of knowledge is verified by evaluation of oral or written exams, review projects, essays and presentations as well as by verifying project work of different categories and at different levels of difficulty. Oral exams are standardised and aimed at testing knowledge at a level higher than the mere knowledge of facts (level of understanding, ability to analyse, synthesise, solve problems). The forms of written exams are essays, reports, short structured questions or Multiple Choice Questions (MCQ), Multiple Response Questions (MRQ), Yes / No questions and matching tasks.

Written and oral exams (short, structured questions), test-like projects realised in class under supervision, a final test with a project work, a written (oral) test.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date	Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/23
at the Faculty of Architecture

A course group	**A.2 – DESIGN** **Rural design, interior design and specialist design resulting from local conditions**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The A2 course group – rural design, interior design and specialist design resulting from local conditions complement the A1 Design classes. The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group A2 – Design at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

A.W1. architectural design for the implementation of simple tasks, in particular: simple facilities taking into account the basic needs of users, single- and multi-family housing development, service facilities in residential ensembles, public utility facilities in an open landscape or in an urban environment;

A.W2. urban design in the scope of implementation of simple tasks, in particular: small building ensembles, local spatial development plans, taking into account local conditions and connections, as well as forecasting the processes of transformations in the settlement structure of cities and villages;

A.W3. provisions of local spatial development plans to the extent necessary for architectural design;

A.W4. principles of universal design, including the ideas of designing spaces and buildings accessible to all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, and ergonomic principles, including ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, especially for people with disabilities.

In respect of skills, the graduate is able to:

A.U1. design an architectural object by creating and transforming the space so as to give it new values - in accordance with a given program that takes into account the requirements and needs of all users;

A.U2. design a simple urban ensemble;

A.U3. prepare planning studies documentation concerning spatial development and interpret it to the extent necessary for designing on an urban and architectural scale;

A.U4. make a critical analysis of the conditions, including the valorisation of the land development and building conditions;

A.U5. think and act creatively, using the workshop skills necessary to maintain and expand the ability to implement artistic concepts in architectural and urban design;

A.U6. integrate information obtained from various sources, interpret and critically analyse it;

A.U7. communicate using various techniques and tools in a professional environment appropriate for architectural and urban design;

A.U8. prepare architectural and construction documentation in appropriate scales in relation to the conceptual architectural design;

A.U9. implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.

In respect of social competences, the graduate is prepared for:

A.S1. independent thinking to solve simple design problems;

A.S2. taking responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, country and Europe

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
MODUŁ A					
MODUŁ 4.A: RURAL DESIGN AND SPECIALIST DESIGN RURAL AREAS REVITALISATION	3	6	C	p/90	90
MODUŁ B					
MODUŁ 3.B: INTERIOR DESIGN	3	3	C	p/45	45

The course outline

Course	Course contents
MODULE A	
MODULE 4.A: RURAL DESIGN AND SPECIALIST DESIGN RURAL AREAS REVITALISATION	**YEAR 2, sem. 3** *Notes:* – *The course is integrated with the course: MODULE 4.B: Architectural and construction design: general construction 1 – sem. 3* – *The course is integrated with the course: MODULE 4.C: Integrated tools of architectural presentation 1 – sem. 3* Objectives:

	The aim of the course is to deepen the student's knowledge of the specificity of rural areas and the shaping of the residential function in the rural context. Detailed objectives: – the ability to carry out a planning and architectural analysis of a selected rural town in the regional context, based on documents and a local vision, with particular emphasis on the ability to find archetypal features of regional architecture and use them in the project; – the ability to analyse the local spatial development plan and to make adjustments to it resulting from the analysis and knowledge of the area; – developing the ability to comprehensively think and design on a variety of scales, from planning to architectural scale; – developing the ability to design homestead architecture and architecture with other functions occurring in rural areas in correlation with the provisions of the plan; – sensitising to spatial chaos and developing the ability to introduce spatial order; – the ability to argue the adopted design solutions based on the knowledge obtained in the field of contemporary trends in the development of rural space. Topics: The program of the course covers planning and architectural issues related to the shaping of contemporary rural development of various functions and scale. The subject of the design study is the concept of a farm development with a residential and production or service function based on the analysis of local and planning conditions, together with a concept of land development. The project covered by the project complements the existing rural tissue - it is related to a specific rural spatial, functional and cultural context - including the adjacent buildings. Scope of the study: – spatial and location conditions analyses, documented by photos (including archetype) and planning; – land development plan; – conceptual design of the selected compound (projections, sections, frontages); – technical detail in the form of a cross-section of the building wall from the foundation to the ridge; – essay and technical description. Study on an architectural and urban / planning scale, depending on the subject matter and complexity.
MODULE B	
MODULE 3.B: INTERIOR DESIGN	**YEAR 2, sem. 3** *Notes:* *The course integrated with the course: MODULE 3.A: Design in a low-density single-family development complex – sem. 3* Objectives: Developing the student's skills in the field of: – creating concepts of interior architecture and their design; – principles of architectural interior composition, functional relationships and ergonomics; – the possibility of using finishing materials and elements of interior design; – analysing the individual needs of the interior user; – improvement of the architect's professional workshop in the field of interior design; – ability to carry out the design process in terms of architectural interior and its presentation. Topics:

	Architectural design of a single interior in a building, taking into account spatial and functional conditions as well as the specificity of the scope of the project. The scope of the study: The scope of the study includes relevant drawings in the scope resulting from the specifics of the project subject, developed in scales appropriate for an unambiguous presentation of the project (taking into account both elements of architectural and material presentation, technical solutions as well as elements of portable and built-in equipment). The text part is an integral part of the study to the extent necessary to complete the information contained in the drawings.

Teaching methods:

Design exercises, sketches and conceptual and architectural drawings, computer drawing, essay, discussion, consultations, presentations and project defence, individual and group work.

Methods of learning outcomes verification and evaluation:

Attainment of the required learning outcomes is checked using various forms of student assessment, including: verbal and written reviews, test-like projects realised in class under supervision, examination (if the program assumes it) as part of the project defence; by assessing the completed project work, including course and review (transitional) work; assessment of the level of the student's creativity demonstrated during the design process and direct individual and team corrections carried out using the "master-student" method; by assessing the ability to present and defend the project.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).

E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/2023
at the Faculty of Architecture

A course group	**C – SUPPLEMENTARY COURSES** **Supplementary courses, in particular: foreign languages and - optional - philosophy and aesthetics, art history, sociology and environmental psychology**
Language of instruction	**A foreign language or Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group C – Supplementary courses at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

C.W1. styles in art and related creative traditions, as well as the process of implementing artistic works related to architecture;

C.W2. determinants of architectural and urban design resulting from the psychophysical abilities of a human being;

C.W3. vocabulary and grammatical structures of a foreign language which is the language of international communication in the area of creating and understanding written and oral statements on architecture, as well as the need to use a foreign language efficiently.

In respect of skills, the graduate is able to:

C.U1. obtain information from properly selected sources, also in a foreign language which is the language of international communication, in order to use it in the design process;

C.U2. use at least one foreign language, which is the language of international communication, at the B2 level of the European Common Framework of Reference for Languages, including specialist terminology in the field of architecture and urban planning necessary in design activities.

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
FOREIGN LANGUAGE	1 2 3 4	2 2 2 2	C C C E	pc/30 pc/30 pc/30 pc/30	30 30 30 30
FUNDAMENTALS OF AESTHETICS WITH ELEMENTS OF PHILOSOPHY	8	1	C	l/15	15
FUNDAMENTALS OF ART. HISTORY	8	1	C	l/15	15
FUNDAMENTALS OF ENVIRONMENTAL PSYCHOLOGY	8	1	C	l/15	15
FUNDAMENTALS OF SOCIOLOGY	8	1	C	l/15	15
ELECTIVE COURSES (NO GROUP)	8	2	C	s/20	40

The course outline:

Course	Course contents
FOREIGN LANGUAGE	**YEAR 1, sem. 1 and 2; YEAR 2, sem. 3 and 4** Objectives: Developing communication and language competences, the ability to participate in discussions on general and technical topics, reading and listening comprehension skills for understanding general and technical texts. Preparation for independent work with technical texts related to the student's specialty and for the use of a foreign language as a cognitive tool. Topics: Vocabulary: people and their immediate surroundings; culture and travelling; state and society; natural environment; Vocabulary related to science and technology: basic mathematical concepts and operations; basic concepts related to geometry; charts and graphs; Vocabulary: building materials and structures; historical styles in architecture; regional architecture; leading trends in contemporary architecture; sustainable design; housing and public utility construction; urban spaces; urban planning issues (e.g. sustainable urban development, revitalisation).
FUNDAMENTALS OF AESTHETICS WITH ELEMENTS OF PHILOSOPHY	**YEAR 4, sem. 8** Objectives: The main aim of the course is to familiarise the student with the basics of theoretical issues in the field of aesthetic research methods in the context of the phenomena of globalisation, "glocalisation", mass culture, post-industrial civilisation, and cultural and historical policies. Presentation of the categories of description and analysis belonging to the language of aesthetics and the aesthetic phenomena themselves as linking a practically oriented view of reality with generalisations concerning existential issues. Topics: The topics covered by the course include the basics of a number of issues in the field of widely understood aesthetics as a philosophy of art. They concern, among others, the role of architecture and its components as a source of metaphors; phenomenological aesthetics; pluralistic definitions and variability of meanings in aesthetics and art sciences; the aesthetic situation, postmodern pluralism in aesthetics and architecture, overcoming dualistic conceptual oppositions in the theory and practice of contemporary architecture; deconstruction and evolution of deconstruction (from poststructuralism to rediscovery of the realm of values), as well as the category of virtuality in relation to digital spaces and beyond.

FUNDAMENTALS OF ART. HISTORY	**YEAR 4, sem. 8** Objectives: Expanding theoretical issues in the field of the history of artistic activity and human civilisation development in the categories of architecture, sculpture, painting, music, applied art, and elements of literature. Extending the curriculum content of the subjects in the field of history of architecture and urban planning to include other areas of art. Topics: Artistic and technological achievements against the historical, cultural and social background, the prevailing ideological ideas and the political situation at the time. Known creative works and their authors in chronological order from prehistory through antiquity, the Middle Ages, and modern times to the beginning of the 21st century in the context of a given epoch and the style or currents and artistic tendencies in a given period. Integrity of architecture with other fields of art. Sources of inspiration in new architectural and artistic creations.
FUNDAMENTALS OF ENVIRONMENTAL PSYCHOLOGY	**YEAR 4, sem. 8** Objectives: Expanding theoretical issues in the field of environmental psychology research methods in the context of planning and designing specific types of environment. Topics: Presentation of the psychological foundations of architectural design, taking into account the recipient-user perspective resulting from the psychophysical abilities of a human being. The issues of perception and environmental knowledge (orientation in space, ecological perception, cognitive mapping, city image), the role of nature (aesthetics and landscape preferences), theories of place, environmental-behaviour relations, personal space and territoriality.
FUNDAMENTALS OF SOCIOLOGY	**YEAR 4, sem. 8** Objectives: Familiarising the student with the basics of theoretical issues in the field of city sociology and related topics. Topics: Spatial context as one of the essential elements of the social world. Geographic and physical structure of cities and social organisation of city dwellers. Dynamics of the urban landscape transformation processes and the resulting theoretical and empirical sociological findings. Ethnographic studies - the city as a laboratory of social life (the so-called Chicago school). Analysis of macroeconomic processes (deindustrialisation) and the corresponding urban processes (suburbanisation, gentrification). The role of the built environment in shaping social interactions, mechanisms of formal and informal social control.
ELECTIVE COURSES (NO GROUP)	**YEAR 4, sem. 8** Objectives: Expanding theoretical and practical issues in the field of conditions, the architect's workshop, trends in architectural and urban design and spatial planning, according to the orientation of the student's interests. Topics: The subject matter of the courses is a link between research interests and issues related to the implemented curriculum. It combines, in individual subjects, a wide spectrum of issues related to the conditioning of architectural and urban design, including planning, as well as contemporary engineering achievements, the influence of the humanities, social sciences and others. The independent subject matter of the courses allows for broadening the knowledge of the design workshop: tools supporting the design process and the role of the architect in this process, the principles of social participation, and the impact of design and planning activities on the natural, cultural and social environment. Overview and analysis of ideological, design and implementation examples.

Teaching methods:

In the foreign language course: practical exercises, discussion, consultations, presentations;

In the remaing courses: lecture, consultations, multimedia presentation, site vision and analysing issues in the context of selected architectural spaces, discussion, field trip (including environmental methods: research walk, photo-story, observations), plan analysis.

Methods of learning outcomes verification and evaluation:

In the foreign language course: individual project (reading assignment/presentation), mid-term test and end-of-term test, participation in classes, activity on the university's e-learning platform. Summative assessment: The sum of points awarded as part of forming assessments translated into a summative assessment according to the adopted scale. Examination at the end of the foreign language training cycle verifying the level of education at CEFRfL level B2 or C1.
In the remaining courses: final test, presentation of the student's own studies and seminars (elective courses).

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date	Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/2023
at the Faculty of Architecture

A course group	**D – INTERNSHIP (WORK PLACEMENT)**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group **D – Internship (Work placement)** at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

D.W1. basic methods, techniques, tools and materials used in solving engineering problems in the field of architectural design;

D.W2. maintenance issues of buildings and systems typical for architectural design;

D.W3. the principles of the functioning of an architectural studio in the context of work organization in the various phases of the design process;

D.W4. norms and standards in the field of architectural and urban design, useful for the performance of auxiliary works;

D.W5. organization methods and the course of the design and investment process, as well as the architect's role in this process.

In respect of skills, the graduate is able to:

D.U1. assess the suitability of typical methods and tools for solving a simple engineering task of a practical nature, characteristic of architectural design;

D.U2. design a simple object or its fragment, typical for architectural design, according to the given specification;

D.U3. prepare elements of architectural and construction documentation in appropriate scales, in cooperation with members of the design team.

In respect of social competences, the graduate is prepared for:

D.S1. adapting to new, changing circumstances occurring in the course of performing professional work of a creative nature;

D.S2. proper prioritization of activities serving the implementation of a specific task;

D.S3. taking up a job in the field of architectural issues;

D.S4. performing the profession of an architect which is a profession of public trust, including the correct identification and resolution of problems related to design activities.

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
DRAWING INTERNSHIP (PRACTICE)	2	2	C	s/30	30
URBAN INVENTORY TAKING INTERNSHIP (PRACTICE)	4	4	C	s/60	60
ARCHICTECTURAL INVENTORY TAKING INTERNSHIP (PRACTICE)	6	4	C	s/60	60
INTERNSHIP (WORK PLACEMENT)	7	30	C	in/450	900

The course outline:

Course	Course contents
DRAWING INTERNSHIP (PRACTICE)	**YEAR 1 SEM. 2** Topics: Improving the skills in the use of traditional drawing and painting techniques in the field of creating representations of historical and contemporary architecture, taking into account the landscape surroundings. The perception of cultural space and its graphic interpretation.
URBAN INVENTORY TAKING INTERNSHIP (PRACTICE)	**YEAR 2 SEM. 4** *Notes: Urban inventory taking internship (practice) may ultimately be thematically integrated with or prepare for the following courses: Urban design (first-cycle studies), Spatial and regional design (second-cycle studies)*.* Topics: The student acquires the ability to conduct an inventory of the city in terms of functionality, nature as well as composition and aesthetics. Thus, they gain the ability to record the method of land development and use of the area of a selected urban ensemble as well as information on visual features (composition, landscape), building structure and its maintenance. They become familiar with methods of valorizing land development elements in terms of their visual and aesthetic values, spatial features and functional importance. The student acquires the ability to prepare input materials for spatial planning and urban design. The detailed scope covers, among others: – Presentation of the drawing method of the given content in urban planning and/or planning scales; – Performing a field inventory, in the form of notes, in accordance with the required level of detail for a given scale, marking the identified functions and elements of land development, compositional and viewing features of the inventoried area, making a photographic inventory and sketches showing the nature of the space; – Valorization of the effects of the field inventory in individual thematic layers; – Graphical elaboration of a functional inventory of a selected part of

	the city in urban and/or planning scales (adequately to the size of the selected area) and developing a graphical representation of the assessment of viewing and compositional features.
ARCHITECTURAL INVENTORY TAKING INTERNSHIP (PRACTICE)	**YEAR 3 SEM. 6** *Notes: The course can be integrated with the theoretical course (History of architecture – first cycle) and the project (Conservation project – second cycle)*.* Topics: The student acquires knowledge about the objectives and methods of preparing measurements and inventory documentation, tools used for this, types and types of inventory drawings, and also about the content of a properly prepared inventory documentation. In addition, students are to acquire the skills to choose the optimal measurement tool and method, determine the scope of measurement work, perform measurements and field notes, develop measurement results, select the degree of detail in inventory drawings, make a technical description, photographic documentation and graphic design for inventory development, as well as competences in teamwork, responsibility for the work performed, respect for the work of other team members, respect for someone else's property, work organization, reliability, accuracy, precision and timeliness. The students also acquire competences in the field of compliance with legal regulations, applicable standards and principles of technical knowledge, as well as occupational health and safety regulations while taking measurements. The architectural inventory taking internship (practice) takes the form of fieldwork under the supervision of academic teachers. The topics of the classes include: a site visit, introduction with a discussion of the specifics of the inventoried object, preparation of sketches and notes in the field, also notes for technical descriptions, drawing notes on a scale, coordination of drawings in the team, preparation of a technical description based on field notes, development of photographic documentation, submission of documentation to be assessed.
INTERNSHIP (WORK PLACEMENT)	**YEAR 4 SEM. 7** **15 weeks, 450 hours** *Notes: For the purposes of the work placement, the student prepares a portfolio of works done during the studies before the placement. The work placement supervisor selects students for it based on the presented portfolios.* The work placement is aimed at familiarizing students with the design process under the supervision of a person with construction qualifications in the architectural specialization without restrictions and professional experience acquired in design and construction activities (a member of the Chamber of Architects of the Republic of Poland) based on the infrastructure of an office or an architectural studio. Design internship (practice) as an assistant architect/designer should include the following issues: 1. Getting to know the basic principles of the functioning of an architectural studio in terms of methods, work organization and the role of an architect, also in the field of the profession of public trust; 2. Participation in work on project management, including design phases, knowledge of the norms and standards necessary to perform auxiliary works supporting the architect-designer in the field of architectural and urban design, general principles of documentation evaluation and project development at various stages of its creation, issues of multi-industry and basic design development formal and legal requirements and procedures related to the construction documentation approval process, estimated completion time - approx. 30 hours / 1 week; 3. Participation in the work leading to the development of: – pre-design analysis and assessment of compliance of the planned construction project with the conditions resulting from

	the planned location and local legal regulations, estimated completion time - approx. 30 hours / 1 week; – conceptual documentation of at least a simple building (or a fragment thereof) with a land development concept, estimated time of completion - approx. 60 hours / 2 weeks; – architectural and construction documentation and / or technical documentation of at least a simple building along with a land development project, created in cooperation and in coordination with designers from other industries, estimated completion time - approx. 120 hours / 4 weeks. 4. Participation in the work leading to familiarization with the issues of architectural supervision carried out on the construction site, as well as the issues of acceptance and maintenance of buildings in proper technical condition, estimated time of completion - approx. 30 hours - 1 week.

**Due to the possibility for the student to change their educational path (obtaining the title of architect engineer at another university), the above-mentioned practices give the opportunity to expand knowledge in subjects in the second cycle but do not constitute their basis.*

Teaching methods:

Drawing internship (practice), urban and architectural design practice:

Field studies and visits, open air workshops, review sessions performed by the supervisor and consultations, group work, consultations, reviews, discussion, demonstration, field exercises, explanations.

Internship (work placement):
Individual and team work, work on conceptual, architectural, construction, technical and modelling drawings, work on a technical description, participation in a design discussion and multi-discipline arrangements, author's supervision on construction sites, also in consultations and monitoring of administrative procedures.

Methods of learning outcomes verification and evaluation:

Drawing internship (practice), urban and architectural design practice:
Assessment of the prepared graphic and painting works. Achieving the required learning outcomes in the category of knowledge, skills and social competences for inventory practices is verified by assessing the acquired knowledge in the field of inventory work methodology and the ability to apply it in practice, as well as by assessing the analytical, descriptive and graphic side of the work. The decisive factor is the assessment of the substantive correctness of the work and the method of graphic recording.

Internship (work placement):
Credit for the internship (work placement) is assigned based on the opinion issued by the work placement supervisor (authorized architect - member of the chamber of architects) confirming its time, participation of the student in the required scope and accepting a portfolio documenting the work performed during the apprenticeship.

Evaluation criteria:

Internship (work placement).
The workplacement is assigned credit by the Work Placement Committee appointed by the Dean of the CUT's Faculty of Architecture. The basis for the credit is:

- confirmation of the completion of the internship by the person taking care of the student carrying out the work placement;
- a portfolio made by the student documenting the work carried out during the internship (the format and scope of the portfolio are determined by the Work Placement Committee).

Drawing internship (practice), urban and architectural design practice:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2020/2021 at the Faculty of Architecture

A course group	**E – DIPLOMA PROJECT** **Diploma: preparation of the thesis and preparation for the diploma examination (theoretical and practical parts)**
Language of instruction	**Polish / English**

Study programme: **architecture** Study programme code: -

Specialising in: **no specialisation**

Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group:

The objective of completing this block is the student's acquisition of the detailed learning outcomes for the course group **E – Diploma project** at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Obtaining the detailed learning outcomes leads to obtaining the general learning outcomes at the First Cycle Study Programme in compliance with the *Regulation of the Minister of Science and Higher Education of the 18th July 2019 (item 1359) on the standard of education preparing for practising the architectural profession*.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

E.W1. issues related to architecture and urban planning in the field of solving design problems;
E.W2. issues related to architecture and urban planning useful for designing architectural objects and urban ensembles in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activity, integrating the knowledge acquired during studies;
E.W3. principles, solutions, structures, and building materials used in the performance of engineering tasks in the field of architectural and urban design;
E.W4. issues related to architecture and urban planning in the context of the multi-sector nature of architectural and urban design and the need to cooperate with other specialists.
E.W5. principles of professional presentation of architectural and urban concepts.

In respect of skills, the graduate is able to:

E.U1. analyze the existing conditions, evaluate the state of land development and existing infrastructure, and formulate design conclusions;

E.U2. design an architectural object or urban ensemble by creating and transforming the space so as to give it new values - in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during the studies;

E.U3. prepare an advanced graphic, written and oral presentation of their own design concepts in the field of architecture and town planning, meeting the requirements of a professional record appropriate for architectural and urban design.

In respect of social competences, the graduate is prepared to:

E.S1. effectively use imagination, intuition, creative attitude and independent thinking, and creative work to solve design problems;

E.S2. accept criticism of the solutions they present and respond to it in a clear and matter-of-fact manner;

E.S3. use information technology to integrate with other participants in processes and projects, including presenting projects and providing feedback in a commonly understood manner.

Form of classes, number of hours in one semester

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
MODULE A					
DIPLOMA DESIGN (PROJECT)	8	12	C	pc/5	360
DIPLOMA (PROJECT) SEMINAR	8	3	C	s/42	90
SPECIALIST CONSULTATIONS	8	1	C	pc/3	30

The course outline

The requirements for bachelor of engineering diplomas are governed by the relevant regulations in force at the Cracow University of Technology and related detailed regulations introduced at the Faculty of Architecture of the CUT.

Course	Course contents
DIPLOMA DESIGN (PROJECT)	**YEAR 4 sem. 8** INTEGRATED DESIGN *Notes: Diploma design (project) course is integrated with the problems and appropriate scope of the following courses: Diploma (project) seminar, Specialist consultations and Project process illustration. The remaining courses of this semester, including Fundamentals of aesthetics with elements of philosophy, Fundamentals of art. History, Fundamentals of environmental psychology, Fundamentals of sociology, as well as the elective courses group have a supportive meaning.* Topics: The subjects of the bachelor of engineering diploma theses vary depending on the choice of the diploma student and the specialization of the Supervisor. The topics of the bachelor of engineering diploma thesis may concern: designing architectural objects with the surroundings, urban design. The subject of the diploma thesis should be a new design issue, not a continuation of a previous course project. In the case of **designing architectural objects**, the bachelor of engineering diploma thesis in the design part should apply to an architectural object or a compound of such objects, with a usable area of not more than 2000 m^2; in justified cases, with the consent of the supervisor, this area may be increased by 50%. Architectural projects include, among others: single-family houses, multi-family buildings, service facilities and public utility facilities. They are assumed to have a moderate degree of functional complexity. The selection of the function and location of the facility, as well as the design proposal for contextual relations, is an integral part of the project. It is developed in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions, integrating the knowledge acquired during the studies. Projects in the area of cultural heritage prepare for full awareness and

	understanding of the historical, artistic and architectural values of historic buildings, both in the tangible and intangible spheres. They refer to such interventions as adapting to a new function and defining the limitations of the expansion of a facility resulting from the protection of its historical, architectural and artistic values. The bachelor of engineering diploma project is carried out from the pre-design phase, through the conceptual phase, up to the architectural and construction development phase, along with the definition of construction and material solutions. In the case of **urban planning projects**, the engineering diploma thesis in the design part: should apply to urban planning in an area of no more than 2 hectares; in justified cases, upon the supervisor's consent, the area may be increased by 50%. Such projects relate to both new spaces and the revitalization of the invested areas. The subject of the project on an urban scale is an area whose development assumes a consistent study from the urban analysis phase and design guidelines, through an urban concept on an appropriate scale, along with a proposal for a fragment of the area of conceptual solutions for public facilities and spaces, it is also necessary to develop technical fragments on a scale appropriate for the detail of the presented design issues. Project development: The diploma thesis consists of a drawing part and a written part. The drawing part of the diploma thesis should be made on boards in the format agreed with the supervisor, in an amount corresponding to not less than four and not more than six 100x70cm boards. It should be made in a way that ensures an unambiguous reading of the idea of the project and technical solutions. The written part should be about 20 pages of the normative text of the typescript (except for possible illustrations and the diploma project boards).
DIPLOMA (PROJECT) SEMINAR (planning the diploma thesis and preparing for the final exam)	**YEAR 4 sem. 8** *Notes: Diploma (project) seminar course is integrated with the problems and appropriate scope of the following courses: Diploma design (project), Specialist consultations and Project process illustration. The remaining courses of this semester, including Fundamentals of aesthetics with elements of philosophy, Fundamentals of art. History, Fundamentals of environmental psychology, Fundamentals of sociology, as well as the elective courses group have a supportive meaning.* Topics: Classes are of a seminar and consultation nature; they are carried out in seminar groups in the diploma unit (chair), under the supervision of the Supervisor. They support the preparation of the thesis in the field of practical (design) and theoretical aspects related to the topic of the thesis, as well as preparation for the diploma examination. As part of the course, students deepen their knowledge of the subject matter. Topics covered in class: – Developing the ability to analyze and synthesize the conditions required by the thematic scope of the thesis; – Formulating individual assessments, developing a conceptual and critical approach, drawing conclusions and guidelines related to the project topic; – Improving the ability to independently solve design problems with the knowledge of determinants, taking into account the principles and methods of design, technical requirements, legal and normative conditions; – Selection of appropriate technical, installation, construction and material solutions, building strategies and their economics; the ability to use the properties of materials, taking into account modern pro-ecological solutions; – Improving the skills of shaping architectural and urban forms and compositions (also in context), considering social, cultural, spatial, technical and communication conditions.

	– The use of research methods and analysis and compilation of the results of these studies in the form of an essay as the theoretical basis for the preparation of an engineering diploma thesis, which includes, in particular: case studies, development of a bibliography of the topic and conducting a comparative methodology. – Verification and support of the student's preparation in terms of knowledge, skills and competences needed to start a professional career, or to continue studies at the second cycle.
SPECIALIST CONSULTATIONS	**YEAR 4 sem. 8** *Notes: Specialist consultations course is integrated with the problems and appropriate scope of the following courses: Diploma design (project), Diploma (project) seminar and Project process illustration. The remaining courses of this semester, including Fundamentals of aesthetics with elements of philosophy, Fundamentals of art. History, Fundamentals of environmental psychology, Fundamentals of sociology, as well as the elective courses group have a supportive meaning.* The diploma student should obtain specialist consultations in the field directly related to the subject of the diploma dissertation. The detailed scope of consultations is specified by the supervisor. The supervisor consultant cannot be the supervisor or reviewer of the diploma thesis. The scope of consultations at the CUT's Faculty of Architecture may include, among others: – Design consultations – Communication consultation – Installation systems consultation The thematic scope of consultations may be extended by the Supervisor, depending on the topic and in agreement with the Dean of the CUT's Faculty of Architecture.

Teaching methods:

Seminars, multimedia presentations, consultations, work reviews, design exercises, test-like projects realized in class under supervision, individual and group work, discussions, defense of the project (diploma exam) before a board of examiners.

Methods of learning outcomes verification and evaluation:

Attainment of the required learning outcomes in the categories of knowledge, skills and social competences in the course group **E – Diploma project** is verified by evaluation of the knowledge acquired in seminars on scientific work methodology and the skill of its practical implementation in design, as well as by evaluation of the analytical and descriptive work and the design and graphic aspects of the diploma project, evaluation of the student's level of academic and design creativity, the value of the architectural solutions developed by the student and the skill of their public presentation and defence.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).

B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

The requirements for the evaluation of the bachelor of engineering diploma thesis, the rules for conducting the diploma examination and the arrangements for the final result of studies are regulated by the relevant provisions in force at the Crakow University of Technology and the related detailed provisions introduced at the Faculty of Architecture of the CUT.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT

Cracow University of Technology

A COURSE GROUP SYLLABUS

Applicable to students commencing their studies in the academic year 2022/23 at the Faculty of Architecture

A course group	**Physical education**
Language of instruction	**Polish / English**

Study programme: **architecture** **Study programme code**:

Specialising in: **no specialisation**
Programme profile: **general academic**

Level of the study programme: **first cycle**

Field: **engineering and technology, art**

Discipline(s): **leading discipline: architecture and urban sciences (91%); the remaining disciplines: civil engineering and transport (4%), fine arts and arts conservation (5%)**

Objectives of the courses included in the course group

Popularising physical culture and sports activity among students; introduction to systematic physical activity and shaping the constant need for exercise in their adult lifestyle; getting acquainted with various forms of physical activity: sport, recreation and tourism, rehabilitation; supporting the harmonious psychophysical development of students; teaching and improving essential technical and tactical elements of various sports; promoting a healthy lifestyle; control and assessment of the level of physical fitness of students based on the tests and examinations carried out; promoting sports competition at various levels of competition (in groups, at faculties, between faculties, Małopolska League of Academics, Polish Academic Championships); mobilising especially predisposed students to participate in the activities of specialised sports groups.

Learning outcomes for the course group:

In respect of knowledge, the graduate knows and understands:

EK W1 The student knows how to use facilities and devices safely, is familiar with devices related to practising various sports disciplines, knows how to prepare for a given type of sports activity, and knows their predispositions and psychophysical limits. The student understands the impact of physical effort on the body and its health and is familiar with the tests assessing physical fitness.

EK W2 The student knows the basic rules and technical and tactical elements of individual sports disciplines implemented within the curriculum.

EK W3 The student of a specialised sports group knows the detailed rules and requirements for the level of performance and technical-tactical skills of a given discipline.

EK W4 Students unable for health reasons to participate in curricular physical education classes know the content of health education carried out as part of theoretical classes by the Centre of Sports and Recreation of the CUT.

In respect of skills, the graduate is able to:

EK U1 The student is able to choose clothes and equipment for a given sports discipline, can assess the level of their physical fitness and technical skills, and can warm up. The student is able to choose the level of effort in order to increase their psychophysical fitness and control its level by performing basic tests and exams.

EK U2 The student is able to perform and use in practice the basic technical and tactical elements of a given discipline and to apply the rules in force in it.

EK U3 The student takes part in sports events at various levels of sports tournaments as part of university competitions, the Małopolska Academic League and the Polish Academic Championships.

In respect of social competences, the graduate is prepared to

EK S1 The student works in a team, participates in sports competitions, and applies the rules of fair play.

Form of classes, number of hours in one semester:

Course	Sem.	ECTS points	Form of credit (C/E)	Form of classes / number of hours	Hours of individual work
PHYSICAL EDUCATION	1 2	0 0	C C	pc/30 pc/30	- -

The course outline:

Course	Course contents
Physical education	**YEAR 1, SEM 1 AND 2** Discussing the health and safety rules during physical education classes, getting acquainted with the conditions for passing, the Centre for Sports and Recreation of the CUT regulations and the regulations for using a given sports facility. Learning essential technical and tactical elements in the field of selected sports, such as volleyball, basketball, handball, floorball, football, tennis, table tennis, athletics, gym, fitness, swimming, skating, alpine skiing, snowboarding, roller skating, sailing, recreation, health education. Regulations concerning individual technical and tactical elements, introducing elements of competition, games and activities. Test of general fitness and acquired technical skills.

Teaching methods:

Practical tools, multimedia presentations, group work, consultations

Methods of learning outcomes verification and evalutation:

Tests of general fitness and acquired technical skills, other tests of acquired skills.

Evaluation criteria:

The grading scale compliant with the European ECTS system:

ECTS grade in the A-F scale	Grade in the 5-2 scale	Requirements
A	**5.0**	**Very good:** Particularly high (perfect) degree of mastering the required knowledge or/and skills, with no discernible errors or with only small errors or shortcomings, indicating a very high level of proficiency in all the aspects of the taught material (transferred range of knowledge).
B	**4.5**	**Good +:** Beyond average (high) degree of mastering the required knowledge or/and skills, yet with errors or shortcomings of slight significance, indicating a high level of proficiency in the decisive majority of the aspects of the taught material (transferred range of knowledge).
C	**4.0**	**Good:** Generally good degree of mastering the required knowledge or/and skills, yet with a certain limited number of discernible errors and shortcomings, indicating a good proficiency in the majority of the aspects of the taught material (transferred range of

		knowledge).
D	**3.5**	**Satisfactory +:** Satisfactory degree of mastering the required knowledge or/and skills, yet with a number of discernible errors and shortcomings, indicating incomplete proficiency in the taught material (transferred range of knowledge).
E	**3.0**	**Satisfactory:** Minimum necessary degree of mastering the required knowledge or/and skills, with a large number of discernible errors and shortcomings, indicating the minimal proficiency in the taught material (transferred range of knowledge).
F	**2.0**	**Unsatisfactory:** The degree of mastering the required knowledge or/and skills unacceptable in all respects. Requires further work.

Approval of the course group syllabus:

place, date

Dean of the Faculty of Architecture, CUT