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I. INTRODUCTION:

Motto:

*Architecture is the art and skill of shaping spaces in compliance with human needs. Its duty is utility and beauty is its indispensable attribute.*

About the Faculty of Architecture

The Faculty of Architecture of the Cracow University of Technology is a public university with over 70 years of tradition in educating architects. The Faculty of Architecture in Krakow has enjoyed a high scientific position in the Polish scientific community for many years - with an "A" category. The Faculty of Architecture possesses full academic rights - to carry out doctoral and habilitation proceedings and procedures of granting academic titles - thanks to highly qualified research personnel, which includes 56 independent researchers, 19 of whom have the academic title of professor. The Faculty educates students as a part of two Engineer's and Master's courses - future architects and urban planners as a part of the Architecture course and landscape architects as a part of the Landscape Architecture course. As a part of the Architecture course, both foreign and Polish students can receive Master's level education in English. As a part of broadening its didactic offering, in the academic year 2016/2017 the Faculty of Architecture started educating specialists in the field of Spatial Management, an inter-faculty Master's course that features specialisations in a) Urban planning and transport - in a partnership with the Faculty of Civil Engineering and b) Spatial planning and municipal management - in a partnership with the Faculty of Environmental Engineering. The Faculty of Architecture of the Cracow University of Technology also offers PhD. studies - doctoral studies - within the scope of the architecture and urban planning scientific discipline. Implementing the principles of the philosophy of continuous education, the Faculty of Architecture also offers post-graduate studies, allowing their graduates to broaden their specialist knowledge and adjust their qualifications to the changing demands of the employment market. The Faculty of Architecture of the Cracow University of Technology participates in broad cooperation and hosts didactic and research exchanges with many domestic and foreign academic facilities, as well as territorial governments, the business sector and professional architectural associations from Poland and abroad. The employees, graduates and students of the Faculty of Architecture achieve professional success, proven by awards won in national and international competitions, as well as highly appreciated architectural works and urban and landscape complexes that are highly appreciated by both the professional community and the public, which is an effect of the knowledge gained at the Faculty of Architecture.

In the twenty first century, Krakow has become one of many European metropolises - one that was nominated for the honour of the Cultural Capital of Europe in the year 2000. Its unique cultural heritage, including the Old Town and its central historical urban complexes, as well as Wieliczka with its historical Salt Mine - that were placed on the UNESCO World Heritage Sites List (1978) - are the city's marketing advantages - ones that are conducive to its current development.

Krakow is a city of science, an academic centre with a tradition spanning several centuries. King Casimir the Great founded one of the oldest universities in Central Europe in the city already during the fourteenth century - the University of Krakow (*Studium generale*). The modern, dynamically developing university tradition aids in the transformation of the city in the direction of "an intelligent city and an innovative economy". Krakow is currently the second city in Poland (after Warsaw) in terms of student count - the number of students attending Krakow's universities has exceeded 210 thousand in recent years.

Krakow is a city of culture - mainly because of its unique cultural heritage of the material culture of past generations. Krakow's museums (44) along with numerous branches and documentation centres, amount to over 110 cultural facilities, including the Royal Castle on Wawel Hill, the National Museum (11 branches), the Historical Museum of the City of Krakow (14 branches), as well as museums of universities, churches and other ones - with rich collections and an attractive offering of permanent and temporary exhibitions.
Krakow belongs to a group of the five largest Polish cities, all of which have a population count exceeding half a million (761,873 residents, 327 km² surface area), it is also the second city in terms of population count after Warsaw (which has a population count of 1,735,442 residents, 517 km² surface area).

The Faculty of Architecture was founded as a part of the Polytechnic Faculties of the Mining Academy, headquartered on Wawel Hill already during the first days of freedom after the Second World War - the first entry examination took place at the Wawel Castle Courtyard in May 1945. The polytechnic faculties of the Mining Academy were transformed into the Cracow University of Technology by governmental decree in 1954.

The Faculty of Architecture has three buildings in Krakow: on the Campus at Warszawska Street 24 (since 1947), at Kanonicza Street 1 (since 1994) and at Podchorążych Street 1 in the former Royal Palace in Łobzów (since 2005).

I.1 GENERAL INFORMATION:

The Faculty of Architecture, Tadeusz Kosciuszko Cracow University of Technology is one of seven Faculties at this University which also educates students at the Faculties of:

- Civil Engineering
- Chemical Engineering and Technology
- Environmental Engineering
- Mechanical Engineering
- Electrical and Computer Engineering
- Technical Physics

Krakow’s Faculty of Architecture is one of the faculties which jointly created this University. The beginnings of the brand new university were facilitated by the Polytechnic Faculties of the Academy of Mining appointed by a governmental decree on November 19, 1945. In 1954, they were transformed into an independent unit – Cracow University of Technology. The Faculty of Architecture, playing an important role in the formation of the new university, began its activities, in an informal manner at first. In January 1945, the Organizational Committee for the Polytechnic University in Krakow was appointed under the leadership of Izydor Stella-Sawicki, Professor at the Academy of Mining. In February 1945, registration was proclaimed for architecture students; in May, the first semiofficial selective examination took place in the atmosphere of the architecture of Wawel’s courtyard.

In fact, the tradition of architectural university education in Krakow began much earlier. The city, playing the role of the cultural centre of the country for centuries, has always had very special spiritual atmosphere which – in combination with the unique values of the achievements of material culture – produced conditions conducive to the development of architectural thinking. It would be difficult to imagine a more appropriate place for this in Poland.

The first form of architectural education was teaching at building guilds. However, in the 17th century, architecture and mechanics were lectured as sciences at Cracow Academy (Jagiellonian University) by a professor of mathematics, Jan Brożek. In the 18th century, civil and military architecture was lectured at Cracow Academy. Starting from the 19th century, this discipline was taught at the Faculty of Philosophy, Cracow Academy. In the 19th century, lectures on construction and architecture, then also the history of architecture and design were delivered at the Faculty of Fine Arts. Architectural education also proceeded from 1934 at the nonacademic Technical Institute renamed as the Industrial and Artistic School later on.

In the interwar period, two schools with an architectural profile worked in Krakow: the Faculty of Architecture, Academy of Fine Arts, liquidated in 1927, and the abovementioned trade Industrial and Artistic School with its strong constructional and architectural curriculum. Both schools employed great creators from Krakow whose
structures can be found in catalogues of architectural works, including Professors Adolf Szyszko-Bohusz, Józef Gałęzowski, Sławomir Odrzywolski, Władysław Ekielski or Franciszek Mączyński.

The contemporary Faculty of Architecture, Cracow University of Technology has an excellent staff of academic teachers, including some outstanding creators known in the country as well as abroad. The academic community is formed by more than two thousand students learning in the system of full-time and part-time studies.

Krakow’s Faculty has extensive contacts all over the world. It maintains scientific cooperation and exchange of academic teachers and student groups with renowned foreign universities and architectural communities.

Professors from universities in Delft, Venice, Milan and Turin, London, Edinburgh, Oxford and Plymouth, Manchester, Madrid and Barcelona, Berlin, Brunshvik, Munster, Trier and Weimar, Paris, Vienna and Graz as well as the USA, Canada, Japan, South Korea and Australia deliver their lectures in the halls of this Faculty.

For the FA CUT, the years to come mean constant evolution and modernization of its teaching programme being adjusted to the latest trends, needs and conditions.

It will be also a period of modernizing the educational objects, first of all the building given to our Faculty by the University authorities – the famous “Officer Cadet School” whose foundations still include some relics of this once grand summer royal residence at Łobzów.

The CUT Faculty of Architecture is one out of three architectural universities which have full academic rights: it offers full- and part-time five-year Master’s studies and postgraduate studies. It has the licence to supervise Ph.D. and D.Sc. programmes.

For years, the CUT Faculty of Architecture has maintained rewarding scientific and educational cooperation with a number of architectural universities and centres across the world. Young people from the USA, Spain, Italy, Great Britain, Germany, Finland, Canada and some developing countries study at the Faculty.

Within the entire period of the existence of the CUT Faculty of Architecture, more than 5,400 people completed their studies receiving the diploma of a Master of Science Architect. Its educational potential developed significantly. More than 300 Ph.D. dissertations and more than 100 D.Sc. dissertations were defended at the Faculty of Architecture.

At present, nearly 2,000 people learn at five-year Master’s studies. Around one hundred attend postgraduate studies. The teaching staff includes 212 employees – 36 independent science workers (including 8 full professors, 6 titular professors, 16 associate professors and 6 doctors of science), 94 teachers, 65 assistants and 17 lecturers.

The lecturers at the CUT Faculty of Architecture include professors from foreign universities as well as some outstanding creators.

Since 2000, the Faculty of Architecture had had accreditation from the Royal Institute of British Architects.

In May 2003, Krakow’s Faculty of Architecture also received accreditation for five years from the Polish Accreditation Committee for Technical Universities. In the field of education, the Faculty of Architecture updates its teaching programme so as to adjust it to the needs of the labour market as well as the formal and material requirements of the European Union remembering to maintain the distinctness and specificity of the Krakow School of Architecture. For this purpose, a credit point system – responding to the standards of the European Credit Transfer System (ECTS) – has been introduced.
The objectives of this credit point system are as follows:

– to make it possible to recognize studying periods between universities,
– to make foreign cooperation and exchange easier,
– to create a flexible studying system,
– to simplify student registration.

Owing to extensive foreign contacts and an attractive teaching programme, the International Programme of educating foreign students in English develops dynamically within educational classes at the Faculty of Architecture. Students from American universities and those from Western Europe take part in it. Polish students participate in this programme as well.

Postgraduate studies are realized, too.

For years, the Faculty of Architecture has been cooperating with a number of foreign universities, including the Faculties of Architecture at the following Universities and Polytechnics: in Knoxville, Tennessee, USA; Munster and Cottbus, Germany; Delft, Netherlands; Plymouth, London, Glasgow and Manchester, Great Britain; Madrid and Barcelona, Spain; Turin, Rome, Venice and Florence, Italy; Paris and Nancy, France; Alexandria, Budapest, Lviv and many others. Out of more than 2,000 students educated at the FA CUT every year, over eighty go to semester studies at numerous universities in Western Europe within the SOCRATES programme during the academic year.

The Faculty has a top-class scientific staff – almost 50 independent science employees locate it at the first position among the Faculties of Architecture in Poland. The Professors of the Faculty of Architecture are outstanding specialists in the domain of architecture and urban design, spatial planning, monument restoration and landscape architecture – both in the field of theory and practice, they boast of serious achievements within implementation as well as practical professional experience.

Apart from the traditional direction of teaching architects realized since 1945 and preparing the students for the profession of an architect and an urbanist at the curriculum Architecture and Urban Design, the CUT Faculty of Architecture has been educating students within the newly formed curriculum Landscape Architecture since the academic year 2000/2001.

I.2 MISSION AND STRATEGIC GOALS

The Faculty of Architecture, Cracow University of Technology is an academic unit – a public tertiary-level school educating future architects and urbanists as well as landscape architects at two curricula. The Mission and the Strategy of the Development of Cracow University of Technology are defined in two documents adopted in the CUT Senate’s resolutions – Resolution no. 53/p/11/2008 on adopting the CUT Mission and Resolution no. 43/o/05/2011 on adopting the Strategy of the Development of Cracow University of Technology.

The Mission of the Faculty matches the mission of the University, therefore the Faculty of Architecture realizes a wide range of activities guaranteeing its competitiveness on the domestic and international higher education market through the high quality of education based upon the latest knowledge resulting from scientific research, the professional creative achievements of its scientific staff and foreign cooperation:

• it educates highly qualified engineering staffs in the field of architecture, urban design and landscape architecture being able to face the challenges of national and worldwide economy;
• it educates top-class specialists – architects, urban designers and landscape architects ready to face the challenges of the current and future labour market – at Master’s, postgraduate and Ph.D. studies;
• it keeps extending its educational offer facing the challenges of the labour market and the philosophy of permanent education;
• it guarantees good relations with the contemporary world through the internationalization of the educational process and the zone of scientific research;
• it educates scientific staffs organizationally and materially supporting the development of their research passion as well as participation in domestic and worldwide scientific exchange;
• it serves economy and the entire society through the formation of permanent intellectual bases for securing order and the sustainable development of space in the intensifying global urbanization process;
• it establishes cooperation with local self-governments and business entities offering solutions to problems characteristic of broadly understood architecture, urban design and landscape architecture as well as the implementation of scientific research results for economic practice.

Architecture is an art and an ability to shape spaces for human needs. Studies at this curriculum give the graduates necessary knowledge and skills in the field of design in relation to contemporary technical requirements allowing for the users’ functional and health-related needs as well as ecological balance. They also guarantee the knowledge of artistic, cultural, intellectual, historical, social, economic and environmental circumstances. The students’ acquired knowledge is based upon the latest scientific research concerning recent achievements and realizations in the discipline of architecture and urban design. An architect’s activity comprises a wide scope: from furniture and interior design, through architectural objects and complexes, to enormous urban and landscape forms.

Studies at this curriculum also prepare the graduates for work in spatial planning in local and regional scales as well as for the protection of the monuments of architecture and urbanism plus restoration works. A special message in the educational process is to stimulate the students’ sensitivity to the need for spatial order and the formation of a sustainable living environment.

The workplaces for the graduates of the Faculty of Architecture can be designing and planning studios, consulting, developing and contracting firms, the services of the state building and restoring supervision, the offices of state and self-governmental administration, the managements of national and landscape parks, scientific and research institutes as well as secondary- and tertiary-level education. Education of university character, broad technical and humanistic knowledge related to the programme of educating the graduates of architecture (architecture and urban design) and landscape architecture as well as their technical and artistic skills acquired in the course of studies make it easier to find their way on the labour market in Poland and abroad, not exclusively within their trade.

Education at the curriculum Landscape Architecture includes the protection of the natural environment and the historical heritage as well as the formation of new values in the landscape that surrounds us. The wide range of professional activity – assignments from the scale of the elements of the surrounding landscape to the scale of regional planning – requires the graduates of this curriculum to have the knowledge of a humanist, a technician and a naturalist, to be prepared for independent work as well as be able to cooperate in large interdisciplinary teams.
A STRONG POINT IN THE REALIZATION OF THE ADOPTED MISSION IS THE HISTORY AND ACADEMIC TRADITION OF THE FACULTY OF ARCHITECTURE, CRACOW UNIVERSITY OF TECHNOLOGY:

The tradition of architectural university education in Krakow is long. The original form of architectural education was teaching at building guilds. Starting from the 17th century, architecture and mechanics were lectured at Cracow Academy (Jagiellonian University); from the 19th century, architecture was lectured at the Faculty of Philosophy and then the Faculty of Fine Arts at this University.

The contemporary Faculty of Architecture in Krakow came into being within the Polytechnic Faculties of the Academy of Mining and Metallurgy with its seat at Wawel in the first days of freedom after the Second World War – the first examination was held at Wawel’s Courtyard in May 1945.

The first Dean and founder of the Faculty of Architecture was Professor Adolf Szyszko-Bohusz – an outstanding architect, a restorer, the renovator of the Wawel Royal Castle. In 1954, the Polytechnic Faculties of the Academy of Mining and Metallurgy were transformed into Cracow University of Technology with its seat at the Campus in Warszawska St. by a governmental decree.

For nearly seventy years, numerous outstanding scientists and creators – professors at the Faculty of Architecture in Krakow – have been forming the intellectual bases for the development of the discipline of knowledge architecture and urban design as well as the spatial growth of the country and the achievements of its material culture through scientific, educational and creative activities, including some outstanding works of architecture and urbanism as well as landscape layouts.

The Faculty of Architecture, Cracow University of Technology is a unit with full academic rights: it has the licence to supervise Ph.D. and D.Sc. programmes as well as university degree procedures. The Faculty offers 1st Degree Engineer’s Studies; 2nd Degree Master’s Studies; 3rd Degree Ph.D. Studies; and Postgraduate Studies.

The curriculum Architecture has been realized since the academic year 2012/2013 in accordance with the material programme identical for the curriculum Architecture and Urban Design having accreditations from the Polish Accreditation Committee, the Accreditation Committee for Technical Universities, the Accreditation Committee at the Royal Institute of British Architects (RIBA – a prestigious, renowned organization with acknowledged international status, accrediting architectural universities). The FA CUT has had this accreditation since 1999 as the only Polish school in recognition of the high quality of education as well as EU evaluation for the curriculum offered in recruitments till the academic year 2011/2012 under the name of Architecture and Urban Design.

The curriculum Architecture and Urban Design offered at the Faculty of Architecture, Cracow University of Technology was acknowledged as Poland’s best curriculum in 2012. As the only one from among the curricula Architecture and Urban Design, it was included on the list of the Ministry of Science and Higher Education including 25 best curricula in Poland.

In 2012, Appendix to Directive V was published by the European Commission in the Official Register of the European Union. It includes diplomas in the field of architecture at Cracow University of Technology which means that the graduates of the CUT Faculty of Architecture received acknowledged qualifications on the territory of the European Union.

On January 9, 2010, the curriculum Landscape Architecture offered at the Faculty of Architecture, Cracow University of Technology, as the only one in Poland, received five-year accreditation from the European
Federation for Landscape Architecture (EFLA) for the following curricula: uniform Master’s studies, 1st degree Engineer’s studies and 2nd degree Master’s studies.

THE BASIC ASSUMPTIONS AND OBJECTIVES OF THE STRATEGY OF THE DEVELOPMENT OF THE FACULTY OF ARCHITECTURE, CRACOW UNIVERSITY OF TECHNOLOGY:

1. – The development of the scientific staff – supporting academic and professional careers, constant extension of the staff’s scientific, professional and educational competence.

• The method of implementing the strategic plan of the development of the staff:

• financial support for the scientific staff and 3rd degree Ph.D. students from ministerial subsidies for the statutory activity of the units of the Faculty of Architecture and from a target subsidy for the development of the young scientific staff as well as within the Project “The 21st Century University of Technology – Developmental programme for Cracow University of Technology – Highest-quality education for future Polish engineers” co-financed from the EU Social Fund – Operational Programme Human Capital, Assignment 5 (Project realized from 2010 till 2015) – extending the possibilities of realizing individual research programmes, research trips, participation in domestic and foreign scientific conferences; support in the form of scientific scholarships as well as scientific Ph.D. and D.Sc. leaves (D.Sc. leaves till September 30, 2013);

• domestic and international scientific conferences organized by the Faculty’s organizational units (5-8 conferences yearly) comprising broad problems in the field of architecture, the history of architecture and monument restoration, urbanism and spatial planning, technical problems in architecture as well as landscape architecture and horticulture, including cyclical conferences organized by: A-1 (Institute of History of Architecture and Monument Preservation), A-2 (Institute of Architectural Design), A-3 (Institute of Urban Design), A-4 (Institute of Building Design), A-5 (Institute of Town and Regional Planning), A-6 (A-8 till September 30, 2013; Institute of Landscape Architecture) – creating a broad platform for exchanging opinions as well as popularizing the results of the latest scientific research for Ph.D. students, young scientists and independent science workers;

• facilitated publication of scientific research results in monographs and books issued by Cracow University of Technology Press as well as renowned science periodicals, such as Czasopismo Techniczne / Technical Transactions, Cracow University of Technology Press, Series Architecture; Środowisko Mieszkaniowe / Housing Environment, Chair of Housing Environment, Faculty of Architecture, Cracow University of Technology; or Wiadomości Konserwatorskie / Restorer’s News etc.;

• organizational support for scientific research – forming the Independent Financial Department at the FA CUT which will guarantee competent support for the proceedings of scientific research, especially domestic and EU research grants, including administrative support for gaining external means for scientific research;

2. – The development of the educational offer – 1st and 2nd degree studies at two curricula Architecture (Architecture and Urban Design) and Landscape Architecture (increased recruitment for 2nd degree studies since 2013/14); 3rd degree Ph.D. studies at the curriculum Architecture (increased recruitment since 2012/13 for more complete realization of the strategic objective of the FA CUT, the University, Poland and the European Union – “knowledge society” – extending the possibility of acquiring the university degree of a doctor of science in the scientific discipline of architecture and urban design);

• realization of a broad offer of international cooperation – more than 100 students take up partial studies abroad yearly (within the programmes LLP ERASMUS, Tennessee, and within the international contracts of the
University and the Faculty of Architecture); 30-50 foreign students take up partial studies at the FA CUT yearly; numerous international student workshops as well as foreign research trips are organized in Poland and abroad;

- internationalization of the educational process – within the Project “The 21st Century University of Technology – Developmental programme for Cracow University of Technology – Highest-quality education for future Polish engineers” co-financed from the EU Social Fund – Operational Programme Human Capital, Assignment 5, the “Visiting Professor” scheme is realized. It guarantees lectures, consultations and participation in workshops at the FA CUT for outstanding specialists and scientists from foreign universities; there are plans to continue foreign cooperation with previous partners and to intensify activities in the field of scientific and educational cooperation, including the organization of international student workshops as an important component of the educational programme in the procedures of guaranteeing the quality of education;

- there are plans to activate 2nd degree studies in English at Master’s level at the curriculum Architecture; these studies were launched in the summer semester 2012/2013 within the Dean’s group piloting the teaching programme in English for the academic year 2014/2015 applied for the educational offer;

- there are plans to activate 3rd degree studies in English within the educational offer for the academic year 2014/2015; piloting lectures including a part of the currently realized programme of 3rd degree studies were launched;

- the offer of postgraduate studies is extended constantly within the philosophy of permanent education and as a reaction to the needs of the labour market in the profession of an architect, an urban designer and a landscape architect – the FA CUT realizes postgraduate studies: Landscape planning and spatial economy; Protection and formation of cultural landscape; Restoration, formation of architecture and arrangement of the interiors of sacral objects; Spatial planning; Postgraduate studies in the restoration of the monuments of architecture and urbanism; new postgraduate studies since 2012: Sustainable architecture and construction; Postgraduate studies in the field of analyses and research on historical architecture; more postgraduate studies are planned within this offer;

- the offer of courses at the FA CUT is extended – Preparatory course in freehand drawing for candidates for architectural studies is realized; The Open Department of Photography was revived in 2012;

3. – The development of the material base – for realizing statutory assignments in the field of education and scientific research:

- adaptation and extension of Building no. 11-1 at 1 Podchorążych St. – its strategic objective is to use the entire building for the needs of the Faculty of Architecture; there are plans to adapt the ground floor of the east wing for Institute A4 (investment in the financial plan 2013), move Institute A4 to the modernized rooms, hand over the rooms after Institute A4 in Building no. 25 at 24 Warszawska St. to the Faculty of Physics, Mathematics and Computer Science, more refurbishments and adaptations of rooms regained in Building no. 11-1 at 1 Podchorążych St. from the Faculty of Physics, Mathematics and Computer Science and move the FA CUT units here from Building no. 25 at 24 Warszawska St.; (2013-2016); modernization and adaptation of the cellars in Building no. 11-1 at 1 Podchorążych St. to a café for the employees and the students (2013 – the unit’s own means + private investor);

- extension of the CUT grounds at 1 Podchorążych St. on the north and east side of the existing building through the purchase of some areas from the Office of the City of Krakow (2013); construction of a new building at 1 Podchorążych St. on the north side (investment in the financial plan since 2013);
• necessary current modernizing work is done at the same time in Building no. 25 at 24 Warszawska St. (a lift, evacuation routes);

• planned modernization of the building at 1 Kanonicza St. (owned by the FA CUT) for educational and research purposes, including the needs of the Centre for Restoration Research and Studies (investment in the financial plan since 2012);

4. – The development of scientific research:

• taking intensive actions which aim at including broadly understood problems in the field of architecture, urbanism, monument preservation, spatial planning, landscape architecture and horticulture on the list of the panels of the National Centre for Science in order to enable all the research workers of the Faculty of Architecture, Cracow University of Technology as well as other architectural universities in Poland to apply for research grants in the field of basic research guaranteeing financial bases for the development of the discipline of knowledge “architecture and urban design”;

• guaranteeing organizational support for intensifying the research workers’ applications for domestic and foreign research grants;

• guaranteeing organizational support for extending cooperation with business entities and local self-governments;

• developing the lodging base and necessary equipment for research activities.

5. – The strategy of guaranteeing the quality of education:

As an organizational unit within Cracow University of Technology, the Faculty of Architecture is included in the system of the central organization of the strategy of the quality of education through the Faculty representatives’ participation in appropriate collegial bodies at the University as well as the realization of the decisions of the University authorities, the CUT Senate and the Senate Commission for the Quality of Education. The Faculty Commission for the Quality of Education and the Dean’s Plenipotentiary for the Quality of Education were appointed by a resolution from the First Faculty Council in the term 2012-2016.

Appropriately to the nearly seventy-year academic tradition and long years of the strategy of the development of its scientific staff, the Faculty of Architecture, Cracow University of Technology has a strong scientific and educational personnel consisting of 48 independent science workers, including 22 professors with a university title. The broad profile of the scientific specialities of the independent employees (with the university title of a professor and the university degree of a doctor of science in the field of technical sciences, also respectively in the field of arts) and the staff members with the university degree of a doctor makes it possible to realize the programme of 1st, 2nd and 3rd degree studies as well as postgraduate studies of university character.

For years, the Faculty of Architecture, Cracow University of Technology has been building its own system of guaranteeing high quality of education which includes:

• a system of developing and promoting its scientific staff on the basis of statutory procedures with the participation of an independent personnel with significant scientific achievements and professional competence;

• the programmatic contents of education as well as the programmes and plans of studies formalized since 1994 in the form of syllabuses within the teaching programmes and currently in a form adjusted to subject cards and defined learning outcomes;
• the cyclical procedure of Faculty accreditation, i.e. assessment and acknowledgement of the realized programmes of studies and the learning outcomes by obligatory and additional – community and international – Accreditation Commissions: 1. Royal Institute of British Architects (RIBA) since 1995; (RIBA visited the FA CUT in the years: 1995; 2000; 2005; 2010; 2012), the latest accreditation from 2012 till 2017; 2. Accreditation Commission for Technical Universities since 2002; recently from 2010 till 2015; 3. State Accreditation Commission since 2006; recently 2010-2015; 4. Accreditation for the curriculum Landscape Architecture 2010-2015 from the European Federation for Landscape Architecture (EFLA) for the following kinds of education: uniform Master’s studies, 1st degree Engineer's studies and 2nd degree Master’s studies;

• external examiners (practical cooperation with the employers and the trade self-government – Małopolska District Architects’ Chamber), the Society of the Architects of the Republic of Poland (SARP) and the Society of Polish Urbanists involved in the procedures of the defence of course and diploma designs (since 1995); the so-called “external examiners” participating in the educational process (defence of course designs) and the certifying process at the 1st and 2nd degrees – the Chamber’s representatives of this profession – can monitor the level of education, express their opinions, both in discussions and final protocols. (On one hand, this system enables the students to acquaint themselves with the opinions of architects who practise this profession on the labour market; on the other hand, it enables the research workers to refine the teaching process. At present, this cooperation is being tightened. After years of experiences, common rules of the functioning of “external examiners” and their role in the educational process are being elaborated on. The fact that more than 40% of the teaching staff are professionally active architects having the licence to practice this profession and certificates from appropriate trade self-governments is also important for the proper direction of the educational process.);

• internationalization of the educational process – broad educational cooperation and exchange of the students and the research workers; participation in and co-organization of international educational student workshops and scientific conferences; frequent invitations for visiting professors from foreign partner universities; expanding participation of students from foreign universities in partial studies at the FA CUT; participation in double diploma procedures with foreign partner universities.

Jacek Gyurkovich, Prof. D.Sc. Ph.D. Arch.
DEAN OF THE FACULTY OF ARCHITECTURE
CRACOW UNIVERSITY OF TECHNOLOGY
I.3 THE FACULTY ADMINISTRATION

DEAN OF THE FACULTY


ASSOCIATE DEAN OF THE FACULTY

Prof. Grażyna Schneider-Skalska, D.Sc. Ph.D. Arch.

Rafał Zawisza, Ph.D. Arch.
I.4 THE COUNCIL OF THE FACULTY OF ARCHITECTURE

The Council of the Faculty of Architecture of Cracow University of Technology autonomously establishes and oversees the directions of teaching and research activity of the Faculty and its organizational units (where these rights are not reserved to the Senate of the Cracow University of Technology by the Higher Education Act and the Statutes of The Cracow University of Technology). The competence of the Council of the Faculty is defined by article 68 of the Higher Education Act furthermore includes:

1) determining the general directions of the entity's operations;

2) passing study plans and curricula, after consultation with the appropriate student body, in accordance with the guidelines established by the public university senate or the collegiate body of the non-public university;

3) passing plans and programs of doctoral studies, after consultation with the competent authority of the doctoral student body, in accordance with the guidelines established by the public university senate or the collegiate body of the non-public university;

4) passing plans and programs of postgraduate studies and training courses, in accordance with guidelines established by the senate of a public university or collegial body of a non-public university.

The Council of the Faculty consists of the following: The Dean as chairperson, vice-deans, all teaching staff employed in positions of full professor or professor of the Cracow University of Technology and all teaching staff with the post-doctoral "habilitation" academic qualification, elected representatives of the remaining teaching staff employed within the Faculty (20-25%) of the Council of the Faculty), representatives of the non-teaching staff (5-10% of the Council of the Faculty). One representative of each of the trade unions functioning within the Faculty participates in the sessions of the Council of the Faculty, with a consultative vote. Only those members of the Council of the Faculty who hold senior academic posts, that is teaching staff employed in positions of full professor or professor of the Cracow University of Technology and all teaching staff with the post-doctoral "habilitation" academic qualification may take part in votes on academic degrees and titles.

The Council of the Faculty can summon permanent or temporary commissions of the Faculty. The chairpersons and members of theses commissions are nominated by the Council of the Faculty in accordance with the Deans recommendation.

MEMBERS OF THE FACULTY COUNCIL:

Council Chairman: Dean of the Faculty of Architecture, Prof. Jacek Gyurkovich, D.Sc. Ph.D. Arch.

Council Members:

Vice-Deans:
Prof. Grażyna Schneider-Skalska, D.Sc. Ph.D. Arch.
Katarzyna Lakomy, D.Sc. Ph.D.Arch.
Rafał Zawisza, Ph.D. Arch.

The group of professors:
Prof. Aleksander Böhm D.Sc. Ph.D. Arch.
Prof. Waclaw Celadyn D.Sc. Ph.D. Arch.
Prof. Stefan Dousa art. rzeźb.
Prof. Ewa Gołogórská-Kucia art. mal.
Prof. Andrzej Kadłuczka D.Sc. Ph.D. Arch.
Prof. Marek Kowicki D.Sc. Ph.D. Arch.
Prof. Krzysztof Lenartowicz D.Sc. Ph.D. Arch.
Prof. Anna Mitkowska D.Sc. Ph.D. Arch.
Prof. Krystyna Pawłowska D.Sc. Ph.D. Arch.
Prof. Janusz Rębielak D.Sc. Ph.D. Arch.
Prof. Wacław Seruga D.Sc. Ph.D. Arch.
Prof. Elżbieta Węclawowicz-Bilska D.Sc. Ph.D. Arch.
Prof. Ewa Węclawowicz-Gyurkovich D.Sc. Ph.D. Arch.
Prof. Maciej Złodzioł D.Sc. Ph.D. Arch.
Prof. Zbigniew Zuziak D.Sc. Ph.D. Arch.
Prof. Maria Jolanta Żychowska D.Sc. Ph.D. Arch.

The group of members holding the title of doktor habilitowany (equiv. to DSc.) holding the position of profesor nadzwyczajny PK (equiv. to Associate Professor):

Andrzej Białkiewicz, D.Sc. Ph.D. Arch. Prof. PK
Kazimierz Butelski, D.Sc. Ph.D. Arch. Prof. PK
Piotr Burak-Gajewski; D.Sc. Ph.D. Arch. Prof. PK
Anna Franta, D.Sc. Ph.D. Arch. Prof. PK
Andrzej Gaczoł, D.Sc. Ph.D. Arch. Prof. PK
Magdalena Jagiello-Kowalczyk, D.Sc. Ph.D. Arch. Prof. PK
Anna Kantarek, D.Sc. Ph.D. Arch. Prof. PK
Justyna Kobylarczyk D.Sc. Ph.D. Arch., Prof. PK
Sabina Kuc, D.Sc. Ph.D. Arch. Prof. PK
Jan Kurek, D.Sc. Ph.D. Arch.Prof. PK
Dominika Kuśnierz-Krupa, D.Sc. Ph.D. Arch. Prof. PK
Zbigniew Myczkowski, D.Sc. Ph.D. Arch. Prof. PK
Krystyna Romanik, D.Sc. Ph.D. Prof. PK
Joanna Stożek, D.Sc. Ph.D. szt. Arch., Prof. PK
Agata Zachariasz, D.Sc. Ph.D. Arch. Prof. PK
Iwona Zuziak, D.Sc. Ph.D. szt. Arch. Prof. PK

The group of members holding the title of doktor habilitowany (equiv. to DSc.):
Rafał Blazy D.Sc. Ph.D. Arch.
Krzysztof Bojanowski D.Sc. Ph.D. Arch.
Marcin Charciarek D.Sc. Ph.D. Arch.
Wojciech Chmielewski D.Sc. Ph.D. Arch.
Małgorzata Drożdż-Szczybura D.Sc. Ph.D. Arch.
Ryszard Grazda D.Sc. Ph.D szt. art. grafik
Mateusz Gyurkovich D.Sc. Ph.D. Arch.
Tomasz Kapecki D.Sc. Ph.D. Arch.
Tomasz Kozłowski D.Sc. Ph.D. Arch.
Teresa Kusionowicz D.Sc. Ph.D. Arch.
Andrzej Lorek D.Sc. Ph.D. Arch.
Beata Makowska D.Sc. Ph.D. Arch.
Hubert Melges D.Sc. Ph.D. Arch.
Małgorzata Mizia D.Sc. Ph.D. Arch.
Maciej Motak D.Sc. Ph.D. Arch.
Krystyna Paprzyca D.Sc. Ph.D. Arch.
Bogusław Podhalański D.Sc. Ph.D. Arch.
Klaudia Stala D.Sc. Ph.D.
Jadwiga Środulska-Wielgus D.Sc. Ph.D. Arch.

Representatives of other academic teachers:
Janusz Barań Ph.D. Arch.
Przemysław Bigaj Ph.D. Arch.
Piotr Celewicz Ph.D. Arch.
Patrycja Haupt Ph.D. Arch.
Katarzyna Hodor Ph.D. Arch.
Bartłomiej Homiński Ph.D. Arch.
Hanna Hrehorowicz-Gaber Ph.D. Arch.
Jarosław Huebner Ph.D. Arch.
Wojciech Korbel Ph.D. Arch.
Piotr Langer Ph.D. Arch.
Beata Malinowska-Petelenz Ph.D. Arch.
Farid Rudolf Nassery Ph.D. Arch.
Kinga Racoń-Leja Ph.D. Arch.
Bogdan Siedlecki Ph.D. Arch.
Filip Suchoń M.Sc. Arch.
Justyna Tarajko-Kowalska Ph.D. Arch.
Mariusz Twardowski Ph.D. Arch.
Katarzyna Zawada-Pegiel Ph.D. Arch.
Miłosz Zieliński Ph.D. Arch.
Paweł Żuk Ph.D. Arch.

Representatives of administrative and technical employees:
Edyta Dziurzyńska
Krzysztof Jasiński M.Sc. Arch.
Elżbieta Ostachowicz M.Sc.
Małgorzata Rekuć M.Sc.

Representatives of students and PhD. students
Natalia Bałda
I.5 FACULTY COMMISSIONS

PERMANENT COMMISSIONS:
1. Faculty Commission in charge of doctoral proceedings in the field of the history of architecture and urban planning, as well as architectural conservation (K-1)
   Chairman: Prof. D.Sc. Ph.D. Arch. Andrzej Kadłuczka
   Members of the Commission:
   1. D.Sc. Ph.D. Arch. Andrzej Białkiewicz, Prof. PK
   2. D.Sc. Ph.D. Arch. Andrzej Gaczoł, Prof. PK
   4. D.Sc. Ph.D. Arch. Dominika Kuśnierz-Krupa, Prof. PK
   5. Prof. D.Sc. Ph.D. Arch. Anna Mitkowska
   7. Dr hab. Klaudia Stala
   10. Prof. D.Sc. Ph.D. Arch. Maria Jolanta Żychowska

2. Faculty Commission in charge of doctoral proceedings in the field of architecture (K-2)
   Chairman: Prof. D.Sc. Ph.D. Arch. Maciej Złowodzki
   Members of the Commission:
   1. D.Sc. Ph.D. Arch. Andrzej Białkiewicz, Prof. PK
   2. D.Sc. Ph.D. Arch. Piotr Burak-Gajewski, Prof. PK
   4. Prof. D.Sc. Ph.D. Arch. Wacław Celadyn
   5. D.Sc. Ph.D. Arch. Marcin Charciarek
   9. D.Sc. Ph.D. Arch. Jan Kurek Prof. PK
3. Faculty Commission in charge of doctoral proceedings in the field of urban design and spatial planning (K-3)

Chairman: Prof. D.Sc. Ph.D. Arch. Waclaw Seruga

Members of the Commission:
4. D.Sc. Ph.D. Arch. Anna Franta, Prof. PK
8. D.Sc. Ph.D. Arch. Anna Kantarek, Prof. PK
17. Prof. D.Sc. Ph.D. Arch. Grażyna Schneider-Skalska

4. Faculty Commission in charge of doctoral proceedings in the field of landscape architecture (K-4)

Chairman: Prof. D.Sc. Ph.D. Arch. Aleksander Böhm

Members of the Commission:
1. Prof. D.Sc. Ph.D. Arch. Marek Kowicki
2. D.Sc. Ph.D. Arch. Sabina Kuc, Prof. PK
6. Prof. D.Sc. Ph.D. Arch. Anna Mitkowska
7. D.Sc. Ph.D. Arch. Zbigniew Myczkowski, Prof. PK
12. D.Sc. Ph.D. Arch. Agata Zachariasz, Prof. PK

5. Faculty Commission in charge of Development Strategies and Faculty Budget

Members of the Commission:
1. D.Sc. Ph.D. Arch. Andrzej Białkiewicz, Prof. PK
2. Prof. D.Sc. Ph.D. Arch. Waclaw Celadyn
5. Prof. D.Sc. Ph.D. Arch. Ewa Węcławowicz-Gyurkovich
8. Przedstawiciel doktorantów
9. Przedstawiciel studentów

6. Faculty Commission in charge of Personnel Development and Professorship Positions
Chairman: Prof. D.Sc. Ph.D. Arch. Kazimierz Kuśnierz
Members of the Commission:
1. Prof. D.Sc. Ph.D. Arch. Waclaw Celadyn
2. Prof. D.Sc. Ph.D. Arch. Andrzej Kadłuczka
3. Prof. D.Sc. Ph.D. Arch. Anna Mitkowska
5. Prof. D.Sc. Ph.D. Arch. Elżbieta Węcławowicz-Bilska
7. Prof. D.Sc. Ph.D. Arch. Maria Jolanta Żychowska

7. Faculty Commission in charge of Didactics and PhD. Studies
Chairman: Prof. D.Sc. Ph.D. Arch. Grażyna Schneider-Skalska
Members of the Commission:
2. D.Sc. Ph.D. Arch. Piotr Burak-Gajewski, Prof. PK
3. Prof. D.Sc. Ph.D. Arch. Wacław Celadyn
4. D.Sc. Ph.D. Arch. Anna Franta, Prof. PK
5. D.Sc. Ph.D. Arch. Magdalena Jagiełło-Kowalczyk, Prof. PK
6. D.Sc. Ph.D. Arch. Anna Kantarek, Prof. PK
13. Prof. dr hab. inż. aech. Ewa Węcławowicz-Gyurkovich
15. Ph.D. Arch. Rafał Zawisza
17. Prof. D.Sc. Ph.D. Arch. Maria Jolanta Żychowska

8. Faculty Commission in charge of Education Quality and Validation of Studies
Chairman: D.Sc. Ph.D. Arch. Magdalena Jagiełło-Kowalczyk, Prof. PK
Members of the Commission:

1. Ph.D. Arch. Joanna Białkiewicz
3. M.Sc. Arch. Małgorzata Burkot – PhD. students' representative
4. D.Sc. Ph.D. Arch. Kazimierz Butelski, Prof. PK
5. D.Sc. Ph.D. Arch. Marcin Charciarek
6. Sebastian Deja – Students' representative
7. Ph.D. Arch. Katarzyna Hodor
8. Ph.D. Arch. Jarosław Huebner
9. D.Sc. Ph.D. Arch. Anna Kantarek, Prof. PK
11. D.Sc. Ph.D. Arch. Sabina Kuc, Prof. PK
17. Ph.D. Arch. Piotr Setkowicz
18. Ph.D. Arch. Bogdan Siedlecki
20. Ph.D. Arch. Justyna Tarajko
21. Ph.D. Arch. Marta Urbańska
22. Ph.D. Arch. Miłosz Zieliński

9. Faculty Commission in charge of Awards and Medals

Chairman: Prof. D.Sc. Ph.D. Arch. Maria Jolanta Żychowska

Members of the Commission:

2. D.Sc. Ph.D. Arch. Justyna Kobylarczyk, Prof. PK
5. Elżbieta Ostachowicz, M.Sc.
8. Representatives of trade unions
a) INSITUTE OF THE HISTORY OF ARCHITECTURE AND MONUMENT PRESERVATION A-1

31-002 Kraków, ul. Kanonicza 1  
Secretariat: r. 107  
Tel. (+48) 12 628 24 08  
Fax (+48) 12 421 87 22  
E-mail: A-1@ pk.edu.pl  
Website: [http://a-1.pk.edu.pl/](http://a-1.pk.edu.pl/)

Institute Director: Prof. Ewa Węcławowicz-Gyurkovich, D.Sc. Ph.D. Arch.  
Secretariat: Katarzyna Limanówka-Doktor M.Sc.

b) INSTITUTE OF ARCHITECTURAL DESIGN A-2

31-155 Kraków, ul. Warszawska 24  
Secretariat: r. 3  
Tel. (+48) 12 628 24 20, 628 24 72  
Tel/fax (+48) 12 423 35 11  
E-mail: A-2@ pk.edu.pl  
Website: [http://a2.arch.pk.edu.pl/](http://a2.arch.pk.edu.pl/)

Institute Director: Prof. Maciej Złowodzki, D.Sc. Ph.D. Arch.  
Secretariat: Joanna Piszczek, M.Sc., Izabela Placzk, M.Sc.

c) INSTITUTE OF URBAN DESIGN A-3

30-084 Kraków, ul. Podchorążych 1  
Secretariat: r. 2.18  
Tel. (+48) 12 628 24 33, 628 24 30  
Tel/fax (+48) 12 628 20 22  
E-mail: A-3@ pk.edu.pl

Institute Director: Magdalena Jagiełło-Kowalczyk, D.Sc. Ph.D. Arch. Prof. PK  
Secretariat: Małgorzata Rekuć M.Sc., Maria Nowak

d) INSTITUTE OF BUILDING DESIGN A-4

30-084 Kraków, ul. Podchorążych 1  
Secretariat: pok. 4  
Tel. (+48) 12 628 24 59  
Tel/fax (+48) 12  
E-mail: A-4@ pk.edu.pl  
Website: [http://ipb.pk.edu.pl](http://ipb.pk.edu.pl)
Institute Director: Prof. Wacław Celadyn, D.Sc. Ph.D. Arch.

e) INSTITUTE OF CITY AND REGIONAL PLANNING A-5
31-155 Kraków, ul. Warszawska 24
Secretariat: pok. 105
Tel. (+48) 12 628 24 66
Tel/fax (+48) 12 628 20 50
E-mail: A-5@ pk.edu.pl

Institute Director: Prof. Elżbieta Węcławowicz-Bilska, D.Sc. Ph.D. Arch.
Secretariat: Aneta Nowacka, M.Sc.

f) DIVISION OF FREEHAND DRAWING, PAINTING AND SCULPTURE A-7
30-084 Kraków, ul. Podchorążych 1
Secretariat: pok. 3.21
Tel. (+48) 12 628 24 38
Tel/fax (+48) 12 637 24 36
E-mail: A-7@ pk.edu.pl
Website: http://www.a7.arch.pk.edu.pl

Division Supervisor: Andrzej Białkiewicz, D.Sc. Ph.D. Arch. Prof. PK
Secretariat: Renata Fatyga, Jerzy Janas

g) INSTITUTE OF LANDSCAPE ARCHITECTURE A-8
31-155 Kraków, ul. Warszawska 24
 Sekretariat: pok. 8
Tel. (+48) 12 628 24 69
Tel/fax (+48) 12 618 20 61
E-mail: A-8@ pk.edu.pl
Website: http://architektura-krajobrazu.pk.edu.pl

Institute Director: Agata Zachariasz, D.Sc. Ph.D. Arch. Prof. PK
Secretariat: Grażyna Szefer, Dorota Ciesielska-Melnyczuk, M.Sc.
II. ORGANIZATION AND PROCEDURE OF STUDIES

II.1 INFORMATION ABOUT COURSES AND ORGANIZATION OF STUDIES:

Courses of Study

ARCHITECTURE COURSE

- Engineer's Degree Studies
- Master's Degree Studies
- Master's Degree Studies in Architecture in English
- Postgraduate Studies

LANDSCAPE ARCHITECTURE COURSE

- Engineer's Degree Studies
- Master's Degree Studies
- Postgraduate Studies

SPATIAL MANAGEMENT COURSE - inter-faculty studies

- Engineer's Degree Studies
- Master's Degree Studies

TECHNICAL SCIENCES SCIENCE BRANCH, DISCIPLINE: ARCHITECTURE

- PhD. Studies (doctoral studies)
- PhD. Studies (doctoral studies) in English

PARTIAL STUDIES

- The Erasmus Programme
- The CEEPUS Programme
- The Tennessee Programme
- Bilateral agreements
- The Mostech Programme

NON-ACADEMIC COURSES

- Freehand drawing course
- Photography course
II.2 COURSES OF STUDIES – EDUCATIONAL GOALS:

Architecture 1st degree:

GROUP OF ELEMENTARY CONTENTS

**Education in the field of mathematics**


Learning outcomes – skills and competences: abstract comprehension of technical problems; application of basic mathematical methods in architectural and urban design.

**Education in the field of descriptive geometry**

Learning contents: Perspective and axonometrics. Methods of mapping and restituting elements of space. Geometrical shaping of architectonic forms with the application of polyhedrons, volumes and surfaces. Applied perspective methods.

Learning outcomes – skills and competences: applying descriptive geometry in architectural design; constructing and rendering architectonic objects.

**Education in the field of the physics of structures**

Learning contents: Thermal and dampness properties of the constructions of building divisions. Basic phenomena concerning illumination with daylight and artificial light. Acoustics – propagation in open space, interior acoustics, acoustic insulation of divisions.

Learning outcomes – skills and competences: allowing for thermal and dampness requirements, architectural design of soundproof protection and proper illumination.

**Education in the field of the mechanics of structures**


Learning outcomes – skills and competences: understanding the issues of shaping building structures and systems; preparing schematics of static constructions; designing constructional elements; identifying stresses in constructional elements.

GROUP OF MAJOR CONTENTS

**Education in the field of the basics of architectural design**

Learning outcomes – skills and competences: understanding mutual relations between an object and its surroundings; preparing architectural designs with a low degree of complexity; using various technical and material means for presenting an architectural idea.

**Education in the field of the basics of urban design**

Learning contents: Principles of urban design. Elements of urban composition. Relations between elements shaping space.

Learning outcomes – skills and competences: understanding mutual relations between an object and its surroundings; preparing urban inventory; designing complexes of buildings together with greenery and selected urban facilities; preparing a plan of developing an area with an increasing degree of complexity allowing for technical, social, natural, cultural and legal requirements; understanding the spatial conditions and consequences of planning documents.

**Education in the field of the history of architecture and urbanism**


Learning outcomes – skills and competences: understanding the cultural conditions of building the forms and stylistics of architectonic objects and urban layouts; comprehending relations between old and newly designed architecture; respecting the existing cultural environment; assessing an architectonic work from the viewpoint of its location, cultural conditions, usability, construction and aesthetics; understanding transformations in urbanism against the background of the changing circumstances.

**Education in the field of general construction and materials science**


Learning outcomes – skills and competences: preparing architectural and building documentation; applying building materials in design.

**Education in the field of building constructions**

Learning contents: Principles of designing contemporary building constructions.

Learning outcomes – skills and competences: preparing an architectural design with the application of constructional elements.

**Education in the field of building installations**


Learning outcomes – skills and competences: understanding the principles of designing building installations in objects with various intended uses; comprehending the general principles of the energy-saving design of buildings.
Education in the field of fine arts and working techniques


Learning outcomes – skills and competences: using artistic techniques; solving artistic issues; applying working techniques.

Education in the field of the economics of the investment process

Learning contents: Basic elements of the economics of the investment process.

Learning outcomes – skills and competences: understanding the basic economic processes and tools for steering the investment process.

Education in the field of the organization of the investment process


Learning outcomes – skills and competences: planning the investment process within its basic scope; negotiations in the investment process.

Education in the field of the building code

Learning contents: Legal conditions of architects and urbanists’ activity. Legal acts binding in construction.

Learning outcomes – skills and competences: understanding legal regulations concerning architectural, constructional and urban design as well as the implementation of an investment.

Education in the field of the ethics of the profession of an architect

Learning contents: Elements of professional ethics.

Learning outcomes – skills and competences: understanding issues and proceedings in accordance with the principles of the ethics of the profession of an architect and an urbanist.

II.3 PROCEDURES FOR ENROLLMENT AND REGISTRATION

Architecture 1st degree:

INFORMATION ON THE LEVEL OF THE QUALIFICATION

Level of qualification: first-cycle programme study

Official length of programme: 7 semesters

Access requirements:

- submission of the complete set of required documents

- positive result of the entrance examination on the artistic gift and architectural predisposition
- certificate equivalent to Polish secondary school leaving examination enabling its holder to take up a place in Higher Education Institution in the country where the certificate is issued

INFORMATION ON THE CONTENTS AND RESULTS GAINED

Mode of study: full-time mode of study

Programme requirements:

Pursuant to the relevant provisions of law, a university graduation diploma is issued to the student who has achieved the learning outcomes specified in the course curriculum, obtained the required number of the ECTS credits, completed the internships provided for in the course curriculum, passed the diploma examination and submitted the diploma project.

The number of the ECTS credits required for the award of the university graduation diploma: 210,0

Education and training standards for the course of Architecture offered as the first-cycle degree programme are as outlined in the Regulation of the Minister of Science and Higher Education of the 29th September 2011 on education and training standards for the study programmes of veterinary medicine and architecture (Journal of Laws No. 207, item 1233). The standards stipulate general requirements, including the number of class hours, a graduate's qualifications, course content and learning outcomes divided into basic content and course-specific content as well as recommendations on internships and other requirements.

Access to the higher education

The total duration of education until completion of a school which offers the possibility of taking the secondary school leaving examination (maturity examination) is 12 – 15 years. Having passed successfully the secondary school leaving examination (maturity examination), graduates are awarded a secondary school leaving certificate which entitles them to apply for admission to a higher education institution.

Higher education system

Higher education system in Poland and the basis for its operation are laid down in the Act of 27 July 2005 – Law on Higher Education (Journal of Laws of 2012, item 572, as amended). Its provisions are applied both to public and non-public higher education institutions, in which programmes of study are offered on the same basis and upon completion of the same requirements.

Higher education institutions are divided, irrespective of their status, into academic and vocational ones.

An academic higher education institution is a school in which at least one of its organizational units is entitled to award the academic degree of doktor.

A vocational higher education institution is a school offering first or second-cycle programmes or long-cycle programmes, and which is not entitled to award the academic degree of doktor.

Study programmes are offered as first-cycle, second-cycle and long-cycle programmes and doctoral (third-cycle) programmes.

First-cycle programmes can lead to a licencjat degree and last six or seven semesters, or they can lead to an inżynier degree and last seven or eight semesters. Second-cycle programmes last three or four semesters.

Long-cycle programmes last from nine to twelve semesters.
Doctoral programmes last no longer than four years. Under a separate procedure, in compliance with the provisions of the Regulation of 14 March 2003 on the Academic Degrees and the Academic Title and on Degrees and Title in Arts (Journal of Laws No. 65, item 595, as amended), graduates are conferred the academic degree of doktor or doktor w zakresie sztuki. Higher education programmes and doctoral programmes may be offered as full-time or part-time programmes.

Degrees awarded to graduates of higher education institutions

– licencjat, licencjat pielęgniарstwa, licencjat położnictwa, inżynier, inżynier pożarnictwa, inżynier architekt i inżynier architekt krajobrazu – awarded to graduates of first-cycle programmes,

– magister and equivalent degrees of magister inżynier, magister inżynier architekt, magister inżynier architekt krajobrazu, magister inżynier pożarnictwa, magister pielęgniарstwa, magister położnictwa, magister sztuki – awarded to graduates of second-cycle programmes,

– magister and equivalent degrees of lekarz, lekarz dentysta, lekarz weterynarii, magister farmacji, magister sztuki – awarded to graduates of long-cycle programmes.

ECTS

The number of the ECTS credits provided by the plan of studies for one semester is 30, while it is 60 ECTS credits for an academic year. To be awarded a diploma it is necessary to gather at least 180 ECTS credits upon completion of a first-cycle programme, at least 90 ECTS credits upon completion of a second-cycle programme, at least 300 ECTS credits upon completion of a long-cycle programme lasting five years and 360 ECTS credits upon completion of a long-cycle programme lasting six years.

Academic degrees, degrees in arts, academic title, title in arts

Academic degrees, degrees in arts and the title of profesor are conferred under provisions of the Regulation of 14 March 2003 on the Academic Degrees and the Academic Title and on Degrees and Title in Arts (Journal of Laws No. 65, item 595, as amended).

The academic degrees are the degrees of doktor and doktor habilitowany of a specific area of science in a given scientific discipline. The degrees awarded in arts are the degrees of doktor and doktor habilitowany of a specific area of arts in a given artistic discipline. Academic degrees and degrees in arts are conferred by organisational units of higher education institutions and the Polish Academy of Sciences, as well as research institutes in compliance with their powers.

The academic title is the title of profesor of a specific area of science, while the equivalent title in arts is the title of profesor of a specific area of arts. The title of profesor is conferred by the President of the Republic of Poland.

Architecture IInd degree:

INFORMATION ON THE LEVEL OF THE QUALIFICATION

Pursuant to the relevant provisions of law, a university graduation diploma is issued to the student who has achieved the learning outcomes specified in the course curriculum, obtained the required number of the ECTS credits, completed the internships provided for in the course curriculum, submitted the diploma project and passed the diploma examination.

The number of the ECTS credits required for the award of the university graduation diploma: 90,0
Education and training standards for the course of Architecture offered as the second-cycle degree programme are as outlined in the Regulation of the Minister of Science and Higher Education of the 29th September 2011 on education and training standards for the study programmes of veterinary medicine and architecture (Journal of Laws No. 207, item 1233). The standards stipulate general requirements, including the number of class hours, a graduate's qualifications, course content and learning outcomes divided into basic content and course-specific content as well as recommendations on internships and other requirements.

ACCESS TO FURTHER STUDY:

The graduate is entitled to apply for admission to third-cycle degree programmes as well as to postgraduate training courses.

PROFESSIONAL STATUS (IF APPLICABLE):

The graduate may seek employment in state-owned and private companies of the production and services sectors as well as in public institutions.

The graduate is eligible for employment in the public and private sectors (i.e. in state-owned or private enterprises, manufacture and service sectors, and public institutions).

The graduate may pursue professional qualifications in compliance with the procedures laid down in the relevant provisions of law.

ADDITIONAL INFORMATION

Additional information – extracurricular activities and awards received:

The field of study completed by the graduate has been given accreditation by The Polish Accreditation Committee, Royal Institute of British Architects and Accreditation Commission for Polish Universities of Technology.

Access to higher education

The total duration of the educational cycle until completion of a school offering the possibility of taking the secondary school leaving examination (maturity examination) is 12–15 years. Having successfully passed the secondary school leaving examination (maturity examination), graduates are awarded a secondary education certificate, or a secondary education certificate accompanied by a statement listing the results of the maturity examinations in individual subjects, which entitles them to apply for admission to a study programme.

The system of higher education

The structure of the higher education system in Poland and the basis for its operation are laid down in the Act of 27th July 2005 – Law on Higher Education (Journal of Laws of 2016, item 1842, as amended). Its provisions apply both to public and non-public institutions of higher education, which provide programmes on the same basis and upon fulfilment of the same requirements.

Institutions of higher education are divided, irrespective of their status, into academic and vocational ones.

An academic institution of higher education is an institution carrying out scientific research in which at least one organizational unit is entitled to award the academic degree of doktor.
A vocational institution of higher education is a school offering first-, second- or uniform long-cycle degree programmes which is not entitled to award the academic degree of doktor.

Institutions of higher education offer study programmes in the form of first-cycle, second-cycle or uniform long-cycle degree programmes (higher education study programmes) as well as third-cycle (doctoral) programmes.

Higher education study programmes as well as doctoral programmes may be offered as full-time or part-time study programmes.

First-cycle degree programmes may be offered as programmes lasting at least six semesters and leading to the degree of licencjat, or programmes lasting at least seven semesters and leading to the degree of inżynier. Second-cycle degree programmes last from three to five semesters.

Uniform long-cycle degree programmes last from nine to twelve semesters.

Higher education study programmes offered in the part-time mode may last one or two semesters longer than the corresponding programmes offered in the full-time mode.

Doctoral programmes may not be shorter than two or longer than four years. Under a separate procedure, pursuant to the provisions of the Act of 14th March 2003 on Academic Degrees and Academic Title and on Degrees and Title in Arts (Journal of Laws of 2016, item 882, as amended), graduates are awarded the academic degree of doktor or doktor w zakresie sztuki.

Degrees awarded to graduates of higher education study programmes

– magister and equivalent degrees of magister inżynier, magister inżynier architekt, magister inżynier architekt krajobrazu, magister inżynier pożarnictwa, magister pielęgniarstwa, magister położnictwa, magister sztuki – degrees awarded to graduates of second-cycle programmes,

– magister and equivalent degrees of lekarz, lekarz dentysta, lekarz weterynarii, magister farmacji, magister sztuki – degrees awarded to graduates of uniform long-cycle programmes.

ECTS

In order to be awarded a diploma confirming completion of a first-cycle programme, the student is obliged to earn at least 180 ECTS credits, a minimum of 90 ECTS credits are required for completion of a second-cycle programme, at least 300 ECTS credits for completion of a uniform long-cycle programme lasting five years and 360 ECTS credits for completion of a uniform long-cycle programme lasting six years.

Academic degrees, degrees in arts, the academic title and the title in arts

Academic degrees, degrees in arts and the academic title of profesor are awarded pursuant to the provisions of the Act of 14th March 2003 on Academic Degrees and Academic Title and on Degrees and Title in Arts.

Academic degrees are the degrees of doktor and doktor habilitowany of a specific field of science within a given scientific discipline. Degrees awarded in arts are the degrees of doktor and doktor habilitowany of a specific field of arts within a given artistic discipline. Academic degrees and degrees in arts are awarded by organisational units of higher education institutions, by academic units of the Polish Academy of Sciences and by research institutes as well as international scientific institutes established pursuant to separate provisions, operating on the territory of the Republic of Poland, each in compliance with their scope of competence.
The academic title is the title of professor of a specific field of science, while the equivalent title in arts is the title of professor of a specific field of arts. The title of professor is conferred by the President of the Republic of Poland.

II.4 ORGANISATION OF CLASSES

1. The following scope of preparation of semester works in designing subjects is hereby determined at the major: Architecture (in Polish and English), conducted at the Faculty of Architecture (FA) of the Cracow University of Technology (CUT), in force starting from the second year of the first-cycle courses and throughout the entire second-cycle course:
   1) The design work consists of a written and drawing part – student solves a theoretical and designing problem,
   2) The scope of the drawing part of the work per semester corresponds to not fewer than 6 and not more than 9 50 x 70 cm boards,
   3) Subject supervisor provides students with a scope of the drawing part of the design work during the first class in the semester,
   4) Student is allowed to submit additional boards, accordingly to the design solutions adopted, the scope of which exceeds the scope determined by the supervisor, provided the student determines the scope of the additional boards with the subject supervisor in the course of the semester. Student is allowed to submit a physical model, clarifying the design solutions adopted, provided it is arranged with the subject supervisor. This type of presentation of the design work can be also imposed by the subject supervisor, provided students are informed about this during the first design class.
   5) The following rules apply to works in the field of architecture and urban planning:
      a) Presenting the concept of the design by means of a freehand perspective drawing on a separate board,
      b) For works in urban planning – presenting the solution of technical details in the form of a vertical section of the external wall of the building, or/and other parts of the building specified by the subject supervisor, in the scale 1:20, on a separate board.
   6) The written part of the work presenting the concept and solutions of the design should contain:
      a) An essay demonstrating student’s knowledge on the problem solved, the topic of which is specified by or agreed with the subject supervisor,
      b) A concise description of the concept of the design (max. one page),
      c) A technical description to the design.
   7) The volume of the text should be at least 18,000 characters, that is not less than 10 pages of text.

2. At the major: Landscape Architecture, the scope of the work in a design subject is determined by the subject supervisor in each semester, taking into account the specificity of integrated design. Starting from the second year of the first-cycle course and throughout the entire second-cycle course, the final work consists of a written part and a drawing part; student solves a theoretical and a designing problem. The volume of the descriptive part starting from the second year should be not less than 18,000 characters, that is not less than 10 pages of text.

3. The Dean divides students into design groups.

4. The following principles relating to participation in design classes apply:
   1) Students of first-cycle courses are allocated to design groups in the first semester of the courses by the Dean,
   2) In subsequent semesters students sign in to design groups by means of the virtual dean’s office system within the time limit defined by the Dean. The number of available places in a given design group is decided by the Dean in agreement with subject supervisors. The lists are drawn up according to the first-come/first-serve rule,
   3) After the expiry of the time limit specified for signing up by means of the digital system, students who fail to sign in a design group will be directed to one of the design groups with available places by the dean’s office for students’ affairs,
   4) In the event of returning from the dean’s leave, repeating the semester, or repeating the subject, the intention to participate in classes in the design group where student was assigned
earlier, at the same year and semester of the courses, should be reported personally in the dean’s office for students’ affairs at least two days before the date of commencement of the enrolment via the virtual dean’s office system,

5) In the event when due to a failure to complete the design subject, the subject supervisor has decided that the number of hours to be repeated is lower than the number of hours planned in the syllabus, student shall be directed to the same subject supervisor to repeat the classes,

6) Classes of a specific design group can be attended exclusively by students entered on the list (assigned to this group) and students holding a relevant certificate issued by the dean’s office,

7) The design group can be changed exclusively via students exchange with the Dean’s consent, preceded with the consent of the subject supervisors, provided that each student taking part in the exchange has the right to attend relevant classes and does not intend to:
   a) Resign from the courses,
   b) Apply for the dean’s leave,
   c) Not undertake to attend the classes.

8) If the group is changed in a manner inconsistent with the principles set forth above, the Dean will annul the grade in the subject it refers to and will order the student to repeat the subject.

9) In the major: Architecture there is no option to change design groups after obtaining credit for the first and third semester of the first-cycle courses. Likewise, design groups cannot be changed after obtaining credit for the subject Architectural / Urban Design II in the 5th semester.

10) The principles of dividing students within design groups are determined by subject supervisors.

5. Teachers provide students with consultations 2 lesson hours a week. The list of consultations is prepared by the head of the competent organisational unit of the Faculty of Architecture, Cracow University of Technology, and communicated to students prior to the commencement of each semester.

6. The following principles referring to the method and procedure of participating in and obtaining credit for internships in the major: Architecture (in Polish and English) are hereby set forth:

1) Internships in the major: Architecture (in Polish and English) are as follows:
   a) Building internship during first-cycle courses,
   b) Designing internship during second-cycle courses,
   c) Other internships defined in the syllabus.

2) The designing internship supervisor is appointed by the Dean.

3) The building internship supervisor is appointed by the Director of the Institute of Constructional Design in agreement with the Dean.

4) The length of the internship is determined in the syllabus. Upon the Dean’s consent, the building internship and the designing internship can be longer. If the student takes part in a longer internship a part of which takes place during the academic year, the student is obliged to adjust it to the schedule of classes and tests.

5) The condition for taking part in longer internships is obtaining credits for all the previous semesters.

6) An application for taking part in longer internships along with a relevant justification and statement on the fulfilment of the conditions set forth in item 4 shall be filed by the student to the Dean via the internship supervisor not later than three weeks before the internship commences,

7) The student can apply for extending the designing and building internship during such internships. In this respect, the provisions set forth in items 4 and 5 shall apply, respectively.

8) The student shall file an application to the Dean via the internship supervisor for a permission to extend the internship, along with a relevant justification and a statement on the fulfilment of the conditions set forth in item 4, not later than one week prior to the completion of the internship in compliance with the time limit corresponding to the requirements set forth in the syllabus.

7. The Board of the Faculty of Architecture can pass a separate resolution regulating detailed principles concerning participation in and assessment of the designing and building internship.
8. At the Faculty of Architecture of the Cracow University of Technology classes are conducted in a foreign language in the following cases:
   1) During second-cycle courses at the major: Architecture in English,
   2) For students of partial courses under agreements and programmes of international exchanges, in compliance with the didactic offer of individual units,
   3) For students who have obtained the Dean’s consent for a double diploma under signed agreements.

9. Subjects, forms of classes, and the scope of classes taught in a foreign language and the language in which the classes shall be taught:
   1) In the major: Architecture in English are defined in the syllabus of this course,
   2) For students of partial courses are defined in didactic offers of individual units, containing detailed descriptions of the courses,
   3) For students who have obtained the Dean’s consent for a double diploma are defined on the individual basis by the Dean in agreement with the supervisor of the diploma work and the coordinator of the international programme
   4) The required level of the conduct of the foreign language and methods of verifying the conduct of language:
      a) For courses referred to in section 8 item 1 – are defined in the recruitment criteria,
      b) For courses referred to in section 8 item 2 – are defined and verified in compliance with the rules applicable to partial courses and student exchange programmes,
      c) For students referred to in section 9 item 3 – are undetermined.

10. Selection of subjects, including in particular design groups, by students studying in a foreign language:
    1) For courses referred to in section 8 item 1 is consistent with the analogous syllabus of courses in Polish, provided that the subject supervisor agrees for such a group to be conducted, filed at the dean’s office for students affairs, not later than three weeks prior to the commencement of the academic year,
    2) For courses referred to in section 9 item 2 takes place in agreement with coordinators of international programmes,
    3) For students referred to in section 9 item 3 is defined on the individual basis by the Dean in agreement with the supervisor of the diploma works and the coordinator of the international programme.

11. Matters relating to classes taught in foreign languages, not defined in these detailed rules, shall be governed by other regulations and provisions of the rules of higher education courses held at the Cracow University of Technology.

II.5 INDIVIDUAL SYLLABUS

1. Individual syllabus for the purposes defined in § 9, section 3, item 1 of the rules of higher education courses at CUT can be applied for by a student who has obtained a mean grade of at least 4.5 from the course of the studies, calculated according to the formula:

   \[
   \text{grade} = \frac{\Sigma(\text{grade} \times \text{number of credit points})}{n}
   \]

   WHERE N STANDS FOR THE TOTAL NUMBER OF ECTS CREDIT POINTS FROM THE CREDITED SEMESTERS.

2. In the major: Architecture (in Polish and English) individual syllabus referred to in section 1 can be applied for by a student who has obtained credit for at least:
   1) The fourth semester of first-cycle courses,
   2) The first semester of second-cycle courses,
   (NOTWITHSTANDING THE CONDITIONS DEFINED IN § 9 SECTION 2 ITEM 4 OF THE RULES OF HIGHER EDUCATION COURSES AT CUT).

3. Individual syllabus can be applied for by a student who wishes to study a given semester at another university under a signed agreement (in compliance with § 2 section 2 item 2 of the rules of higher education courses at CUT), provided he/she obtains a mean grade for the course of the studies of at
least 4.0, calculated according to the principles defined in section 1. According to this principle, individual syllabus can be granted only if there is a discrepancy in the schedule of the academic year in the receiving university and CUT so that it is clearly impossible to obtain credit for the semester at CUT prior to the commencement of the next semester at the receiving university.

II.6 TRANSFERS AND CHANGES IN THE COURSE OF STUDIES

1. Transfer from another university to the Faculty of Architecture, CUT, is possible not earlier than after obtaining credit for the first year of studies.
2. Transfer from another university to the Faculty of Architecture, CUT, for the last semester of the courses is not possible.
3. In the event of transfer to the Faculty of Architecture, CUT, to the major: Architecture:
   1) The requirement set forth in § 11 section 7 of the Rules of Higher Education Courses at CUT is deemed satisfied if the student has obtained positive grades for two drawing works prepared during the entrance examination to the major: Architecture,
   2) Transfer is possible only after the completion of the summer semester.
4. The student who applies to be transferred from another university should file the following documents in the dean's office of the Faculty of Architecture:
   1) Justified application along with a confirmation of fulfilling the obligations resulting from the rules of the university, signed by the dean of the previously attended faculty
   2) Certificate of academic record
   3) Portfolio with works prepared within the framework of designing subjects, designing classes, designing seminars and labs during completed semesters.
5. Transfer from another university to full-time first-level courses conducted at the Faculty of Architecture can be applied for by a student of full-time courses who has obtained a grade of at least 4.5 in the major: Architecture or Architecture and Urban Planning, or 4.0 in the major: Landscape Architecture, which is a weighted mean calculated according to the following formula:

\[
\text{grade} = \frac{\sum (\text{grade} \times \text{number of credit points})}{n}
\]

\(n\) – TOTAL NUMBER OF ECTS CREDIT POINTS FOR COMPLETED SEMESTERS.

6. Student can be admitted to full-time courses in the recruitment procedure, carried out according to the principles defined in separate regulations in force at CUT. Student admitted in the recruitment procedure can apply to be admitted to a higher semester than the first one, following the last completed semester. Transfer is possible in the winter semester or in the summer semester of a specific academic year.
7. A condition for being admitted from extra-mural courses to full-time courses in the same major of the Faculty of Architecture is obtaining a grade of at least 4.5 for the total previous course of studies, calculated as in section 5. Transfer can be executed not earlier than after successful completion of the first year of studies. Transfer is executed with the consent of the Dean, upon an application of the interested party.
8. Transfer from full-time courses to extramural courses is executed with the Dean’s consent upon an application of the interested party.
9. The condition of the transfer referred to in section 5 and of the transfer referred to in section 7 is successful completion of all previous semesters.

II.7 METHODS OF EVALUATION

1. Evaluation of the design works in the major: Architecture can be attended by external examiners – members of the Małopolska District Chamber of Architects of the Republic of Poland, who are not
employees of the Faculty of Architecture. The principle of participation of such persons in the evaluation of design works shall be agreed upon by the subject supervisor and the Chamber and communicated to students during the first class in a given semester.

2. The Faculty of Architecture, CUT, endorses a list of subjects which constitute the foundation of subjects taught in the subsequent semester, and it constitutes:
   Appendix No. 1 for the major: Architecture
   Appendix No. 2 for the major: Landscape Architecture.

II.8 REPEATING A SEMESTER

1. As long as the Dean decides so, during the first two weeks of the repeated semester student is obliged to discuss with the subject supervisor the possibility of transferring the credit for the subject for which the student has obtained a positive grade.
2. The subject supervisor expresses an opinion referring to the possibility of transferring the credit for the subject conducted by him/her to the student repeating the semester, following exclusively the provisions of § 22 section 4 of the rules of higher education courses at CUT. The decision in this matter is made by the Dean.
3. Student applies to the Dean of the Faculty of Architecture, CUT, for a permission to attend classes at the same level and apply for the transfer of credit not later than one day prior to the commencement of the semester. The application should contain a list of subjects proposed to be attended and a list of outstanding subjects, specifying the number of outstanding ECTS credit points.

II.9 RE-ENTRY

1. In the event when the Dean conditions the possibility of re-entry on passing a re-entry examination, the applicant sits this examination before a committee consisting of three persons:
   1) Dean or Deputy Dean as the chairperson,
   2) Two academic teachers holding the title of the Professor or a scientific degree of Doctor Habilitatus.
2. During the re-entry examination:
   1) The person applying for re-entry answers three questions relating to the subject matter of the basic and major-related subjects, taught in individual semesters at the Faculty of Architecture, CUT, successfully completed by this person in the course of their studies, or completed in the scope allowing them to be enrolled in the next semester;
   2) The subject matter of the questions can correspond exclusively to the teaching effects and the contents defined in syllabuses of the subjects for the semesters referred to above, in compliance with the programme of the courses in force;
   3) After the examination, the committee referred to in section 1 decides whether the knowledge of the applicant, despite a break in studying, is or is not sufficient to re-enter higher education courses at the Faculty of Architecture, CUT.
3. If the re-entry examination is failed, it can be retaken not earlier than after the expiry of one year.
4. The Dean issues a re-entry decision when the student pays all pending fees to the Faculty of Architecture, CUT.
### III. PROGRAMME OF STUDIES

#### ARCHITECTURE – 1ST DEGREE

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<tr>
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<th>TYP GODZIN / TYPE OF HOURS</th>
<th>IŁOŚĆ GODZIN W TYGODNIU / AMOUNT OF HOURS IN A WEEK</th>
<th>IŁOŚĆ PUNKTOW KREDYTOWYCH / AMOUNT OF CREDITS</th>
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|   | 435 | 120 | 30 | 45 | 60 | 180 | 30 |

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IN 7TH SEMESTER THERE ARE 8 WEEKS FOR UNITS 1-5, 4 WEEK FOR UNIT 6 AND ONLY 1 H FOR UNIT 7
ARCHITECTURE – 2ND DEGREE

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III.1 SUBJECT MATTER OF COURSES

A-1

INSTITUTE OF THE HISTORY OF ARCHITECTURE AND MONUMENT PRESERVATION A-1

Institute Director: Prof. Ewa Węcławowicz-Gyurkovich, D.Sc. Ph.D. Arch.

A-11 Chair of the Protection of Cultural Heritage and Modern Architecture
Chairman: Prof. D.Sc. Ph.D. Arch. Ewa Węcławowicz-Gyurkovich

31-002 Kraków, ul. Kanonicza 1, pok. 109
Tel. (+48) 12 628 2411

A-11 Chair of the Protection of Cultural Heritage and Modern Architecture

1. Joanna Białkiewicz Ph.D. Arch.
2. Jacek Czubiński Ph.D. Arch.
3. Andrzej Gaczoł D.Sc. Ph.D. Arch., Prof. PK
5. Dominika Kuśnierz-Krupa, D.Sc. Ph.D. Arch. Landscape Arch., Prof. PK
7. Marta Urbańska Ph.D. Arch.
8. Elżbieta Waszczyszyn Ph.D. Arch.

I-C-9 OCHRONA ZABYTKÓW/MONUMENT PROTECTION

Director: Prof. Andrzej Kadłuczka D.Sc. Ph.D. Arch.
Number of hours: 30
ECTS credits: 2
Format: lecture and classes

LECTURE:

Objectives: The transfer of knowledge regarding the development of conservation thought, based on the permanent expansion of the scope of protection, while also accepting - apart from the traditional, objective approach to perceiving heritage - its subjective interpretation: not only as a tangible relic, but also as a behaviourally interpreted form of conveying memory about the past. The subject of the lectures is meant to present a wide spectrum of solutions that are being implemented in European countries against a background of fundamental principles and philosophical ideas on the aesthetic, artistic, functional, spatial, technical and technological layers.
## Content:
- The beginnings of the protection of historical monuments in Europe. The history of conservation doctrines. The development of concepts of conservation from the beginning of the eighteenth century. Violet Le Duc - the doctrine of the restoration of monuments. The restoration of historical monuments in Polish lands in the second half of the nineteenth and at the start of the twentieth century. The protection of architectural and urban monuments in Poland after the Second World War. The beginnings of modern architectural and urban conservation theory. Adaptation and intervention versus the protection of a historical site. Conservation studies of historical buildings: goals, types, methods.

## Assessment:
- *Attendance, paper, essay, participating in discussions, presentation

## SEMINAR:

### Objectives:
- The transfer of knowledge regarding practical solutions and theoretical guidelines featured in the broadly understood concept of the protection of cultural heritage. The examples of foreign and Polish built projects presented during the course constitute a basis for discussion with students, which is to culminate in the presentation of an essay containing an individual proposition of the solution of a conservation and construction-related problem present in a historical structure.

### Content:
- Basic concepts of the field of the protection of historical monuments. Reconstruction projects of architectural monuments. The exposure of historical relics in new arrangements of architectural spaces. Innovative structural and technical solutions in the adaptation of historical structures. Modern multimedia in the presentation of historical structures. Construction projects versus the problem archaeological preserves. Conservative and controversial conservation. Individual exercises in the form of a written and graphical assignment - essay - about a selected structure of complex of historical structures, representing one of the many conservation methodologies. The presentation of a selected historical structure: performing an architectural and conservation analysis, focusing both on history, as well as the implemented design solutions. An attempt at solving, in the form of a sketch, of a structural detail featuring an intervention into the historical structure of a building.

### Assessment:
- *Attendance, paper, essay, participating in discussions, presentation.
II-C-18 OCHRONA MIEJSKICH ZESPOŁÓW ZABYTKOWYCH - PROTECTION OF HISTORICAL URBAN COMPLEXES

| Director: | Dominika Kuśnierz-Krupa, D.Sc. Ph.D. Arch. Landscape Arch., Prof. PK |
| Number of hours: | 15 |
| ECTS credits: | 2.00 |
| Format: | seminar |

**CLASSES/SEMINAR:**

| Objectives: | Transferring necessary knowledge to students about the historical values of historical cities and the precepts of the protection of these values. |
| Content: | The teacher provides students with knowledge regarding the starting materials for the assessment of the cultural values of historical urban complexes. The teacher presents examples of historical cartography, including the map by Mieg, the map by Hendelsfeld and the Galician Cadastre, as well as historical iconography in the form of figures and photographs. Students (based on selected examples of cities, including those in Southern Poland) learn about the types and forms of historical urban layouts within the modern space of a small historical town, in addition to learning about the organisation and competencies of administrative organs charged with the protection of historical monuments in Poland. During classes, students will also gain knowledge about three-dimensional constituent elements of historical cities (along with their characterisation), such as town halls, churches, other religious buildings (a synagogue, orthodox church), a building of the "Sokół" physical culture association, etc. Based on writing a paper focusing on the subject of a selected historical town, students will, over the course of the semester, learn how to perform an evaluation of its cultural values and their revalorisation, exhibition, as well as promotion in the context of the multi-planar development of the respective centre. |
| Assessment: | Written assignment |

A-12 Chair of the History of Architecture, Urban Planning and the Arts


30-084 Kraków, ul. Podchorążych 1, pok. 3.04
Tel. (+48) 12 628 2417
Website: riad.pk.edu.pl/~a-12/

1. Katarzyna Kołodziejczyk, Ph.D. sztuki
2. Bogusława Kwiatkowska-Baster Ph.D. Arch.
3. Rafał Malik Ph.D. Arch.
### LECTURE:

| Objectives: | Transferring knowledge regarding the development of Polish, European and global urban planning throughout history. Familiarising students with the urban planning-related factors that determine the genesis and development of individual types of cities, as well as the principles of the shaping of each of the diverse urban forms in different periods. Transferring knowledge about the qualities of historical cities. |
| Content: | The definition of a city. Factors affecting the establishment of cities according to Tadeusz Tołwiński. The basic types of layouts and urban forms. Organic and defined layouts: radial-concentric and orthogonal ones. The stages of the development of urban planning around the world and its distinct qualities in individual regions during each stage of development: in Egypt and Mesopotamia; in Greek poleis, in the Roman Empire; in the different European regions throughout the Medieval period (Italy, France, Germany, Switzerland, Poland - the importance of town laws; the Renaissance (Italy, France, Germany, Poland) - a comparison of urban planning theory and practice; the Baroque (Italy/Rome, France, Poland, Russia, Germany, the United States of America) - the dualism of the schools of the Baroque. The great growth of cities and industrial urban planning in the nineteenth century, including new theoretical concepts that formed the foundation of modern urban planning (the Garden city, the linear city, the industrial city). |
| Assessment: | *Attendance, set of class sheets, test, examination |

### CLASSES/SEMINAR:

| Objectives: | Referring the knowledge about the historical development of Polish, European and global urban planning to several dozen specific cases of cities. Demonstrating the effects of urban planning-related factors and the implementation of specific theories, concepts and urban design and planning guidelines - in the form built or transformed cities. |
| Content: | Producing a sketch-like outline of the plans of cities that are the most accurate examples of urban planning. The identification of the most significant qualities of |
RIBA VALIDATION VISIT NOVEMBER 2017

Assessment:  
* Attendance, set of class sheets, test, examination

A-13 Division of the History of Polish Architecture

Head of the Division: Klaudia Stala D.Sc.
31-002 Kraków, ul. Kanonicza 1, pok. 213
Tel. (+48) 12 628 3134

1. Anna Bojęś-Białasik Ph.D. Arch.
2. Jacek Czechowicz Ph.D. Arch.
4. Małgorzata Hryniewicz M.Sc. Arch
5. Dominik Przygodzki Ph.D. Arch.

II-B-2 HISTORIA SZTUKI, KULTURY I ESTETYKI - HISTORY OF ART, CULTURE AND AESTHETICS

Director: KLAUDIA STALA D.Sc.
Number of hours: 45
ECTS credits: 3
Format: lectures and seminars

LECTURE:

Objectives: The goal of the classes is familiarising students with the basics of the history of the artistic activity and civilisational development of man. The basic artistic disciplines that are discussed, namely: architecture, sculpture, painting, music or elements of literature and technological achievements, are presented against a
historical, cultural, social and ideological background, which enters philosophical
grounds with emphasis on matters of aesthetics. It is crucial for students to
develop skills in the identification of well-known artistic works and their authors,
that they perform an accurate identification of the style of a work along with its
chronological timeframe and link it with an appropriate historical and cultural
background. One of the basic objectives of the course is the highlighting of the
integrality of architecture with the remaining disciplines of art and the fact of
drawing inspiration in new architectural works from the historical achievements
of artists and their previous built projects.

| Content: | 45-minute long weekly lectures over the course of a single semester for a period
|          | of 15 consecutive weeks. The lectures are delivered twice during the course of a
|          | week for the first and second half of a year's students. Below is a detailed
|          | thematic scope of the lectures in chronological order: prehistoric art, the art of
|          | ancient Egypt and Mesopotamia, Aegean art, ancient art: ancient Greece and
|          | Rome, early Christian and Byzantine art, Merovingian and Carolingian art, early
|          | Medieval art, late Medieval art, the art of the Renaissance and Mannerism, the
|          | art of the Baroque and Rococo, the art of Classicism, the art of the Romantic
|          | period, the art of the turn of the nineteenth and twentieth centuries, modern art,
|          | contemporary art. |

| Assessment: | *Attendance |

### CLASSES/SEMINAR:

| Objectives: | The seminar is meant to make students involved in the subject so that they will
|             | actively participate in classes. Students will work in two-person teams. They are
|             | required to deliver a 30-minute presentation elaborating on the subject
|             | discussed during lectures. The structure of the work, its factuality, originality and
|             | form of presentation are assessed. The presentation is to be preceded by
|             | consultations with the teacher and must be approved along with the
|             | bibliographic material presented by the student. The presentation is an impulse
|             | for further discussion that takes place during the next part of the class. Students
|             | will be encouraged to present selected problems in a creative and original
|             | manner. It is important to gain knowledge about artistic phenomena which fit in
|             | with the cultural, social, political and ideological background of a given period. |

| Content: | Students select presentation subjects from a pool of subjects that were prepared
|          | beforehand by the module instructor. Students have the right to propose their
|          | own subject under the condition that it is approved by the module instructor. The
|          | subjects cover all aspects of art, including music, theatre, cinematography,
|          | posters, applied art, literature, etc. Below is a list of examples of subjects
|          | selected by students for presentation in the 2016/2017 academic year.

|          | Canon in the art of ancient Egypt, art of the Amarna period, Architectural relief in
|          | the art of ancient Mesopotamia, Architecture and urban planning in ancient
### Objectives:
The goal of the module is familiarising students with the basics of the history of the artistic activity and human civilisational development. The basic disciplines of art that are being discussed - architecture, sculpture, painting, music or elements of literature or technological achievements - are shown against a historical, cultural, social, political and ideological background.

### Content:
The scope of the material of the module includes a review of issues regarding the history of the arts and culture, discussed chronologically from the ancient period to contemporary times.

### Assessment:
*Attendance*
The goal of the classes is for students to achieve a degree of knowledge that will enable them to freely navigate the subject of the module.

| Content: | The students are each required to give a 30-minute presentation, with the subjects of the presentation being proposed by students and subjected to approval by the module instructor. The presentations will be assessed in terms of its structure, factuality, originality, presentation skill and discussion. Each presentation is to be preceded by consultations with course staff. The presentation is meant to be an impulse for a general discussion, it is recommended that students present the selected subjects in a creative and original manner. A one-time field trip is proposed as a part of the seminar (in the year 2016/2017 one of the course meetings took place at the Museum of the Royal Castle on Wawel Hill). The students visited the royal cathedral, the chambers and the archaeological and architectural preserves: the basilica of St. Gereon and "Lost Wawel". |
| Assessment: | *Attendance, activity, participation in discussions, presentation |

A-2

INSTITUTE OF ARCHITECTURAL DESIGN A-2
Institute Director: Prof. Maciej Złowodzki, D.Sc. Ph.D. Arch.

A-21 Chair of the Architecture of Places of Work and Recreation
Chairman: Prof. Maciej Złowodzki D.Sc. Ph.D. Arch.
31-155 Kraków, ul. Warszawska 24, pok. 206
Tel. (+48) 12 628 2448

A-21 Katedra Architektury Miejsc Pracy i Rekreacji
Chairman: Prof. D.Sc. Ph.D. Arch. Maciej Złowodzki

ARCHITECTURAL THEORY AND AESTHETICS TEAM
Director: Piotr Winskowski Ph.D. Arch.

1. Angelika Lasiewicz-Sych Ph.D. Arch.

SPORTS AND RECREATION ARCHITECTURE TEAM
Director: Andrzej Wiszowaty Ph.D. Arch.

**Objectives:**  
The transfer of knowledge regarding basic terms and concepts regarding the reception (perception) of architecture and its influence on the shaping of people's behaviour and the relations of the man-environment type. Preparing a student for making informed design decisions that take into account the humanist character of architecture, especially including the needs of its users, as well as for the anticipation of the social consequences of design decisions.

**Content:**

1. Introduction to the field of the psychology of architecture. Basic terms and concepts.
2. The problem of qualitative survey studies. Observations of human behaviour, observations of physical traces, analysis of plans, archival research, surveys. Discussing the objectives, techniques and criteria of studies.
3. The problem of the perception of form and space in architecture. Concepts from the sphere of cognitive psychology: the perception of form, "environmental" perception, cognitive maps and orientation. Location theories.
4. The problem of territorialism in architectural design. Private space, primary and secondary territories (threshold spaces). Spatial syntax - the social potential of architectural and urban space.
5. Psychological concepts of architectural space. Theory of safe space. Human needs within an architectural environment. The problem of social ties and identification with a place in architectural design.

**Assessment:**  
*Attendance, participation in discussions, writing an essay on a theoretical or empirical subject (experiment), essay presentation*
II-C-1919 TEORIA I ESTETYKA ARCHITEKTURY NAJNOWSZEJ

THEORY AND AESTHETICS OF CONTEMPORARY ARCHITECTURE

Director: Piotr Winskowski PhD. Arch.
Number of hours: 15
ECTS credits: 2
Format: Seminar

Objectives:
Introduction to a critical approach to architecture, understood as a spatial record of the state of a culture, both in the artistic and non-artistic sense. Expanding the tools used in performing analyses of the built environment to feature aesthetic categories in the context of the phenomena of globalisation and mass culture, post-industrial civilisation, cultural and historical policies. Allowing students to develop skills in the verbalisation and problematisation of spatial phenomena, making use of literature, obtaining comparison, valorisation and synthesis of information coming from different sources.

Content:
High-tech architecture: from the radicalisation of modernist models to archetypes of traditional cultures - a formal and semiotic evolution over the course of the increase in the accessibility of technical products among successive generations. Architecture as a spatial record of globalisation, "glocalisation" and commercialisation of culture, as well as spatial efforts that are a testament to the resistance against these phenomena. Elements of architectural theory after post-structuralism, deconstructivism and a fascination with virtual spaces: "the spatial turn", "the performative turn", neurosciences and the aesthetic conceptualisation of experiences (including the experience of space), another wave of environmental perspectives. Site visit and study of a selected structure on-site.

Format:
*Attendance, participating in discussions, presentation.

I-C-3 SEM 7 MZ – ERGONOMIA I BHP W ARCHITEKTURZE - ERGONOMICS AND HEALTH AND SAFETY IN ARCHITECTURE

Director: prof. dr hab. inż. arch. Maciej ZŁOWODZKI
Number of hours: 15
ECTS credits: 1
Format: Lecture

LECTURE:

Objectives:
The goal of the course is broadening the students' knowledge regarding the subject of ergonomics and health and safety regulations in the process of architectural design. The listeners should become familiarised with the main literature on ergonomics, research centres, their profile and the research that
they conduct, in addition to information about where information regarding the knowledge of man that is required during professional work can be found. The listeners should become familiarised with ergonomic and environmental guidelines in regards to the shaping of the environment of human activity. Listeners should become familiar with the basic indications drawn from accident science. They should gain knowledge about the structures and legal basis for the operation of the State Workspace Inspectorate, the Health and Safety Inspectorate and the State Sanitary and Epidemiological Inspectorate. The future engineers should gain a humanocentric point of view and a conviction that knowledge of man is the leading factor in technology and the shaping of the environment of human activity.

Content: The series of lectures covers the following subjects:
- The genesis of the knowledge of man and the foundations of ergonomics and health and safety regulations.
- The goals set before the discipline of ergonomics during various periods and the scope of its research field.
- The disciplines that co-create ergonomics as a part of comprehensive science.
- The definitions of ergonomics. The role and place of ergonomics in highly developed societies.
- The concept of homeostasis, as well as that of physical and psychological well-being in human activity.
- Corrective ergonomics and conceptual ergonomics.
- The concept of macroergonomics. The relations between ergonomics and economics.
- Ergonomics organisations, research centres, literature and other published works on the subject, national and international conferences.
- Elements of static, dynamic and ergonomic anthropometry. Methods of their implementation and use in design.
- Elements of general axiology.
- Theories on human developmental needs. Aspects of globalisation in interpersonal relations. Elements of psychology and sociology in work. Axiological and ethical problems in architecture.
- The shaping of the environment of human activity: natural and artificial lighting, functional and preferred colours, the influence of colours, sound volume and noise, the climate of interiors, the advantages and disadvantages of various methods of heating buildings and interiors, artificial climate versus HVAC installations.
- The problem of the so-called sick building syndrome.
- Physical and emotional load placed on people during work. Load measurement, acceptable values, legal and normative aspects. Aspects of physical regeneration, rest, work breaks and sleep.
- Ergonomics in architecture. Scope, position, contemporary body of work, perspectives.
- Architectural methods of balancing the technologisation and uniformisation of the environment: regionalism, vernacularism, environmental aspects, reaching to
the heritage of the past, highlighting specificity and dissimilarity. Methods of adapting architecture to the needs of users: addressing, POE, participation. Relations between ergonomics and health and safety regulations.
- Elements of accident science.
- Evaluation of occupational risk and occupational safety management systems.
- Current legal and normative acts regarding Health and Safety and occupational conditions.

Assessment: Examination

I-C-18 SEM 7 MZ – TEORIA PROJEKTOWANIA ARCHITEKTONICZNO-URBANISTYCZNEGO - ARCHITECTURAL AND URBAN DESIGN THEORY

Director: prof. dr hab. inż. arch. Maciej ZŁOWODZKI
Number of hours: 15
ECTS credits: 1
Format: Lecture

LECTURE:

Objectives: Gaining theoretical knowledge from the field of the design of functionally complicated layouts of widely understood workplace architecture, with emphasis on the architecture of industrial and production buildings.

Content: The basic part of the module is a block of lectures describing the principles of designing industrial buildings and their surroundings.

The module discusses architectural aspects viewed from a functional perspective, such as:

The zoning of space, the protection of goods and information, workplace access control. It also covers spatial solutions that are the result of the implementation of health and safety regulations - providing toilets, social rooms, cantinas, restrooms for women, etc.

The lectures are the basis for the development of a conceptual design studio project as a part of module I-C-20 SEM 7 MZ.

Assessment: Examination
# I-C-20 SEM 7 MZ – PROJEKTOWANIE ARCHITEKTONICZNO-URBANISTYCZNE II - URBAN AND ARCHITECTURAL DESIGN II

<table>
<thead>
<tr>
<th>Director:</th>
<th>prof. dr hab. inż. arch. Maciej ZŁOWODZKI</th>
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<tbody>
<tr>
<td>Number of hours:</td>
<td>90</td>
</tr>
<tr>
<td>ECTS credits:</td>
<td>6</td>
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<tr>
<td>Format:</td>
<td>Design studio</td>
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## DESIGN STUDIO/SEMINAR:

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>The gaining of practical knowledge about the design of functionally complex layouts of the widely understood architecture of workplaces, with emphasis on forms of use that feature the creation, processing, distribution and commercialisation of information, considering aspects of mobility, functional flexibility and the possibility of adapting the form of use to the needs of different users.</th>
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<td></td>
<td>The development of skills related to the creating of compositions of mixed-use architectural complexes while taking into account the complicated urban context of a site.</td>
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<td></td>
<td>The development of skills regarding the use of technologically advanced structural and material solutions.</td>
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<tr>
<th>Content:</th>
<th>The module’s fundamental part is the development of a design project of a medium-sized production plant featuring uncomplicated production technology, composed of a production section, storage section, technical and transport section, as well as an administration and staff room section.</th>
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<td></td>
<td>The design includes:</td>
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<td></td>
<td>1. A site development plan, with circulation links (pedestrian circulation, public and car transport, as well as the transport of supplies) with the region of the site and connections to municipal service grids, taking into account the composition of the spatial layout of the surroundings of the site.</td>
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<td></td>
<td>2. A conceptual design of the facility, formulated on the basis of production technology, including horizontal functional zoning and a determinant functional and structural layout, as well as an aesthetic expression of architecture.</td>
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<td></td>
<td>3. Construction detail drawings, referring to the specificity of a technical design.</td>
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## Assessment:

| Attendance, design reviews, tests, project |
I-E-1 MZ – PROJEKTOWANIE DYPLOMOWE - DIPLOMA DESIGN

Director: prof. dr hab. inż. arch. Maciej ZŁOWODZKI
Number of hours: 5
ECTS points: 15
Format: Design studio

DESIGN STUDIO/SEMINAR:

Objectives: Demonstrating proficiency in architectural design, allowing for independent work on thematic problems during the process of the development of a comprehensive conceptual design, expanded to include structural, technical and construction-related aspects.

Content:
Diploma design has the character of individual consultations and reviews, adapted in terms of subject and scope to a selected thematic subject.

The design includes the following scopes: urban (location, circulation and transport links, relations with the surroundings and the spatial context), technological, functional, compositional, aesthetic, technical and structural (structure, modular systems, building services, material solutions).

Assessment: Engineer's project

II-C-6 SEM 2 MZ – TEORIA PROJEKTOWANIA ARCHITEKTONICZNO-URBANISTYCZNEGO - ARCHITECTURAL AND URBAN DESIGN THEORY

Director: prof. dr hab. inż. arch. Maciej ZŁOWODZKI
Number of hours: 15
ECTS credits: 1
Format: Lecture

LECTURE:

Objectives: Gaining theoretical knowledge from the field of the design of functionally complicated layouts of broadly understood workplace architecture, with emphasis on the architecture of structures dedicated to users who work on information processing - office buildings.

Content:
The basic part of the module is a block of lectures describing the principles of designing office buildings and their surroundings.

The course includes architectural aspects viewed from a functional perspective, such as:
The zoning of space, the protection of goods and information, workplace access control. At the same time, spatial solutions that are the result of the implementation of health and safety regulations - providing toilets, social rooms, cantinas, restrooms for women, etc.

The lectures are the basis for the development of a conceptual design studio project as a part of module II-C-7 SEM 2 MZ.

**Assessment:** Examination

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**II-C-7 SEM 2 MZ – PROJEKTOWANIE ARCHITEKTONICZNO-URBANISTYCZNE II - ARCHITECTURAL AND URBAN DESIGN II**

**Director:** prof. dr hab. inż. arch. Maciej ZŁOWODZKI

**Number of hours:** 105

**ECTS credits:** 7

**Format:** Design studio

**DESIGN STUDIO:**

**Objectives:** The gaining of practical knowledge about the design of functionally complex layouts of the broadly understood architecture of workplaces, with emphasis on forms of use that feature the creation, processing, distribution and commercialisation of information, considering aspects of mobility, functional flexibility and the possibility of adapting the form of use to the needs of different users.

The development of skills related to the creating of compositions of mixed-use architectural complexes while taking into account the complicated urban context of a site.

The development of skills regarding the use of technologically advanced structural and material solutions.

**Content:** The module's fundamental part is the development of a design of a medium-sized office building featuring a high advancement and standard of use. Apart from an office section, the design needs to include a generally accessible, commercial area, a gastronomic area, an administrative area and an area featuring a conference centre. The design includes:

1. A site development plan, with circulation links (pedestrian circulation, public and car transport, as well as the transport of supplies) with the region of the site and connections to municipal service grids, taking into account the composition of the spatial layout of the surroundings of the site.
<table>
<thead>
<tr>
<th>2. A conceptual design of the office building, including horizontal functional zoning and a determinant functional and structural layout, as well as an aesthetic expression of architecture.</th>
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</thead>
<tbody>
<tr>
<td>3. Construction detail drawings, referring to the specificity of a technical design.</td>
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</table>

**Assessment:**
Attendance, reviews, tests, project

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### II-C-16 SEM 2 MZ – SEMINARIUM SPECJALISTYCZNE - SPECIALIST SEMINAR

**Director:** prof. dr hab. inż. arch. Maciej ŻŁOWODZKI

**Number of hours:** 49

**ECTS credits:** 7

**Format:** Seminar

### SEMINAR:

**Objectives:**

The gaining of practical knowledge about the design of functionally complex layouts of the broadly understood architecture of workplaces, with emphasis on forms of use that feature the creation, processing, distribution and commercialisation of information, considering aspects of mobility, functional flexibility and the possibility of adapting the form of use to the needs of different users.

The development of skills related to the creating of compositions of mixed-use architectural complexes while taking into account the complicated urban context of a site.

The development of skills regarding the use of technologically advanced structural and material solutions.

**Content:**

The seminar constitutes a preparatory stage - the initial phase of the development of a student's Master's project. The students should:

- define technological, functional, contextual, site-related scopes, as well as the theoretical aspects of the conceptual design that they will develop,

- identify and gather comparative material consisting of a set of built projects and designs, both domestic and foreign, that are analogous to the subject of the diploma thesis,

- develop synthetic documentation in the form of initial sketches and spatial composition variants of the subject of the Master's project.

**Assessment:** Reviews, test, Master’s project
I-C-16 WPROWADZENIE DO TEORII PROJEKTOWANIA ARCHITEKTONICZNO-URBANISTYCZNEGO

INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN THEORY

SEM. I

Director: dr hab. inż. arch. Marcin Charciarek
Number of hours: 15
ECTS credits: 4
Format: Lecture

LECTURE:

Objectives: The transfer of basic knowledge regarding:
Goal 1 - initial familiarisation of students with matters of architectural form, especially with composition using elementary geometric shapes
Goal 2 - transferring basic knowledge about architectural and urban composition
Goal 3 - transferring basic knowledge about matters associated with functionality, technology and ergonomics
Goal 4 - transferring basic knowledge regarding universal design

Content: The subject of the lectures is associated with matters of form and architectural composition, theory of colours, the history of architectural ideas, matters associated with the programme, ergonomics and presentation of an architectural design.
The lectures tie in with the subject of design the design studio: Subject I: Tomb. Elementary composition; Subject II: Pavilion in a city park.

Subject of lectures:

**Subject 1**: 1. Elementary architecture - examples and models; 2. Tomb - the elementary character of meanings; 3. Light in religious architecture; 4. Facade, floor plan, cross-section - the language of architecture; 5. Axonometric view - definitions, examples, the requirements of the presentation of an architectural space; 6. Drawn Architecture. The presentation of an architectural idea;


Assessment: Examination

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**I-C-16 WPROWADZENIE DO TEORII PROJEKTOWANIA ARCHITEKTURO-O-URBANISTYCZNEGO**

**INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN THEORY**

SEM. II

Director: dr hab. inż. arch. Marcin Charciarek

Number of hours: 15

ECTS credits: 4

Format: Lecture

**LECTURE:**

**Objectives:**

The transfer of basic knowledge regarding:

Goal 1 - initial familiarisation of students with matters of architectural form, especially with composition using elementary geometric shapes

Goal 2 - transferring basic knowledge about architectural and urban composition

Goal 3 - transferring basic knowledge about matters associated with functionality, technology and ergonomics

Goal 4 - transferring basic knowledge regarding universal design

**Content:**

The subject of the lectures is associated with matters of form and architectural composition, the theory of colours, matters associated with the programme, construction technique, ergonomics and presentation of an architectural design.
### Subject of lectures:

### Assessment:
Examination

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### I-C-17 WProwadzenie do projektowania architektoniczno-urbanistycznego
**Introduction to Architectural and Urban Design**

**Sem. I**

**Director:** dr hab. inż. arch. Marcin Charciarek  
**Number of hours:** 120  
**ECTS credits:** 8  
**Format:** Design studio

### Design Studio:

**Objectives:**
- The transfer of basic knowledge about:  
  - the fundamental principles of design and composition in architecture and urban design,  
  - the development of an architectural and urban conceptual design featuring a low degree of complexity,  
  - the presentation of an architectural and urban conceptual design using various different tools,  
  - the skills necessary to defend one's design solutions and participate in a discussion

**Content:**

**Subject I:** Tomb. Elementary composition

Design task: Given a theoretical site that is 6x6 metres in size, the student is to design a tomb, an architectural form that is meant to be used for prayer and contemplation. The structure, constrained by a space that is 4x4x4 metres in size, should be treated as a composition made of a single elementary geometric shape.
1. Task goal: Learning architectural composition: design using basic geometric shapes; learning compositional discipline. All of the designed forms need to fit inside the cubic volume.

We define a form, not a religious denomination. 2. Scope of the work: 2.1. A 70x100 cm sheet (vertical): 1:15 axonometric view as shown on the example, a 1:20 plan, cross-section and frontal facade, drawing layout as shown on sample sheet provided with the subject; 2.2. Technique: hand-drawn axonometric view(permanent drawing, drawn in colour, greyscale or black and white on a white background), the remaining drawings should be either hand-drawn or CAD drawings (0.5 mm thick black lines on a white background).

**SUBJECT II**: Exhibition pavilion in a city park. Elementary composition constrained by a cubic shape. Design task: On the given site located in a city park (Park H. Jordana) design an exhibition pavilion - a small building with an exhibition space. The design, constrained by a space that is 7.2m x 7.2m x 7.2m in size. should be treated as a free elementary composition designed within the space of a cube. 1. Design programme: 1.1. The pavilion is meant to be used throughout the entire year. The building, which is not to have an underground level, should have a maximum of two storeys (a mezzanine is acceptable). Maximum useable floor area is 70 m². The building should include an exhibition space and a room for an exhibition staff worker, a storage space, a toilet and building services. 1.2. The architectural form of the pavilion, its structural system (walls, load-bearing columns, amenities - after consultations with the design group instructor). 1.3. Structure: monolithic, steel or masonry. 2. Task goal: Learning architectural composition; design using elementary geometric shapes; learning compositional discipline. 3. Scope of the work: 1:50 floor plans of all levels of the pavilion, including furnishings and equipment, along with the designed surroundings, 1:50 cross-section, 1:50 facade of choice, a 1:50 model made of grey cardboard (3 mm thick) on a 35x35 cm base, an author’s work file containing the textual part of the design (1 A4 page) and materials about the design (photocopies of inspirations, sketches, details, quotes). 4. Design presentation: 70x70 cm sheets of white carton; all drawings made using CAD software or hand-drawn using a black and white presentation technique (0.5 mm line thickness), walls on the floor plans and cross-section should be solid black; layout of the drawings should comply with the provided template; the model should be made out of grey cardboard or painted grey.

**Assessment:** Designs, reviews, active participation in classes (individual and group consultations)
INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN
SEM. II

Director:  dr hab. inż. arch. Marcin Charciarek
Number of hours:  120
ECTS credits:  8
Format:  Design studio

DESIGN STUDIO:

Objectives:  The transfer of basic knowledge about:
- the fundamental principles of design and composition in architecture and urban design,
- the development of an architectural and urban conceptual design of a low degree of complexity,
- the presentation of an architectural and urban conceptual design using various different tools,
- the skills necessary to defend one's design solutions and participate in a discussion

Design task: On the given site outside of the city, the student is to design a small single-family house meant for weekend and holiday stays. The design of the house should be treated as an unrestricted elementary composition. 1. Building programme: 1.1. Site: outlined with the scope of the design on the attached map, fenced off, with the possibility of access from a local, paved road from the north, featuring building services: water, gas, electricity, sewerage. Site area: 2369 m², terrain incline: 5 %. 1.2. Parking spaces: a minimum of two parking spaces. 1.3. House: without a basement, maximum of three storeys, with a useable floor area of around 120 m² (10 %), covered by a flat roof, with a floor to ceiling height of a minimum of 2,5 m, the level of the ground floor entrance is to be around 30 cm above the level of the surrounding soil, the entrance should be roofed and the area in the direct vicinity of the building should be paved. Functional programme prepared for a family of four. 1.4. Structure: a column and slab system, wall system or mixed. 2. Task goal: Learning how to design single-family houses using the provided architectural composition; learning compositional discipline, 3. Scope of the work: 3.1. Drawings: 1:500 site plan, 1:50 floor plans, 1:50 cross-section, 1:50 elevations, 1:20 detail, 1:50 axonometric view, hand-drawn perspective view. 3.2. File: important sketches, materials associated with the subject (single-family houses, elementary architecture, geometric composition, space in an open plan), photocopies, inspirations, details, quotes; an essay associated with the main subject (7 A4 pages), containing footnotes, with illustrations and ending with a literature reference list; textual part of the design featuring its technical information (3 pages); A3 prints of all the sheets folded to...
**A4 format.** 4. Design presentation: drawings on 70x50 cm sheets, drawn using CAD software or hand-drawn using a black and white technique; the walls on floor plan and cross-section drawings should be solid black; the site plan should feature an outlined and complete site development; floor plans featuring basic furnishings, windows and doors, furniture.

**Assessment:** Design, reviews, active participation in classes (individual and group consultations)

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**II-C-6 WPROWADZENIE DO TEORII PROJEKTOWANIA ARCHITEKTONICZNO-URBANISTYCZNEGO**

**INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN THEORY**

**SEM. II**

Director: dr hab. inż. arch. Marcin Charciarek

Number of hours: 15

ECTS credits: 4

Fomat: Lecture

**LECTURE:**

**Objectives:** The transfer of basic knowledge regarding:

Goal 1. Developing skills in the defining of architecture within the space of a city, the main currents that dominate the shaping of the architecture of modern cities associated with the subject - *Garden city. An elementary composition.*

Goal 2. Developing skills in the designing of architectural and urban composition: - modern ideas and principles of the shaping of the spatial structure of modern cities; modern ideas and principles of the shaping of functional and spatial relations within a modern residential complex; spatial, cultural and natural contexts, motivations and pretexts for the shaping of mutual relations between urban spaces, with particular emphasis on residential architecture.

Goal 3. Developing skills in the design of residential architecture: modern ideas and principles of the design of multi-family residential architecture; - the ideas and principles of composing the space of a modern apartment.

Goal 4. Developing skills involving the principles of the appropriate design of function and the mutual relations between compositional elements of residential architecture complexes (public spaces, semi-public spaces, private spaces, circulation, recreation, greenery) taking into account current legal regulations.

**Content:** The subject of the lectures is associated with matters of architectural form and composition, the theory of colour, matters tied with the programme, construction technology, ergonomics and the presentation of an architectural design.
Lectures are tied in with the subject of the design studio: *Garden city. An elementary composition.*

Subject of lectures:


**II-C-16 A2 SEMINARIUM SPECJALISTYCZNE/SPECIALIST SEMINAR**

**Director:** DR HAB. INŻ ARCH. MARCIN CHARCIAREK  
**Number of hours:** 5  
**ECTS credits:** 15  
**Format:** Design studio

**DESIGN STUDIO:**

**Objectives:**  
Goal 1. The perfection and presentation of the skill to independently solve a design problem by a student, taking into account the principles and design methods that a student has learned, according to current standards of developing Engineer's projects.

Goal 2. Verifying a student's readiness in terms of knowledge, skill and competencies for taking up professional activity and take up Master's studies.

**Content:**  
1. The selection of the topic and site for the diploma design, performing an urban analysis.  
2. Developing a site development plan, featuring solutions regarding urban composition, circulation, site development elements and their mutual connections, employing the principles of composing space while taking into account current regulations and standards.  
3. Architectural conceptual design, functional, spatial, structural and material solutions.
4. Technical solutions, as well as those associated with current regulations and standards, technical conditions, fire safety, safety of use, technical conditions regarding connections to building services, circulation scope, site access.
5. Development of graphical documentation and a presentation of an architectural and urban conceptual design, writing a short academic essay, writing the textual part of the design according to guidelines provided in Construction Law and compliant with requirements set for a design that will be used to apply for a building permit.

### Assessment:
Project defence

**II-E-1 PROJEKTOWANIE DYPLOMOWE A-2/DIPLOMA DESIGN**

**Director:** DR HAB. INŻ ARCH. MARCIN CHARCIAREK
**Number of hours:** 10
**ECTS credits:** 20
**Format:** Design studio

### DESIGN STUDIO:

#### Objectives:

**Goal 1.** The perfection and presentation of the skill to independently solve a design problem by the student, taking into account the learned design patterns and methods, according to current standards of the development of Master's projects.

**Goal 2.** The preparation of the student in terms of knowledge, skills and competencies for taking up professional activity as an architect, as well as taking up PhD. studies.

**Goal 3.** Learning the principles of design on the urban scale while adhering to the principles of urban composition and taking into account contextual conditions by the student. Mastering the skill of performing an urban analysis of a given site and developing design guidelines, as well as formulating design decisions. The skill to develop a design as a whole to the given scales and within the given spatial context, with particular emphasis on problems related to the identity and culture of a place, aesthetic and functional relations, transport systems and sustainable development.

#### Content:

According to the Higher Education Statute of the Cracow University of Technology, specific provisions of the Faculty of Architecture of the Cracow University of Technology and the individual requirements of the supervisor. The subject of the studio is determined individually for each student, in strict reference to the specifics of the design problem.

#### Assessment:
Review, presentation, defence
II-C-16 A2  SEMINARIUM SPECJALISTYCZNE/SPECIALIST SEMINAR

Director:   DR HAB. INŻ ARCH. MARCIN CHARCIAREK
Number of hours:  49
ECTS credits:  8
Format:   Sheet/poster

LECTURE:

Objectives:

Goal 1. The goal of the module is preparation for the Master's project through the selection, analysis and graphical documentation of a spatial pattern occurring in modern architecture.

Goal 2. The goal of the module is the search for the theoretical foundation of a conceptual design.

Goal 3. The goal of the module is the search for a suitable architectural form, structural, technical and material principle in terms of the idea-matter-architecture relation.

Goal 4. The goal of the module is an analysis of functional guidelines associated with the selected subject.

Content:

1. Subject: The search for spatial patterns compliant with the idea-matter-architecture principle.

2. Task: The task involves the finding, analysis and graphical documentation of a single, freely chosen pattern of architecture (spatial pattern), that could serve as the basis for its continuation in a Master's project.

3. Scope: cavalier axonometric view (bottom-up) showing all the storeys of the building and containing all of the key elements of its structure (without furniture), referring to selected floor plans, cross-sections, facades and the site. The drawing is meant to form a basis for an oral presentation of the selected example (idea-matter-architecture). The scale is to be consulted with the supervisor. Graphical presentation: black lines on a white background (0,5 mm and 0,35 mm thick).

1. 100x70cm vertical sheet + written documentation on 5 A4 pages (text, photographs, analysis) with an attached CD containing the entire design (dwg, pdf, jpg, doc.)

Assessment: Presentation

A-24   Division of Public and Service Architecture
Director: Kazimierz Butelski, D.Sc. Ph.D. Arch. Prof. PK
31-155 Kraków, ul. Warszawska 24, pok. 403
Tel. (+48) 12 628 3023

1. Witold Gilewicz Ph.D. Arch.
4. Paweł Żuk Ph.D. Arch.
### I-C-18 TEORIA PROJEKTOWANIA ARCH.-URB / THEORY OF ARCH. AND URBAN DESIGN

**Director:** dr hab. inż. arch. Kazimierz Butelski, prof. PK  
**Number of hours:** 15  
**ECTS credits:** 1  
**Format:** lectures  

<table>
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<th>Lectures:</th>
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| **Objectives:** The cycle of lectures titled "elements of space" is meant to familiarise students with basic spatial solutions employed in public and commercial buildings. The intended goal of these lectures is aiding students in the informed design of public and commercial buildings.  
**Content:** Subject of lectures:  
1. First, I enter - the foreground  
2. Circulation - His Highness, the step  
3. Structure - the function of structure or the structure of function  
4. Envelope  
5. Final presentation  
**Literature:**  
1. Rafael Moneo, Theoretical anxiety and design strategies In the work of eight contemporary architects, MIT Press 2004  
3. Manuel De Landa, A thousand years of nonlinear history Swere Editions-New York, 2000  
4. Kazimierz Butelski, Architecture as a dialog of Cultures, CUT 2017  
**Assessment:** Attendance, participation in a discussion - a conversation with the teacher, reading 1 book from the literature list. |
1. Zbigniew Kupiec – Modern Gdynia  
2. Oskar Niemeyer - Exquisite  
3. Wojciech Obtułowicz - Discovering new  
4. Paris –Source of modernity  
5. Denmark - Coherence and gentleness  
6. Hong Kong - Design as discontinued continuity  
7. Edo - Japan Identity I  
8. From Edo to Osaka - Japan Identity I  
9. Los Angeles i San Francisco – Circulation  
10. Between Chicago and Toronto - East coast  
11. Contemporary architecture of the Arab world  
13. Contemporary architecture of Lebanon  
14. Resume  
15. Guest lecture  

**Literature:**  
5. Rafael Moneo, Theoretical anxiety and design strategies  
   In the work of eight contemporary architects, MIT Press 2004  
6. Alberto Campo Baeza, Principia Architectonica  
   On Architecture, Columbia University Press, Mairea Libros 2013  
7. Manuel De Landa, A thousand years of nonlinear history  
   Swere Editions-New York, 2000  
8. Kazimierz Butelski, Architecture as a dialog of Cultures, PK 2017  

**Format:**  
Attendance, participation in a discussion - a conversation with a module instructor, reading a minimum of 2 books from the literature list.

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**II-C-7 PROJEKTOWANIE ARCH. – URB. / ARCH. AND URBAN DESIGN**

**Director:** dr hab. inż. arch. Kazimierz Butelski, prof. PK  
**Number of hours:** 105  
**ECTS credits:** 7  
**Format:** Design studio  

**Design studio:**  

**Objectives:** Imparting the skills of the architectural and urban design of public buildings featuring a complicated functional programme and high spatial complexity. Imparting the skill to use optimal architectural solutions in reference to the existing cultural environment. Imparting the skill of working in a group and of interdisciplinary cooperation during the process of designing public buildings. Knowledge: the students will be able to independently design a public building with a size of up to 6 000 m², understanding the dependencies between form, structure and function. Skills: the students will become familiar with the principles of architectural composition and apply them in their design, they will
understand and employ structural solutions appropriate to the given scale, they will be able to correctly design the functional layout of a building. Social skills: Students will understand the social and urban planning-related role of public buildings, they will also be able to cooperate as a part of an interdisciplinary team of designers and consultants in order to develop a design of appropriate quality, making use of current knowledge. Skills: The students are being prepared to take up future employment as architects in the design of buildings featuring complex form and function.

Content: In the 2017/2018 academic year the subject of the project will be the Adam Mickiewicz Institute in Kaunas. Kaunas is a bustling city where the influences of many civilisations intertwine with each other. Demonstrating the attractiveness of Polish culture through providing spatial culture of high quality is the basis for the selection of the subject and its location. This is in line with the general assumptions of programmatic content dedicated to the subject of a modern public building, featuring a form of use oriented towards: culture, education, sports, healthcare, administration or the judiciary. The buildings are located in various parts of the city in areas with a strong cultural identity. Students are to prepare a design of a public building with a size of around 6000 m². The basic scale for the considerations is that of 1:200, with other design scales being used in a supplementary manner. A written documentation of the design problem, based on thorough initial research, is a significant part of the project. The entire process of design features the use of a digital model, as well as that of a traditional one, as the basic tool of work.

Assessment: Attendance, assignment, group work, model of the surroundings, individual model, preparing a project, presentation, defence, essay, participation in a discussion, submitting the graphical part of the project (print).

II-C-19 FAKULTET / SPECIAL ELECTIVE CLASSES

Director: dr hab. inż. arch. Kazimierz Butelski, prof. PK
Number of hours: 15
ECTS credits: 2
Format: seminars and student presentations

Seminars and student presentations:

Objectives: Presentation of the process of the design and construction of buildings using prototyping. Familiarising students with modern design methods that ignore the process of preparing documentation - going from a model to a building while ignoring the traditional form of a design. Another important goal is the search for innovation in architecture and ruling out the copying of existing structures. Knowledge: Students will know which advanced CAD modelling and CAM manufacturing tools are used in the development of building prototypes. Social
Skills: Students will know that the development of prototypes is based on a broad range of interdisciplinary knowledge and is the effect of the work of a team of designers and consultants. Students will understand the orchestrating role of architects in this process. Skills: Students will be able to apply prototyping methods in architectural design. Social skills: Students will understand the influence of prototyping on the changes to the current manner of the construction and design of buildings.

### Content:

**1:1 – THE MODERN PROTOTYPE AS A UNIQUE MODEL OF THE BUILDING**

Prototyping as a process of design and implementation on the construction site is still in a preliminary stage. However, the direct implementation of 3D computer models in actual construction is possible. A lot of experiments have shown that robots are more efficient than printers during the final stage of construction. Robots are better because they have no scale limits like printers do. But robots are more expensive than printers and for this reason, we are looking for different strategies on how to use them in a more efficient manner. One of the most popular ideas is to divide a problematic element and create parts for later assembly into a complex form. Enabling the printing of intelligent materials is an interesting and promising direction but scale limits are the same as described above. Through experiments we can observe that prototyping methods combine with traditional ones at different stages of the design and construction process. Following these remarks, we can note that currently only a part of the building can be prototyped. Searching for a relation between construction and the natural environment is currently a vital process. Tools and software as well as materials used during the prototyping process are different but still, the element that plays the most important role is human imagination. That is why we will focus our attention on the education process in order to stimulate creative thinking based on constantly changing knowledge of technology. Conducting study exercises that involve the designing of complex buildings in real conditions seems to be more interesting than on experimental pavilions, because it helps us to come closer to solving real design problems.

### Assessment:

Attendance, essay, preparing a presentation, presentation, defence, participation in discussion
II-C-16 SEMINARIUM SPECJALISTYCZNE / SPECIALIST SEMINAR

Director: dr hab. inż. arch. Kazimierz Butelski, prof. PK
Number of hours: 49
ECTS credits: 8
Format: seminar

Seminar:

Objectives: Visitation of public buildings. Familiarisation with the architecture of the modern period, as well as with the contemporary architecture of Warsaw and Gdynia. Analysis of the dependencies between form, structure and function, as well as of the principles of architectural composition. Familiarising students with the social and urban role of public buildings. Learning the skills of presenting the idea of a design.

Content: Didactic seminar titled: „Warsaw and Gdynia - the faces of modernism in public and commercial buildings”.
Date of the seminar: June 2018
Location of the seminar: Warsaw and Gdynia.
The seminar will feature lectures and the visitation of around 40 modern buildings, with the entirety being summarised during a seminar at the Gdańsk Infobox. The seminar in Gdynia will have an open character and will feature the participation of the city's residents and representatives of the municipal government.

Assessment: Attendance, seminar exercises, presentation, defence, essay, participating in a discussion, visitation of buildings.

I-C-18 TEORIA PROJEKTOWANIA ARCH.-URB / THEORY OF ARCHITECTURAL AND URBAN DESIGN

Director: dr hab. inż. arch. Kazimierz Butelski, prof. PK
Number of hours: 15
ECTS credits: 1
Format: Lecture

LECTURE:

Objectives: The cycle of lectures titled "elements of space" is meant to familiarise students with basic spatial solutions employed in public and commercial buildings. The intended goal of these lectures is aiding students in the informed design of public and commercial buildings.

Content: Subject of lectures:
1. First, I enter - the foreground
2. Circulation - His Highness, the step
### Literature:

1. Rafael Moneo, *Theoretical anxiety and design strategies in the work of eight contemporary architects*, MIT Press 2004
3. Manuel De Landa, *A thousand years of nonlinear history* Swere Editions-New York, 2000

### Assessment:
- Attendance, participation in a discussion - a conversation with the teacher, reading 1 book from the literature list.

### IIC-6 TEORIA PROJEKTOWANIA ARCH.-URB / THEORY OF ARCHITECTURAL AND URBAN DESIGN

**Director:** dr hab. inż. arch. Kazimierz Butelski, prof. PK  
**Number of hours:** 15  
**ECTS credits:** 1  
**Format:** Lecture

### LECTURE:

#### Objectives:
Explaining the influence of culture and of the outstanding creators of modern architecture on the design of public and commercial buildings.

#### Content:
Subject of lectures:
1. Zbigniew Kupiec – Modern Gdynia  
2. Oskar Niemeyer - Exquisite  
3. Wojciech Obtulowicz - Discovering new  
4. Paris –Source of modernity  
5. Denmark - Coherence and gentleness  
6. Hong Kong - Design as a discontinued continuity  
7. Edo - Japan Identity I  
8. From Edo to Osaka - Japan Identity I  
9. Los Angeles and San Francisco – Circulation  
10. Between Chicago and Toronto - East coast  
11. Contemporary architecture of the Arab world  
13. Contemporary architecture of Lebanon  
14. Resume  
15. Guest lecture

#### Literature:
1. Rafael Moneo, Theoretical anxiety and design strategies
   In the work of eight contemporary architects, MIT Press 2004
2. Alberto Campo Baeza, Principia Architectonica
   On Architectue, Columbia University Press, Mairea Libros 2013
3. Manuel De Landa, A thousand years of nonlinear history
   Swere Editions-New York, 2000
4. Kazimierz Butelski, Architecture as a dialog of Cultures
   PK 2017

Assessment: Attendance, participation in a discussion - conversation with a teacher, reading at least 2 books from the literature list.

### II-C-19 FAKULTET / SPECIAL ELECTIVE CLASSES

**Director:** dr hab. inż. arch. Kazimierz Butelski, prof. PK
**Number of hours:** 15
**ECTS credits:** 2
**Format:** seminars and presentations prepared by students

**Objectives:**
Presentation of the process of the design and construction of buildings as the result of prototyping. Familiarising students with modern design methods ignoring the documentation development stage - going from a model to a finished building while ignoring the traditional form of a design. Another key element is the search for new elements in architecture and excluding the copying of existing buildings. Knowledge: A student knows what advanced design (CAD) and production (CAM) methods are used in the development of building prototypes. Social skills: A student knows that the development of prototypes is based on wide-ranging interdisciplinary knowledge and is the result of the cooperation of a team of designers and consultants. The student understands the orchestrating role of the architect in this process. Skills: The student can use prototyping methods in architectural design. Social skills: The student understands the influence of prototyping on changes in the current manner of the construction and design of buildings.

**Content:**

**Assessment:** Attendance, essay, preparing a presentation, delivering a presentation, defence, participating in a discussion
I-C-18 TEORIA PROJ. ARCH. URB. II THEORY OF ARCHITECTURAL AND URBAN DESIGN II

Director: dr hab. inż. arch. Magdalena Kozień-Woźniak
Number of hours: 15
ECTS points: 2
Format: Lecture

LECTURE:

Objectives: Transfer of theoretical knowledge regarding the design of public buildings with particular emphasis on the architecture of cultural spaces.

Content: Lectures on the subject of the theory of the design of entertainment, exhibition and library buildings.

Assessment: *Attendance, test

I-C-20 PROJEKTOWANIE ARCH. URB. II ARCHITECTURAL AND URBAN DESIGN II

Director: dr hab. inż. arch. Magdalena Kozień-Woźniak
Number of hours: 90
ECTS credits: 8
Format: Design studio

DESIGN STUDIO:

Objectives: Teaching students the principles of the design of public buildings that are small in size and are located in a small town. Gaining the skills necessary to perform an analysis of the urban context, the relations between buildings and public spaces. The deliberate use of elements of architectural and urban composition. The solving of functional programmes with a low degree of complexity and the use of current legal regulations in regards to design.

Content: The students’ task is to develop a design of a public building that has a low degree of complexity.

Work will be divided into the following stages throughout the semester:

Field trip, making a model of the surroundings of the site in 4-person groups, the development of a conceptual design sketch, detailed development of the conceptual design, including a 1:500 site development plan, 1:200 floor plans, cross-sections, elevations, a hand-drawn perspective view of the designed building, a 1:20 technical and structural detail of the entirety of an external wall. All the design solutions will be presented at the end of the semester in the form
of a presentation - defence of the work on the forum of the course group. An exhibition of student designs is planned at the end of the semester.

Assessment: *Attendance, working model, essay, presentation, architectural conceptual design, defence

Studia II stopnia w języku angielskim/ Master's Degree Studies in

Architecture in English

II-C-6 THEORY OF ARCHITECTURAL AND URBAN DESIGN

Director: dr hab. inż. arch. Magdalena Kozień-Woźniak
Number of hours: 15
ECTS credits: 1
Format: Lecture

LECTURE:

Objectives: Transfer of theoretical knowledge regarding the design of public buildings with particular emphasis on the architecture of cultural spaces.

Content: Lectures on the subject of the theory of buildings of culture associated with the problem of the design being developed during design classes.

Assessment: *Attendance, oral examination as a part of the defence of the design

II-C-7 ARCH. AND URB. DESIGN – PUBLIC USE BUILDINGS

Director: dr hab. inż. arch. Magdalena Kozień-Woźniak
Number of hours: 105
ECTS credits: 7
Format: Design studio

DESIGN STUDIO:

Objectives: Teaching students the principles of designing public buildings featuring a complex functional programme that are located in a big city. Gaining the skills necessary for performing analyses of complex urban contexts, as well as the relations between buildings and public spaces. The deliberate use of elements of architectural and urban composition. The solving of functional programmes with a high degree of complexity, with the use of current legal regulations in terms of design.
The task of the students is to develop a design of a cultural building. Work throughout the semester is to be divided into the following stages:

The making of a model of the site's surroundings in 5-person groups, writing an essay, making an individual draft model, the development of a conceptual design sketch, detailed development of the conceptual design, including a 1:500 site development plan, 1:200 floor plans, cross-sections, elevations, a hand-drawn perspective view of the designed building and a 1:20 technical and structural detail of the entirety of an external wall. All the design solutions will be presented at the end of the semester in the form of a presentation - defence of the work on the forum of the course group. An exhibition of the students' designs is planned at the end of the semester.

Format: * Attendance, draft model, essay, presentation, architectural conceptual design, defence
occupy the entire space of the theoretical module or a part of it; no element of
the building can be located outside of this space. The scope of the design also
includes a concept of its placement, presented on a plan of the site.

Fourth semester. The subject of the module is a HOUSE. Students are to design
a single-family, freestanding residential building located on the given site. In the
vicinity of the city, at a distance that frees it from the inconvenience of the
crowds, traffic, unforeseen meetings or common curiosity, yet allowing the
preservation of one’s urban citizenship and enabling participation in the life of
the urban community - a HOUSE is to be built. The site was carefully selected.
The area assigned for the construction of the house and a park covers a small
hill with a gentle, sunny slope, with observable differences in terrain height, in
addition to being of considerable size. Nearby are agricultural areas; farther still
is a small river. The site offers a view of both the neighbourhood and of what is
in the distance, until the time that the trees in the park will start to provide
enough intimacy, discretely sheltering the house from unforeseeable
neighbours. Road and pedestrian access are available via the road in the lowest
area of the site. The site has access to the water, power, telecommunications
and gas grids, there is no access to sewerage or to the heating grid.

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<th>Design project</th>
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I-C-20 ARCHITECTURAL AND URBAN DESIGN I

Director: dr hab. inż. arch. Tomasz Kozłowski, prof. PK
Number of hours: 90
ECTS credits: 8.00
Format: Design studio

DESIGN STUDIO:

Objectives: The module’s subject is the architectural and urban design of residential buildings in terms of: the shaping of a multi-family residential building with a basic residential form of use in specific urban conditions; functional solutions - those of the apartments, of the building, its surroundings; the architectural composition of a multi-family residential building within a city; design methods; the use of technical solutions on the architectural and urban scale; the presentation and development of an architectural and urban design; the theoretical justification of the urban and architectural conceptual design and the written documentation of the design.

Content: The goal of the semester-long classes is the development of a design of a multi-family residential building on a given site along with a service and recreational section. The given site plan shows the mandatory building line which also outlines the size of the building. The site of the residential complex is located in the centre
of Krakow. The shaping of the site of the design, the architectural form of the building and its detailed functional programme is a part of the design task. Number of storeys: a maximum of 6, maximum height to the top of the parapet walls above the uppermost storey: 21,00 m.

| Assessment: | Design project |

II-C-7 ARCHITECTURAL AND URBAN DESIGN

Director: dr hab. inż. arch. Tomasz Kozłowski, prof. PK
Number of hours: 105
ECTS credits: 7.00
Format: Design studio and lecture

DESIGN STUDIO AND LECTURE:

| Objectives: | The subject of the module is the architectural and urban design of residential architecture in terms of: the basics of the shaping of a complex of multi-family residential buildings, regarding the basics of the residential form of use within the given spatial urban conditions; functional solutions - regarding apartments, the multi-family residential building, its surroundings and the residential buildings complex; the architectural composition of a multi-family residential building within a city; the method of design; the use of technical solutions on the architectural and urban scale; the presentation and development of an architectural and urban design; the theoretical justification of the urban and architectural conceptual design and its written documentation. |
| Content: | The goal of the term project is the design of a complex of multi-family residential buildings on a given site in Krakow, along with a service and recreational section. The provided site map underlay presents the mandatory building lines that constrain the complex that is to be designed. The area of the residential complex is located in Krakow, outside of the zone of the influence of historical architecture. The location is a pretext for the search for model solutions. The shaping of the site of the design, the architectural form of buildings, their detailed functional programme is a part of the design task. Number of storeys per building: 4-5, more in exceptional cases (when justified) |
| Assessment: | Design, defence |
II-C-16 Specialist Seminar

Director: dr hab. inż. arch. Tomasz Kozłowski, prof. PK
Number of hours: 49
ECTS credits: 6.00
Format: Design studio

DESIGN STUDIO:

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>The search for the lost record of the idea of the city, the monument or the house within the global museum of imagination - the spatial reconstruction of an image, application in real space.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>- The students are to design an &quot;architectural object&quot; representing the idea of architectural space, an object that can be turned into a specific design, in a selected fragment of the city.</td>
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<tr>
<td></td>
<td>- The shape of the architectural object - the idea of the City, Monument or House, should be found in the Global Museum of Imagination. The lost idea can be found in the world of art or among common objects.</td>
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<tr>
<td></td>
<td>- The idea that has been found should be transformed into a spatial reconstruction of an image. The reconstruction should be applied in a real world location.</td>
</tr>
</tbody>
</table>

PRESENTATION

- Sheet 1: the plan of the "architectural object". 1:500 scale or a different one if justified. Permanent graphical technique of choice, making it possible to reproduce the sheet; exhibition presentation style. The drawing should present the idea of the solution on the plan of the city.

- Sheet 2: axonometric drawing, a spatial reconstruction of an image. No scale. Permanent graphical technique: acrylic, oil or fixed distemper; exhibition presentation style. The drawing should present the idea behind the spatial solution.

Assessment: Design
I-E-1 Diploma Design

Director: dr hab. inż. arch. Tomasz Kozłowski, prof. PK
Number of hours: 5
ECTS credits: 15.00
Format: Design studio

**DESIGN STUDIO:**

| Objectives: | The perfection and presentation of the skill to independently solve design problems, taking into account the learned design patterns and methods, according to current standards of the development of Engineer's projects. The preparation of the student in terms of knowledge, skills and competence for the purposes of taking up professional activity as an engineer, as well as taking up Master's studies. |
| Content: | Selection of the subject of the Engineer's project, selection of the site, urban and spatial analysis. Site development plan, solutions in terms of urban composition, circulation, elements of site development and their mutual relations with the use of the principles of composing space and taking into account current regulations and standards. Architectural conceptual design, functional, spatial, structural and material solutions. Technical solutions and those associated with current regulations and standards, technical conditions, fire safety, safety of use. Graphical presentation of the architectural and urban conceptual design, the writing of a short academic essay, writing technical documentation. |
| Assessment: | Design |

II-E-1 Diploma Design

Director: dr hab. inż. arch. Tomasz Kozłowski, prof. PK
Number of hours: 10
ECTS credits: 20.00
Format: Design studio

**DESIGN STUDIO:**

<p>| Objectives: | The perfection and presentation of the skill to independently solve design problems, taking into account the learned design patterns and methods, according to current standards of the development of Master's projects. The preparation of the student in terms of knowledge, skills and competence for the purposes of taking up professional activity as an architect, as well as taking up PhD. studies. |</p>
<table>
<thead>
<tr>
<th>Content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of the subject of the Master’s project, selection of the site, urban and spatial analysis. Preparing a site development plan, as well as of design solutions in terms of urban composition, circulation, elements of site development and their mutual relations with the use of the principles of composing space and taking into account current regulations and standards. Development of an architectural conceptual design, including functional, spatial, structural and material solutions. Technical solutions and those associated with current regulations and standards, technical conditions, fire safety, safety of use. Interior design - room furnishings in connection with functional and spatial solutions. Graphical presentation of the architectural and urban conceptual design, the writing of a short academic essay, writing written technical documentation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment:</th>
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<tbody>
<tr>
<td>Design project</td>
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</tbody>
</table>

### A-3

**INSTYTUT PROJEKTOWANIA URBANISTYCZNEGO A-3**  
Institute Director: Magdalena Jagiello-Kowalczyk, D.Sc. Ph.D. Arch. Prof. PK

A-31 Chair of Urban Composition  
30-084 Kraków, ul. Podchorążych 1, pok. 1.18  
Tel. (+48) 12 628 2430  
Strona WWW: zku.pk.edu.pl

4. Ph.D. Arch. Beata Malinowska-Petelenz  
5. Ph.D. Arch. Agnieszka Matusik  
7. Ph.D. Arch. Mariusz Twardowski  
8. Ph.D. Arch. Wojciech Wicher  
I-C-19 PROJEKTOWANIE ARCHITEKTONICZNO – URBANISTYCZNE I / ARCHITECTURAL AND URBAN DESIGN I

Director: prof. dr hab. inż. arch. Jacek Gyurkovich
Number of hours: 90 [6 hours per week]
ECTS points: 8
Format: Design classes

DESIGN CLASSES:

| Objectives | Mastering basic principles of design and composition in architecture and urban design, particularly regarding the knowledge and skills associated with the development of architectural conceptual designs of multi-family residential buildings in the context of an urban location. The participants of the course will learn the principles of establishing desired relations between the elements that shape space: the significance of cultural and spatial context for the identity of a place and the creation of aesthetic and functional qualities. Mastering the knowledge and skill of shaping proper relations between a multi-family residential building and its immediate surroundings; the relation of a building with urban public spaces and the common spaces used by residents, semi-private spaces and external private spaces tied with apartments. Mastering the knowledge and skills of shaping proper relations between the functional and spatial elements of apartments and buildings, the ties between structural and material solutions (building services, modern pro-environmental solutions) and architectural form and the comfort of living of the residents. Familiarising students with current legal regulations regarding the problem of the design task that is to be solved during the module. The development of aesthetic sensitivity and creativeness in the shaping of a modern architectural form. The development of skills associated with the presentation of a design and the justification and defence of one's conceptual design proposal. |
|---------------------------------------------------------------|
| Content: | The factual programme of the module covers architectural and urban planning-related problems associated with the shaping of high-density forms of residence within a city. The subject of the design work developed as a part of the course is a conceptual design of a building or a complex of several buildings featuring a residential form of use, as well as the necessary services that are the result of the conditions of the location and the concept of the development of the site. The project featured in the design constitutes a complementation of existing urban tissue, it is tied with a specific urban, spatial, functional and cultural context. The design can also focus on the problem of the regeneration of areas subjected to urban decay and the adaptation of post-industrial buildings to feature a residential form of use (lofts). The design includes the development of the site and an urban public space tied with the location: paved pedestrian and road surfaces, parking spaces, biologically active areas, greenery, street furniture, lighting, surface runoff drainage. The basis for the formulation of the functional programme of this project and determining the spatial and functional relations with the immediate |
surroundings is an urban analysis (1:5000 and 1:2000 diagrams, 1:500 plans, sketches, photographs, panoramas and comments by the author), covering the area of the site and its immediate surroundings which form a mutual impact zone. The design includes the preparation of a 1:500 site development plan, a conceptual design of a selected building featuring 1:100 drawings (floor plans, cross-sections, elevations), as well as 1:20 technical details in the form of a cross-section through the external envelope of a building, allowing for the presentation of the technical and material solutions used in the design, constituting an original conceptual design of an architectural detail. The adoption of technical, structural and material solutions that are appropriate to the formal and functional features of the conceptual design is a significant element of the project. Mandatory illustrations of the architectural conceptual design include a hand-drawn perspective view (on a separate 50 x 70 cm sheet), a physical mock-up of the structure (1:100) as well as digital visualisations. An essay (a minimum of 20 000 characters, A4 pages, Arial 11 size font with a standard margin and a 1,5 distance between verses + illustrations) confirming individual studies and a familiarity with modern tendencies in the shaping of residential architecture, as well as a written description of the employed conceptual design solutions (minimum of 16 000 characters, A4 page size, Arial 11 size font with a standard margin and 1,5 point distance between verses) + illustrations (design sheets on A4 pages) is an integral part of the design.

| Assessment                      | Active participation in classes, tests and interim reviews, the presentation and defence of a design project |

I-E-1  PROJEKTOWANIE DYPLOMOWE / DIPLOMA DESIGN

Director: prof. dr hab. inż. arch. Jacek Gyurkovich
Number of hours: 5
ECTS credits: 15
Format: Design studio

DESIGN STUDIO:

| Objectives                      | The consolidation of knowledge regarding architectural design and the ability to apply this knowledge in the process of design. The consolidation of knowledge regarding the significance of the spatial, functional, cultural, social and natural context in the making of design decisions and of the skill to apply this knowledge in the process of design. The consolidation of skills regarding the application of knowledge regarding the history and theory of architecture and urban design, the fine arts, construction and construction technologies, building physics and technical and construction regulations, as well as those of construction law, the economics and methodology of the organisation of the process of design the development process. The consolidation of the ability to develop architectural designs that meet aesthetic, functional and technical requirements, as well as... |
Form and context. As a part of the diploma design module, the student is to develop a conceptual design of a building located in a given urban spatial and cultural context, along with the development of the immediate surroundings of both the building's site and the associated public spaces of the city. The basis for the formulation of the functional programme of this project and the determining of the spatial and functional relations with its immediate surroundings is an analysis of the conditions of the location of the area - an urban analysis (1:5000, 1:2000, 1:500 diagrams and plans, sketches, photographs, panoramas and comments by the author), covering the area of the site and its immediate surroundings, which form the zone of mutual impact. The design includes the development of a 1:500 site development plan, a conceptual design of a selected building featuring 1:100 drawings (floor plans, cross-sections, facades), as well as 1:20 technical details in the form of a cross-section through the external envelope of the building, allowing for the presentation of the technical and material solutions used in the design, constituting an original conceptual design of an architectural detail. One of the design's significant elements is the adoption of technical, structural and material solutions that are appropriate to the formal and functional features of the concept. Mandatory illustrations of the architectural conceptual design include a hand-drawn perspective view (on a separate 50 x 70 cm sheet), a physical mock-up of the structure (1:100) as well as digital visualisations. An essay (a minimum of 20 000 characters, A4 pages, Arial 11 size font with a standard margin and 1,5 distance between verses + illustrations), confirming individual studies and a familiarity with modern tendencies in the shaping of residential architecture, as well as a description of the employed conceptual design solutions (minimum of 16 000 characters, A4 page size, Arial 11 size font with a standard margin and 1,5 point distance between verses) + illustrations (design sheets on A4 pages) is an integral part of the design. Diploma design is a module during which a student must demonstrate the skill to make design decisions independently and apply the knowledge gained during his studies. The supervisor is a guide, an advisor, a consultant. The goal of the course is the verification of the knowledge and skills of a student regarding architectural and urban design, sensitivity in the shaping of relations with surroundings, understanding the significance of the extant qualities of the cultural and natural environment to the identity of a place. The design project makes it possible to verify familiarity with legal regulations and procedures associated with the design and the carrying out of projects covered by the programme of the module and prepare the student to take up further studies.
### I-C-21 TEORIA PROJEKTOWANIA URBANISTYCZNEGO / THEORY OF URBAN DESIGN

**Director:** prof. dr hab. inż. arch. Jacek Gyurkovich  
**Number of hours:** 15 [1 hour per week]  
**ECTS credits:** 2  
**Format:** Design studio

### DESIGN STUDIO:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Expanding the knowledge of students regarding the theory of urban design and urban composition. Transferring theoretical knowledge about modern problems associated with the processes of the transformation of the areas of city centres of European cities in accordance with the idea of sustainable development and the shaping of a city's public spaces. The transfer of basic knowledge regarding the shaping of urban complexes within city centres. Stimulating the sensitivity of students and directing it to understanding the cultural conditions of the structure of architectural forms and urban complexes and respecting existing cultural conditions. Expanding the knowledge of students through the study of subject literature in order to develop a more comprehensive understanding of the transformations occurring in urban planning against the background of changing conditions and needs of urban communities.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>The cycle of lectures on the theory of the design of city centres is devoted to modern processes of the transformation of city centres and the shaping of the urban spaces of cities. Definitions of basic concepts such as that of the city, the city centre, public space, transformation, regeneration and urban composition are discussed on examples of modern built projects of urban complexes located in the centres of European cities. Modern solutions regarding systems of transport accessibility, public and individual transport, parking, pedestrian circulation and bike paths, public greenery and recreation zones are presented. Students are being given the opportunity to learn the principles of the shaping of the relations between modern structures and urban complexes and the extant cultural, spatial and natural context. A significant element of the lectures is the presentation of modern aesthetic tendencies in the shaping of architectural form, the mutual relations between buildings and the space that they define, the programme of the furnishing, colour, texture and form of the urban detail of public spaces.</td>
</tr>
<tr>
<td>Assessment</td>
<td>Participation in lectures, positive result of an oral examination.</td>
</tr>
</tbody>
</table>
DESIGN STUDIO:

| Objectives | Mastering the basic principles of design and composition in urban planning, particularly regarding the knowledge and skills related with the development of a conceptual design of an urban public space in the context of extant development. Mastery of skills of performing an urban analysis of an area, allowing a student to familiarise themselves with the conditions of a site (functional, spatial, cultural, environmental conditions), as well as the relations with the city and the areas in the vicinity of the site. The analysis constitutes a basis for the development of guidelines for the site and making design decisions. The development of principles of establishing desired relations between the elements that make up a space; understanding the significance of the cultural and spatial context to the identity of a place and the creation of new aesthetic and functional values; the significance of the role of the natural environment, transport and circulation systems, as well as of the attractiveness of a functional programme to the quality of the central areas of a city, shaped in accordance with the idea of sustainable development. Familiarising students with current legal regulations regarding the design and carrying out of projects covered by the programme of the module. |
| Content | The Urban design of city centres is a module devoted to problems of the delimitation and transformation of selected areas of a city, which, due to their location within the spatial structure of a particular city, play or could play a significant role as centres that group services-related and public forms of use. During the process of historical development cities are subjected to constant processes of transformation, associated either with the development or decline of a city, economic or socio-political transformation, the necessity of replacing degraded urban tissue or of the adaptation to constantly changing needs and requirements. In European culture, cities have developed a characteristic model associated with a hierarchic structure of areas and spaces. Public spaces play a significant role in the centres of cities. Cities owe the legibility of their spatial structure largely to public spaces. The public buildings that accompany them - landmarks or strong forms - play an important role in the composition of urban space and have substantial significance in the shaping of the identity of places and the identification of the diverse sequences of urban tissue. The revitalisation of the areas of former city centres or the transformation of areas of cities subjected to urban decay is currently one of the most topical and urgent tasks in most European cities. The factual programme of the module covers urban planning-related issues. The subject of the project that is to be prepared as a part of the module is a conceptual design of the regeneration of a city's public space, either |
located in an area suffering from urban decay and subjected to a process of transformation or of the shaping of a new public space in areas of the territorial expansion of a city. The project is to feature a conceptual design of the necessary transformation of the transport network on the site and within the zone that is functionally connected to the site, public and individual transport, a parking system, bike paths and pedestrian zones and paths, as well as the shaping of the paved and biologically active surfaces (greenery), the composition of tall greenery, the surface runoff drainage system, lighting, street furniture. The project also includes a spatial (compositional) and programmatic (functional) conceptual design of the complementation or shaping of mixed-use buildings accompanying the designed public space in the context of existing development. The basis for the formulation of programmatic and spatial guidelines for the site and the determination of its spatial and functional relations is the analysis of the conditions of the location of the site - an urban analysis (1:5000, 1:2000 diagrams, 1:500 plans, sketches, photographs, panoramas and comments by the author), covering the area of the site and its immediate surroundings that forms the mutual impact zone. As a part of the course, the students are to develop a given site in the context of the city. The design is to feature the development of a 1:2000 regulation plan, a 1:1000 urban conceptual design, a 1:500 site development plan for a selected fragment of the area along with characteristic cross-sections and panoramas, elevations, ground floor and basement floor plans or complementary floor plans drawn to as scale of 1:500, a visualisation and a drawing of an urban detail. A hand-drawn perspective view (on a separate 50 x 70 cm sheet) is a mandatory form of illustrating the architectural conceptual design, as is a physical mock-up of the structure (1:500), as well as digital visualisations. Another integral element of the design project is an essay - a description of the conceptual design (minimum of 35 000 characters).

Assessment: Active participation in classes, tests and interim reviews, presentation and defence of a student's project.

II-C-7 PROJEKTOWANIE ARCHITEKTONICZNO-URBANISTYCZNE /ARCHITECTURAL AND URBAN DESIGN

Director: prof. dr hab. inż. arch. Jacek Gyurkovich
Number of hours: 105 [7 hours per week]
ECTS points: 7
Format: Design studio

DESIGN STUDIO:

Objectives: The goal of the module is the mastering the principles of design and composition in architecture and urban design, with particular emphasis on the knowledge and skills associated with the development of an architectural and urban conceptual design of a complex of multi-family residential buildings located in the context of
an urban location, featuring accompanying elements of the functional programme that are necessary to provide a currently expected quality of the urban housing environment. The participants of the course will learn the principles of establishing desired relations between the elements that shape space: the significance of cultural and spatial context to the identity of a place and the creation of new aesthetic values, the role of the natural environment, as well as of the urban public space in the quality of the urban housing environment. The second goal of the module is familiarising students with current legal regulations associated with the design and carrying out of the project associated with the programme of the module. The third goal of the module is the development of the students' creativity in regards to the shaping of a housing environment that features high aesthetic and functional qualities, shaped in accordance with the idea of sustainable development.

Content:
The factual programme of the module covers the architectural and urban planning-related problems associated with the shaping of the modern housing environment in city centres. The subject of the project prepared as a part of the module is a spatial and programmatic urban conceptual design of a complex of multi-family residential building in the spatial, functional and cultural context of existing urban development, in an area of the territorial expansion of a city or in areas suffering from urban decay that are subjected to a process of transformation. The basis for the formulation of programmatic and spatial guidelines for the site and the determination of spatial and functional relations is the analysis of the conditions of the location of the site - an urban analysis (1:5000, 1:2000 diagrams 1:500 plans, sketches, photographs, panoramas and comments by the author), covering the area of the site and its immediate surroundings that forms the mutual impact zone. The project includes the development of an urban programmatic and spatial conceptual design of a complex of multi-family residential buildings with a surface area of around 10-15 ha. The urban conceptual design requires the establishment of appropriate relations between the area of the site and the city and the immediately surrounding areas, including circulation-related, functional and spatial relations, the formulation of the composition of the residential buildings and the resulting functional programme of accompanying service buildings (buildings on dedicated sites: schools, kindergartens, healthcare facilities, telecommunications facilities and structures, cultural facilities, administration buildings, commercial services etc.), vehicle, bike and pedestrian circulation, recreation and sports facilities, composition of tall greenery. The urban conceptual design needs to be developed using a 1:1000 scale on a site survey map, as a compositional sheet (top-bottom view with shadows), supplemented by necessary diagrams illustrating the adopted solutions (functional scheme, vehicular and pedestrian circulation scheme, scheme of the structure of the natural environment, recreational and tall greenery zones). An overlay for the compositional sheet must be prepared, featuring the elements of the development of a site, drawn to the same scale. A 1:500 sheet showing a selected fragment of the complex is to constitute a conceptual design of the site’s development associated with semi-private spaces of the
surroundings of the mixed-use residential and service buildings as well as the external public spaces. The design of a selected multi-family residential building (1:200 floor plans, cross-sections, elevations - application of the knowledge gained during Engineer's studies) is a mandatory element of the illustration of the architectural conceptual design, in addition to digital visualisations. A 1:1000 or 1:500 physical mock-up of the urban design is also mandatory. An integral element of the course project is an essay (a minimum of 20 000 characters, A4 pages, Arial 11 size font with a standard margin and 1,5 point distance between verses + illustrations), constituting proof of individual studies and familiarity with modern tendencies in the shaping of residential architecture, as well as a written description of the conceptual solutions employed (minimum of 16 000 characters, A4 pages, Arial 11 size font with a standard margin and 1,5 distance between verses + illustrations - design sheets in A4 format)

| Assessment | Active participation in classes, tests and interim reviews, presentation and defence of a student's project. |

II-C-16 SEMINARIUM SPECJALISTYCZNE / SPECIALIST SEMINAR

| Director: | prof. dr hab. inż. arch. Jacek Gyrkovich |
| Number of hours: | 49 [3,2 hours per week] |
| ECTS credits: | 6 |
| Format: | Design studio |

DESIGN STUDIO:

| Objectives: | The complementation of the knowledge of students in regards to basic principles of design and composition in architecture and urban design, with particular emphasis placed on knowledge associated with the development of architectural and urban conceptual designs of mixed-use building complexes featuring diverse functions in the context of an urban location and featuring the necessary - from the point of view of adopted guidelines - functional programme. Expanding knowledge regarding the significance of cultural and spatial context to the identity of a place and the creation of new aesthetic properties, as well as the role of urban public spaces and the natural environment in the sustainable shaping of the spaces of cities. |
| | Familiarising students with the functional and spatial programmes of basic architectural and urban complexes within the structure of modern cities. Selection of the subject and specific site of the location of a Master's project and the performing of an urban analysis in regards to the planned design. Preparing an initial functional programme for the design task that is to be performed during the diploma design module. |
| Content: | Thematic block 1: Lectures about urban composition, the principles of shaping public spaces, the theory of strong form, orientation within the space of a city and urban morphology. Thematic block 2: The selection of the subject of the Master's project. Familiarisation with functional and spatial programmes of architectural and urban complexes. Preparing a paper on one of the selected subjects by students: 1. THE HOUSING ENVIRONMENT: 1.1. The apartment, the residential building, housing estates. 1.2. - Education services: schools, kindergartens. 1.3. - Services: retail, administration, culture, healthcare. 1.4. - A church with a parish building. 1.5 - Public transport, individual transport, parking facilities. 1.5. - Public, semi-private and private spaces: recreational areas. 2. CITY: 2.1. Centre, inner city, peripheries 2.2. Public transport in a city - stations, stops. 2.3 - Parking facilities. 2.4. - Pedestrian paths, bike paths. 2.5. - Public spaces: squares, green squares, parks. 2.6. - The public space: a commercial street within a city 2.7. - Big box stores with complementary forms of use. 2.8 Complexes of administrative and office buildings. 2.10. The cultural facility. 2.11. The complex of multi-functional halls. 2.12. - The museum, complexes of cultural buildings. 2.13 - The library, mediatheque, 2.14. - Complexes of sports buildings and facilities, 2.15 - The hotel, complexes of hotel buildings. 2.16 - University buildings within a city - Complexes of university buildings (campus). 2.17. - Hospitals within a city. 2.18 - Gastronomic buildings and complexes within a city. Paper consultations, preparing a PP presentation, writing an essay associated with the Master's project. Scope: individual PP presentation in the form of a lecture at a seminar and as a print-out of the presentation (in black and white) along with a text that makes it possible to perceive the most significant elements of the entire lecture. The development of a functional programme. An essay - an analysis of three selected designs or projects, either from Poland or from abroad, associated with the subject of the Master's project, along with conclusions - a description of the urban conceptual design with the author's commentary and evaluation (minimum of 20 000 characters, A4 pages, Arial 11 size font with a standard margin and 1,5 space between verses + illustrations), constituting proof of individual studies and familiarity with the subject. A CD containing all the basic materials for a RIBA accreditation portfolio. Thematic block 3: Selection of the site of the Master's project. Preparing materials and performing an urban analysis. Consultations. Scope: urban analysis, graphical presentation of the urban analysis: 1:25 000, 1:10 000, 1:5 000, 1:2 000; graphical presentation of the conclusions or ideological guidelines. CD containing all of the presented materials. Materials for a RIBA portfolio. |
| Assessment: | Active participation in classes, multimedia presentation of the individually researched subject regarding modern architecture and urban planning. |
I-E-1  PROJEKTOWANIE DYPLOMOWE / DIPLOMA DESIGN

Director:  prof. dr hab. inż. arch. Jacek Gyurkovich
Number of hours:  10
ECTS credits:  20
Format:  Design studio

DESIGN STUDIO:

Objectives:  Demonstrating the skills necessary to perform an analysis of urban context and using it as a basis for the formulation of a list of design problems and the preparation of a comprehensive design proposal that takes into account the spatial, cultural, natural and social context, location-specific conditions, technical conditions, as well as transport and functional links. The goal of the module is to verify the knowledge and skills of an Engineer's candidate and their readiness for future independent professional work. The Engineer's project developed during the module is an occasion to stimulate a candidate's creativity, verify their skills in the application of knowledge, analytical research work and the synthesising of their thoughts in the formulation of conceptual theoretical, spatial and programmatic solutions, as well as practical skills, their architectural sensitivity and the effectiveness of their concept of the presentation of their own work, including argumentation and the ability to defend their own ideas.

Verification of the mastery of the skill of defining programmatic, spatial and functional guidelines and the development of original concepts of solving the encountered problems in accordance with current regulations and modern tendencies, as well as requirements associated with the subject matter of the project, while using the latest technical and material solutions.

Demonstrating the ability to deliberately make use of the principles and methods of shaping an architectural form/urban structure and an understanding of formal, spatial, cultural and functional links. The development of creativity and architectural (visual) sensitivity in the shaping of architecture and spatial layouts featuring high compositional and functional qualities, in compliance with current knowledge and in a manner that is respectful of extant cultural and environmental (natural, social) qualities, placing the proposed solutions in the latest stylistic and aesthetic concepts (originality, innovation, harmony, beauty).

The goal of the module is to expand specialist knowledge and skills associated with the selected problems of a Master's project. Providing proof of one’s skill in the presentation of a Master's project featuring an appropriate scope and graphical and written/factual form, the skill of justifying and defending the solutions that are presented. Achieving an awareness of the level of one's knowledge and skills and understanding the need of the constant improvement of one's competencies. Preparation for professional work, including taking up PhD. studies.
Master's level diploma design is a module that finalises one's studies, during which the student - a Master's candidate - should demonstrate independent decision-making skills in regards to design and the knowledge gained throughout the course that is necessary to take up professional work and undertake further, continuous self-education. The supervisor is meant to guide the candidate across the meanders of thought, aiding in making proper choices and, through factual discussion, stimulating inquisitiveness and the mutual discovery of paths that lead to truth. The Master's candidates who sign up for developing their Master's project at the Chair of Urban Composition can develop the design of their dreams after discussing its subject with their supervisor or pick a subject associated with the research performed at the Chair in cooperation with local governments. The subject of a Master's project can also be that of a national or international competition for students. Master's projects are developed under the care of a supervisor, or with the participation of supplementary supervisors - adjuncts from the Chair of Urban Composition or researchers from foreign universities - as a part of the university's international cooperation. The subject matter of Master's projects covers broadly understood matters of urban composition, the shaping and transforming of urban complexes, designing architecture within the spatial, cultural and functional context of the built environment.

A Master's project is to be composed sections focused on urban design and architecture. Identifying site-specific contextual conditions through urban analyses and design solutions on urban design-related scales constitutes the basis for the creation of the architectural form of a selected building. The Creed of the Chair of Urban Composition fully applies to Master's projects just as it applies to module projects prepared at the Chair: the goal of teaching the art and skill of design is preparing students, future architects, to independently make proper design decisions in terms of the shaping of architecture and the open space that is associated with it in accordance with the needs of individuals and groups.

Any architect who participates in a project development process should be aware that space is a common good, which is why they need to remember the need to shape the environment of human life in accordance with the modern philosophy of sustainable development while ensuring the implementation of modern aesthetic, functional and technical requirements. Architecture is a form of applied art and beauty is its indispensible attribute, while its basic duty is functionality. Architecture is always built in a specific spatial, social and cultural context.

Man is a social entity. The creative continuation of tradition and the striving for the preservation of appropriate mutual relations between existing and designed buildings and the spaces that they create during the transformation of existing urban tissue or the establishing of new urban territories is the basis for the harmonious development of urban space. the form and scope of the factual elaboration of the project is determined individually in consultation with the supervisor. Minimum requirements in this regard are defined in the Master's
project guidelines of the Faculty of Architecture of the Cracow University of Technology.

Assessment: Active participation in classes, discussions and consultations, the presentation and defence of a student's project

A-32 Chair of Housing Environment
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2. Piotr Celewicz Ph.D. Arch.
3. Patrycja Haupt Ph.D. Arch.
8. Elżbieta Kusińska Ph.D. Arch.
9. Maria Lubelska Ph.D. Arch.
13. Paweł Tor M.Sc. Arch.

I-C-17 WPROWADZENIE DO PROJEKTOWANIA ARCHITEKTONICZNO-URBANISTYCZNEGO - INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN


Number of hours: 120 (sem. 01) + 120 (sem. 02)
ECTS credits: 8 + 8
Format: Design studio

DESIGN STUDIO:

Objectives:
- Mastering knowledge regarding the implementation of theory in design practice
- Obtaining the skill of developing a functional and spatial conceptual design of a simple design task
- Obtaining the skill of preparing a design presentation using various tools, including drawings, models and written documentation
- Initiating the obtaining of the skills necessary to defend one's design proposals and participate in discussions.
<table>
<thead>
<tr>
<th>Content:</th>
<th><strong>Thematic block - Form:</strong></th>
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<tbody>
<tr>
<td></td>
<td>- introduction to the subject of architectural and urban design through exercises associated with the shaping of space using solids, rhythm and surfaces;</td>
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<tr>
<td></td>
<td>- design of a spatial composition featuring a given form of use, located within the space of a city, using theoretical knowledge of the manner of constructing forms and the shaping of spatial composition, with references to the human scale (model, drawings - floor plans, cross-sections, perspective views, written documentation)</td>
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<td><strong>Thematic block - Function:</strong></td>
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<tr>
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<td>- introduction to the design of the interior of a building in connection with the external zone;</td>
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<td>- the conceptual design of the arrangement of an interior through the practical use of principles of ergonomics, using modern design products currently available on the market (a project in the form of a competition, with the use of the products of lighting manufacturers, e.g. Foscarini, Diesel, furniture - e.g. Vitra or glass by AGC Glass, with specialist consultations) (drawings - floor plans, cross-sections, perspective views, written documentation)</td>
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<td><strong>Thematic block - Urban composition:</strong></td>
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<tr>
<td></td>
<td>- introduction to the design of urban spaces;</td>
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<td></td>
<td>- a functional and spatial conceptual design of a mixed-use urban interior - a public space with a social or pedestrian-dominant function. Including: urban analysis, relations diagram, arrangement diagram, urban detail (drawings - urban plan, cross-section, spatial drawings, model, written documentation)</td>
</tr>
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<td><strong>Thematic block - Sustainable design:</strong></td>
</tr>
<tr>
<td></td>
<td>- introduction to sustainable design;</td>
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<tr>
<td></td>
<td>- conceptual design of a small building featuring sustainable solutions, showing the relations between architecture and nature (e.g. rainwater collection, alternative energy sources, local materials and recycling, green roofs and walls, etc.) (model, drawings necessary to communicate the conceptual design, including a floor plan and cross-sections, schemes and diagrams of sustainable solutions, written documentation)</td>
</tr>
<tr>
<td>Assessment:</td>
<td><em>Attendance, reviews and presentations, project</em></td>
</tr>
</tbody>
</table>
**LECTURE:**

| Objective:                          | Transfer of theoretical knowledge regarding the structure of architectural and urban forms and compositions; |
|                                   | Transfer of knowledge regarding principles of sustainable design; |
|                                   | Transfer of knowledge regarding the structure of the functional programme of a small structure and urban complex; |
|                                   | Transfer of knowledge regarding the identification and assessment of relations within the built environment. |

| Content:                           | Three thematic blocks: |
|                                   | 1. The design of urban spaces; the structure of a city and the methods of perceiving it; urban analysis - its objective, method and tools; Hierarchisation of urban space - public space, social space, private space; Design of square-type spaces; The contact between a building and its surroundings - elements of circulation. |
|                                   | 2. Sustainable design; Architecture versus Nature; Sustainable building; Modern architects and the principles of sustainable design; Outline of the history of garden design; Regeneration - examples of built projects. |
|                                   | 3. Introduction to the shaping of the housing environment; The status and role of residential buildings within the structure of a city; Environmentally friendly urban complexes; The housing environment of the twenty-first century |

| Assessment:                       | *Attendance, oral examination |
### DESIGN STUDIO:

| Objectives | Obtaining skills related to: 1) the development of an architectural and urban design of a comprehensive complex of single-family residential buildings in a given location 2) the performing of a multi-aspect urban analysis in order to formulate a proper functional and spatial conceptual design of said residential complex, 3) familiarising students with the principles of urban composition, 4) consistently preparing a project across various urban and architectural scales, 5) the development of an urban and architectural design of a detached single-family house within an urban and open landscape 6) developing critical evaluation and rational argumentation skills as the basis for decision-making in the process of urban design 7) sustainable design 8) the design of dense compact complexes of single-family residential buildings and low-rise residential buildings with a high floor area ratio, featuring various types and sizes of buildings, based on current technical conditions, 9) the shaping of the housing environment in terms of ecology across the scales of the complex and the individual home in accordance with the needs of their users 10) designing an energy efficient, economic, open house 11) the search for regional cultural inspirations and utilising them in modern urban and architectural solutions, 12) the coherence of newly designed architecture with the landscape, 13) the use of modern construction technologies, including the use of energy from renewable sources, 14) the graphical and verbal presentation of functional and spatial solutions |
| Content: | Third semester - An architectural and urban design titled "Design of Single-family Residential Complexes" featuring the design task named "Social space in a place of residence". It includes: a site analysis along with conceptual design sketches, - the development of a 1:500 urban conceptual design of a single-family residential complex along with an urban design-related visualisation of the complex - the development of a 1:200 urban and architectural design of a selected fragment of the designed built-up area for around 20 to 40 houses, including visualisations. The architectural design covers: - an architectural conceptual design of residential buildings in a dense layout (terraced, atrial, grouped, semi-collective) - design of a row of houses featuring the floor plans of all storeys, distinct cross-sections, 1:100 facades - presenting the idea of the design using a hand-drawn perspective view, - developing a technical detail drawing in the form of a 1:20 |
vertical cross-section of an external wall of a building (from the foundation to the roof)

- the principles of the operation of the technologies used in the design (in the form of schemes and diagrams), the written part of the design presenting the idea and design solutions includes - an essay on the subject of the problem being solved - technical documentation of the design, CD with a digital version of the design.

Fourth semester - An architectural and urban design titled "Design of Single-family Residential Architecture" featuring the design task "House within the Landscape". It includes: 1:500, 1:250, 1:200 drawings of the placement of the building within its complex, 1:50 floor plans of all storeys, including the plan of the ground floor featuring elements of the site development plan, 1:50 characteristic cross-section, 1:50 elevations with the landscape in the background, a selected fragment of the arrangement of the interior (in the form of a visualisation); perspective, axonometric view or 1:50 floor plan, visualisation (perspective view) of the building within the landscape, a hand-drawn perspective view on a separate sheet, written part of the design explaining the idea behind the architectural solution and the structural and material solutions featured in the design (10 pages), CD with a digital version of the project.

Assessment: *Attendance, reviews and presentations, project

I-C-18 TEORIA I ZASADY PROJEKTOWANIA URBANISTYCZNO- ARCHITEKTONICZNEGO. PROJEKTOWANIE ARCHITEKTURY MIESZKANIOWEJ I. PROJEKTOWANIE JEDNORODZINNYCH ZESPOLÓW MIESZKANIOWYCH - THEORY AND PRINCIPLES OF ARCHITECTURAL AND URBAN DESIGN. DESIGN OF RESIDENTIAL ARCHITECTURE I. DESIGN OF SINGLE-FAMILY RESIDENTIAL COMPLEXES

Direction: prof. dr hab. inż. arch. Waclaw Seruga
Number of hours: 15
ECTS credits: 2,0
Format: Lecture

LECTURE:

| Objective | Subject: Theory and principles of architectural and urban design. Design of residential architecture I. Design of single-family residential complexes. Familiarising students with the theoretical foundations of the architectural and urban design of single-family residential complexes. Familiarising students with matters of the architectural and urban composition of single-family residential complexes. |
Objective 2: Learning the principles of the construction of architectural form and various views on aesthetics (as a general theory of the beauty of works of art and natural objects).

Objective 3: Familiarising the students with the principles of shaping a sustainable housing environment (energy efficiency and ecology). Objective 4: Familiarising students with modern tendencies in the shaping of the urban and architectural designs of single-family residential complexes of the Netherlands, Denmark, Norway, Sweden, the United Kingdom, Germany, France, Austria, Australia and the United States.

Content: Programmatic content associated with architectural and urban design includes the following types of topics: function and space, the programme, circulation, municipal engineering - building services, basics of sustainable design.

Assessment: *Attendance, oral examination
What is architecture? Definitions.
The Architect, the profession, its tools and mission.
Modern architecture - stories.
Theory of the structure of architectural forms.
The Housing Environment and the typologies of residential buildings.
Universal design.
Urban composition theory.
Orientation within a space.
The space of the city and architecture - stories.

Assessment: Attendance, examination

I-C-17 WPROWADZENIE DO PROJEKTOWANIA ARCH.URB./INTRODUCTION TO ARCHITECTURAL AND URBAN DESIGN

Director: dr hab. inż. arch. Anna Agata Kantarek, prof. PK
Number of hours: 120 +120
ECTS credits: 8 + 8

DESIGN STUDIO:

Objectives:  
- Mastering the basic principles of design and composition in architecture and urban planning.
- The development of an architectural and urban conceptual design as a part of a simple design project along with its graphical presentation.
- The selection of the appropriate forms of the presentation of a project, adequate to the given guidelines and conceptual design.
- Defence of design solutions and participation in a discussion.

Content:  
First semester
Thematic block 1
The study of spatial structure
Introduction to the subject of architectural and urban design in the form of a design studio involving shaping space using solids, surfaces, lines and rhythmic elements.
Task: A composition of a set of solids, surfaces, lines and rhythmic elements on the surface of a rectangle, developed using a selection of elements in given colours.
Scope: 50 x 70 cm sheets featuring a 1:2 floor plan and two views, as well as a perspective view of the entirety of the composition from a standing person's perspective given the altered scale of the composition, a model, a written description, conceptual sketches, hand-drawn perspective view drawn during a scheduled test on an A3 sheet, as well as a CD with the documentation.
Thematic block 2
Design of an apartment, a fragment of a single-family house or a studio.
| Assessment: | Attendance, project |

Introduction to the subject of designing an apartment or a studio along with its spatial structure; functional layout and a detailed interior arrangement.

**Task:** Design of an apartment, of a fragment of a single-family house or a studio in the given external relations (cardinal directions, external circulation system, vertical circulation).

**Scope:** 50 x 70 cm sheets with 1:100 floor plans and a cross-section of the apartment, a 1:25 floor plan and wall views of a selected room, as well as a hand-drawn perspective view, conceptual sketches, hand-drawn perspective view drawn during a scheduled test on an A3 sheet, as well as a CD with the documentation.

Second semester

**Thematic block 3**

Design of the spatial and functional arrangement of a given public space.

Introduction to the subject associated with composition on the scale of an urban space. **Task:** Redevelopment of an existing public space. The project begins with a surveying of the space/sketches, photographs, notes/ and the performing of selected elements of an urban analysis (diagrams showing circulation, function and the composition of form). Afterwards, the students are to formulate guidelines for changes, as well as initial design proposals and the overall ideas of their projects. During the final phase the students are to fully develop the project.

**Scope:** 50 x 70 cm sheets showing the urban analysis, design guidelines and the design itself in the form of a 1:500 site plan and the views of all the frontages of the urban space, with a selected fragment being drawn to a lower scale (floor plan, elevations, material solutions) along with an axonometric view of the project (from a bird’s eye view); an essay - an analysis of two selected domestic and foreign built projects, associated with the subject of the design task, featuring formulated conclusions, a description of their urban conceptual design with commentary by the author and an evaluation constituting proof of having performed individual studies and of the students' familiarity with modern tendencies in the shaping of public spaces, a written description of the design, a sketchbook and a CD with a digital version of the documentation.
### Design Studio:

#### Objectives:

- Mastery of the basic principles of design and composition in architecture and urban design, particularly regarding knowledge and skills associated with the development of an architectural conceptual design of a multi-family residential building in the context of an urban location.

- Mastery of knowledge and skills in the shaping of the appropriate relations between a multi-family residential building and its immediate surroundings: the relations between a building and urban public spaces, as well as semi-private spaces jointly used by residents, in addition to the external private spaces associated with apartments.

- Mastering the knowledge and skills of the shaping of appropriate functional and spatial relations between the elements of an apartment and those of a building, relations between structural, material and technical solutions (building services, modern pro-environmental solutions) with architectural form and the comfort of living of residents.

- Familiarising students with current legal regulations regarding the subject of the design task of the studio. The development of aesthetic sensitivity and creativity in the shaping of a modern architectural form.

- The development of design presentation skills and those related to communicating and defending one's conceptual design.

#### Content:

The factual programme of the module involves architectural and urban design-related subjects associated with the shaping of high-density residential forms within a city. The subject of the design studio project is the development of a conceptual design of a building or that of a complex of several residential buildings, in addition to a conceptual site development plan. The project is meant to constitute a complementation of existing urban tissue and should be associated with a defined urban spatial, functional and cultural context. The project can also feature the problem of the urban regeneration of areas of urban decay and the adaptation of post-industrial buildings to residential forms of use.

The project includes a development plan of the site and of the urban public spaces associated with its location. The basis for the formulation of the functional programme of this project and determining its spatial and functional relations with...
its immediate surroundings is an analysis of site-specific conditions - an urban analysis (1:5000, 1:2000 diagrams, 1:500 plans, sketches, photographs, panoramas and original commentary) covering the site and its immediate surroundings that form the zone of mutual influence.

The projects includes the preparation of a 1:500 site development plan, a 1:100 conceptual design of a selected building (floor plans, cross-sections, elevations), as well as technical details in the form of a 1:20 cross-section through the external envelope of a building that makes it possible to present structural and material solutions. The adoption of technical, structural and material solutions that are appropriate to the formal and functional aspects of the design is a significant element of the project. A hand-drawn perspective view (on a separate 50 x 70 cm sheet) constitutes a mandatory form of illustrating the design, in addition to a physical model (1:100) and digital visualisations. Another key element of the project is a written essay constituting proof of individual studies and familiarity with modern tendencies in the shaping of residential architecture, as well as a written description of the adopted conceptual design solutions, in addition to the project's documentation on a CD.

Assessment: Attendance, project, defence

I-C-22 PROJEKTOWANIE URBANISTYCZNE/URBAN DESIGN

Director: dr hab. inż. arch. Anna Agata Kantarek, prof. PK
Number of hours: 90
ECTS credits: 8
Format: Design studio

DESIGN STUDIO:

Objectives:
- Teaching students the principles of design on the urban scale while adhering to principles of urban composition and taking into account contextual conditions.
- Mastering the skill of performing the urban analysis of a given area, developing design guidelines and preparing design decisions.
- Developing the skill to prepare the entirety of the project across given scales and in a given spatial context, taking into account problems of the identity and culture of a place, as well as aesthetic and functional relations, circulation systems and sustainable development.
- Developing the skill of applying current legal regulations concerning design.

Content: The Urban design of city centres is a module aimed at presenting a cohesive conceptual design of the transformation of a centrally located area of a city that is significant in terms of content and context. The design proposal prepared during the course of the module should focus both on the external conditions of a given
site/compositional, circulation and functional relations with the rest of the city and the neighbourhood/ as well as internal ones /forms of use, structure, form, relations between public and private spaces/. Students select one of the given sites /most often fragments of Krakow/ for their projects.

The module features the following stages of work:
- urban analysis, design guidelines, formulating general design decisions (drawn to a scale of 1:5 000, 1:10 000 and higher) - diagrams, plans, as well as accompanying perspective sketches - preparation of a regulation plan - 1:2000 - preparing a conceptual urban design - 1:2000 - preparing a fragment of the design to a scale of 1:500 (ground floor and basement plans, characteristic urban cross-sections, panoramas and elevations, visualisations covering the subjects presented in 1:2000 and 1:5000, as well as a hand-drawn perspective view /50 x 70 cm/. The scope also includes an essay, a written description of the design according to the provided guidelines and a CD containing a digital version of the documentation.

Assessment: Attendance, project, defence

I-E-1 PROJEKTOWANIE DYPLOMOWE/DIPLOMA DESIGN

Director: dr hab. inż. arch. Anna Agata Kantarek, prof. PK
Number of hours: 5
ECTS credits: 15
Format: Design studio

DESIGN STUDIO:

Objectives:
- The perfecting and presentation of the skills involving the independent solving design problems, taking into account known principles and methods of design, according to the accepted standards of developing Engineer's projects.
- Verifying a student's preparation in terms of knowledge, skills and competencies to take up professional employment as a design assistant and to take up Master's studies.

Content:
Thematic block 1
Development of an Engineer's project on the basis of a selected design module project, according to the following options:
1. designing a fragment of a residential complex according to a design module project with elements of a technical design /basic scales from 1:500 to 1:100 plus details/
2. developing alternative solutions of a fragment of a residential complex on a site used in a design studio module /basic scales from 1:500 to 1:100 plus details/
3. the development of a design of a new building, featuring a form of use of the student's choice in freely chosen conditions or according to a studio module project /basic scales from 1:500 to 1:100 plus details/
Scope: 100 x 70 cm sheets with a full set of drawings /respectively: urban analysis, 1:2000 to 1:500 urban design, regulation plan, visualisations of the entire complex, 1:200 to 1:100 floor plans, cross-sections, elevations, visualisations and a hand-drawn perspective view, structural detail/, written description of the design, conceptual sketches; CD containing a digital version of the documentation.
Thematic block 2
Writing an essay
Scope: written essay - an analysis of at least three domestic or foreign built projects of choice, associated with the subject of the project, featuring conclusions and a description of the urban planning concepts of said projects with original commentary and assessment; CD containing a digital version of the design.

Assessment: Attendance, project, defence

II-C-7 PROJEKTOWANIE ARCHITEKTONICZNO-URBANISTYCZNE/ARCHITECTURAL AND URBAN DESIGN

Director: dr hab. inż. arch. Anna Agata Kantarek, prof. PK
Number of hours: 105
ECTS credits: 7
Format: design studio

DESIGN STUDIO:

Objectives:
- Mastery of the basic principles of design and composition in architecture and urban design, with particular emphasis on:
- knowledge and skills associated with the development of an architectural and urban conceptual design of a complex of multi-family residential buildings, located in the context of an urban location, featuring elements of a functional programme accompanying residential buildings that is necessary to provide a currently desired quality of the urban housing environment.
- Learning the principles of establishing desired relations between space-shaping elements: the significance of:
- the cultural and spatial context to the identity of a place and the creation of new aesthetic qualities, the role of the natural environment and of the urban public space in the quality of the urban housing environment.
- Gaining familiarity with current legal regulations and procedures associated with the design and construction of the project featured in the module through practice.
Another goal of the module is to develop the creativity of students in terms of shaping of a housing environment that features high aesthetic and functional qualities, in accordance with the idea of sustainable development.

Content:
The module's factual programme covers the architectural and urban design-related subjects associated with the shaping of a modern housing environment in city centres.

The goal of the project developed as a part of the module is the development of a spatial and programmatic conceptual design of a complex of multi-family residential buildings in the spatial, functional and cultural context of an existing developed urban area, in areas assigned for the territorial expansion of a city or those that suffer from urban decay and are subjected to transformation processes. The conceptual design is meant to be the result of objectives adopted by the author, associated with their formulation of the idea of housing within the modern urban environment.

The basis for the formulation of the functional programme of the site and determining its spatial and functional relations with its immediate surroundings is an analysis of site-specific conditions - an urban analysis (1:10000 and 1:5000 diagrams, 1:2000 plans, sketches, photographs panoramas and original commentary), covering the area of the site and its immediate surroundings which form the mutual impact zone.

The project involves the development of a programmatic and spatial urban conceptual design of a multi-family residential complex located on a site with an area of around 20 ha. The urban conceptual design requires ensuring proper relations between the site and the city, as well as with the surrounding areas, including circulatory, functional and spatial ties, the formulation of a composition of the residential buildings and the accompanying service buildings mandated by the functional programme (structures on dedicated sites: schools, kindergartens, healthcare facilities, telecommunications facilities, cultural buildings, administrative buildings, commercial services etc.), vehicle, bicycle and pedestrian circulation systems, recreational and sports facilities, compositions of tall greenery.

The design should also present convincing solutions in terms of the economy of its solutions and sustainable operation within an urban environment. This applies to all of the presented scales.

The 1:2000 conceptual design is meant as a preliminary stage/regulation plan, building layout and size/ to the 1:1000 presentation, which is meant to be shown on a survey map, as a compositional sheet (top-down view with shadows), supplemented by the necessary diagrams of vehicular and pedestrian circulation, a diagram of the structure of the natural environment, well as zones of recreation and tall greenery). The students are to prepare overlays for the compositional
sheet, containing the elements of the site’s development on the same scale, as well as a 1:1000 physical model.

The 1:500 sheet, covering a selected fragment of the designed complex, constitutes a conceptual design of the development of the site and is associated with the semi-private space of the surroundings of the complex of mixed-use residential and service buildings, as well as of its external public space. The 1:500 scale should also be used to present plans of the ground floors and underground levels, urban cross-sections and elevations. The 1:200 sheet covers a fragment of the complex of residential buildings. Sketches and visualisations, including digital ones, as well as a hand-drawn perspective view are a mandatory form of the presentation of the conceptual design. A written essay, as well as a written description of the design are an integral element of the design module project, as is a CD with its digital version.

| Assessment: | Attendance, project, defence |

**II-C-16 SEMINARIUM SPECJALISTYCZNE/SPECIALIST SEMINAR**

**Director:** dr hab. inż. arch. Anna Agata Kantarek, prof. PK  
**Number of hours:** 49  
**ECTS credits:** 8  
**Format:** Seminar

**SEMINAR:**

| Objectives: | • Supplementing the knowledge of the students in terms of the basic principles of design and composition in architectural and urban design, with particular emphasis on knowledge associated with the development of architectural and urban conceptual designs of buildings featuring a diverse array of forms of use, situated in the context of an urban site and possessing the necessary functional programme from the point of view of adopted guidelines.  
• Broadening knowledge regarding the significance of the cultural and spatial context to the identity of a place and the creation of new aesthetic qualities, as well as the role of public spaces and the natural environment in the sustainable shaping of the space of the city.  
• Familiarising students with the functional and spatial programmes of basic architectural and urban complexes.  
• The selection of the subject of the Master’s project and a specific site for it, in addition to the development of an urban analysis in terms of the planned project, as well as the formulation of an initial functional programme.  
• Writing an essay on a subject of the student’s choice. |
### Content:

| Lectures on the subject of urban composition, the principles of the functioning of public spaces, the theory of strong form, orientation within the space of a city and urban morphology.  
| Optionally - participation in design workshops.  
| Selection of the subject of the Master's project. Familiarisation with functional and spatial programmes of basic architectural and urban complexes.  
| Written academic essay. Proposed subjects:  
| 1. The housing environment.  
| 2. The city.  
| Reviews of the assignment, the preparation of a PP presentation, delivery of a lecture, preparing an essay on a subject associated with the Master's project.  
| Scope: PP presentation accompanying the delivery of a lecture at the seminar, as well as a print-out of the PP presentation (black and white) along with a text enabling the perception of key elements of the lecture, a functional programme, an essay with conclusions, documentation on a CD. |

### Assessment:

| Attendance, assignment, presentation |

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### II-C-19  08 FAKULTET FORMA URBANISTYCZNA/ELECTIVE COURSE, URBAN FORM

**Director:** dr hab. inż. arch. Anna Agata Kantarek, prof. PK  
**Number of hours:** 15  
**ECTS credits:** 2  
**Format:** seminar

### SEMINAR:

#### Objectives:

- Broadening knowledge on the subject of urban design and urban morphology,  
- Expanding skills regarding the analysis of urban tissue,  
- Expanding skills regarding the making of informed design decisions from the point of view of the typomorphology of urban form.

#### Content:

- Presentation of theories regarding urban morphology and architectural and urban typomorphology.  
- Morphological analysis of selected urban complexes using methodologies developed by M.R.G. Conzen and G. Caniggia

#### Assessment:

| Attendance, assignment, presentation |
### II-C-20 HISTORY OF CONTEMPORARY URBAN DESIGN

**Director:** dr hab. inż. arch. Anna Agata Kantarek, prof. PK  
**Number of hours:** 15  
**ECTS credits:** 2  
**Format:** Lectures in English

#### LECTURE:

**Objectives:**
- Familiarising students with the history of urban planning of the nineteenth and twentieth centuries and with contemporary achievements of the urban design of the twenty-first century.
- Transfer of knowledge regarding the complexity of the conditions of the shape of the modern urban form and the principles of its composition.
- The demonstration of the mutually complementing role of interdisciplinary actions in the shaping of urbanised space.
- Presenting the role of works of architecture, landscape forms and planning conditions in the process of the transformation of the form of urban complexes.

**Content:**
Selected issues of nineteenth century urban design (G. Haussmann, I. Cerdà and others), American urban design, modernism, Europe after the Second World War, the urban design of socialist countries, Postmodernism and Neorationalism, Polish urban design after the Second World War, Kevin Lynch, Christopher Alexander, Typology of urban layouts, New Urbanism and Urban morphology.

**Assessment:** Attendance, examination

### A-34 Division of the Shaping of Circulation Spaces

**Director:** Anna Franta, D.Sc. Ph.D. Arch. Prof. PK  
30-084 Kraków, ul. Podchorążych 1, pok. 2.07  
Tel/fax (+48) 12 628 2470  
Website: a34.pk.edu.pl/

3. Ph.D. Arch. Bartłomiej Homiński  
5. Ph.D. Arch. Eliza Szczerek  
**Design studio:**

<table>
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<tr>
<th>Objectives:</th>
<th>Reinforcing:</th>
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<td>- knowledge about architectural design and the skill of applying said knowledge in the design process.</td>
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<td>- knowledge of the significance of the spatial, functional, cultural, social and natural context in the making of design decisions and the skills of applying this knowledge in the process of design.</td>
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<td>- the skill of applying knowledge from the fields of the history and theory of architecture and urban design, the fine arts, building construction and building technologies, building physics, as well as building regulations and construction law, economics, the methodology of the organisation of the design and development process.</td>
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<td>- the skill of preparing architectural designs that meet aesthetic, functional and technical requirements, as well as those associated with the shaping of the environment of human life and its functional needs, taking into account the needs of disabled persons.</td>
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<td>- the skills to gather and make use of information. Preparation for taking up Master's studies and taking up professional activity as an assistant, as well as in the construction and construction supervision and inspection in terms of the design of works of architecture and their surroundings.</td>
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| Content: | THE HYBRID AS AN ELEMENT OF THE REGENERATION OF A CITY. As a part of the diploma design module, the students are to develop a conceptual design of a building or an urban design of a fragment of an area suffering from urban decay, that is situated in a specific urban spatial and cultural context, along with its associated urban public space. The basis for the formulation of the functional programme of this project and the determination of its spatial and functional relations with its immediate environment is the performing of an urban analysis (1:10000, 1:5000, 1:2000 diagrams, sketches, photographs, panoramas and original commentary), covering the area of the site and the immediate surroundings that together form the zone of mutual influence. The scope of the project should comply with the diploma design statute of the Faculty of Architecture of the Cracow University of Technology. Diploma design is a module during which students are to demonstrate the skills necessary to make independent design decisions and apply the knowledge gained during studies. The supervisor is a guide, an advisor and a consultant. The goal of the module is verifying the knowledge and skills of a student related to architectural and urban design, sensitivity in the shaping of relations of a site with surrounding areas, understanding the significance of the existing qualities of the cultural and natural |
environment to the identity of a place. The project allows verification of familiarity with legal regulations and procedures associated with the design and development of the project covered by the programme of the module and preparing the student for further studies.

Assessment: *project, essay, written documentation, defence

### II-E-1

**II-E-1 Projektowanie dyplomowe A-3 MG DIPLOMA DESIGN II-E-1**

**Director:** dr hab. inż. arch. Mateusz Gyurkovich

**Number of hours:** 10 Design studio

**ECTS credits:** 20

**Format:** Design studio

#### Design studio:

**Objectives:**

The skill of performing analyses of urban context, formulating a list of design problems on the basis of said analysis and the development of a comprehensive design proposal that takes into account the spatial, cultural, natural and social context, site-specific conditions, technical conditions, circulatory and functional connections. The goal of the module is the verification of a student's preparation for taking up future independent professional activity. The Master's project is an occasion to stimulate a Master's candidate's creativity and the innovativeness of the solutions that they propose, verifying the skills of the application of their knowledge, analytical research work and synthesising thoughts in the formulating of conceptual theoretical and spatial and programmatic solutions, as well as verify their technical skills, architectural sensitivity and the effectiveness of their concept of the presentation of their own work, their argumentation and defence of their ideas. The skill to present a Master's project featuring the proper scope as well as graphical and textual/factual form. The module is integrated with the diploma seminar module. Mastering the skill of the rational argumentation and defence of presented solutions. Achieving an awareness of one's knowledge and skills and understanding the need to constantly increase one's competencies. Preparation for professional work, including taking up PhD. studies.

**Content:**

Diploma design is a module that ends the studies, during which a Master's candidate should demonstrate the skills necessary for independent decision-making in terms of design decisions, in addition to the knowledge and skills they have learned during the entire cycle of the two tiers of studies, necessary for the taking up of professional activity and further continuous self-education. The Master's candidates who take up the preparation of a Master's project as a part of this module can develop any architectural and urban or urban project they wish, after approving its subject with the supervisor, or they can develop a subject associated with scientific research performed at the institute, cooperation with local governments, non-government organisations or external companies. The
subject of the Master's project can also be a national or international student design competition. The Master's projects are being prepared under the care of a supervisor, as well as with the participation of supplemental supervisors - adjuncts of the Faculty of Architecture of the Cracow University of Technology or researchers from foreign universities as a part of current international cooperation. The scope of a Master's project covers broadly understood urban or urban and architectural problems.

| Assessment: *project, essay, written documentation, defence |

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### I-C-22 Projektowanie urbanistyczne I-C-22 A-3 MG URBAN DESIGN I-C-22 A-3 MG

**Director:** dr hab. inż. arch. Mateusz Gyurkovich  
**Number of hours:** 90 project  
**ECTS credits:** 8  
**Format:** Design studio  
**Seventh semester**

#### Design studio:

| Objectives: Mastery of the basic principles of design and composition in urban design, with particular emphasis on the knowledge and skills associated with the preparation of a conceptual design of a public urban space in the context of existing development, an urban analysis of the area, the principles of establishing desired relations between elements that shape space; understanding the significance of the cultural and spatial context to the identity of a place and the creation of new aesthetic and functional values, the significance of the role of the natural environment, of the transport and circulation systems as well as the attractiveness of the functional programme to the quality of each area of a city, shaped in accordance with the idea of sustainable development.  

Familiarising students with the current legal regulations associated with the design and development of the project covered by the programme of the module. Developing social skills related to working in a group, taking responsibility for one's individual work, as well as the development of the skill of the presentation of a design and the argumentation and defence of one's concept.  

| Content: Urban design is a module devoted to the problems of urban regeneration and the transformation of selected areas of a city, which, due to their location within the spatial structures of cities, either currently fulfill an important role as centres that group together commercial and public functions or have the potential to do so, or can become an element of a city's overall network of recreational spaces. The basis for the formulation of guidelines is an urban analysis performed in groups. The project includes a spatial (compositional) and programmatic (functional) conceptual design of the supplementation or shaping of hybrid buildings that accompany the designed public space in the context of existing development. |
The project also includes a conceptual design of the necessary modifications to circulation services on the project’s site and in the zone that is functionally connected to it. It also covers the shaping of paved and biologically active areas (greenery, water) on the site, compositions of tall greenery, a surface runoff drainage system, lighting and street furniture.

The project covers the preparation of an urban site development concept (prepared in two-person groups) employing the 1:2000 and 1:1000 scale (along with 3D visualisations), followed by individual designs for selected fragments of the site with characteristic cross-sections and facades, a floor and basement plan or supplementary floor plans drawn to a scale of 1:500, visualisations and urban detail.

Presentation format: 50 x 70 cm sheets (black and white graphics + colour), as well as a multimedia presentation (*ppt, *pdf). A sketchbook, essay and written documentation are also required.

Assessment: *project, essay, written documentation, presentation, discussion, defence

I-C-19
Projektowanie arch.-urb. I I-C-19 sem 5 A-3 MG Architectural and urban design

Director: dr hab. inż. arch. Mateusz Gyurkovich
Number of hours: 90 design studio
ECTS credits: 8
Format: design studio
Seventh semester

Design studio:

Objectives:
Mastering the knowledge and skills associated with the development of an architectural conceptual design of a complex of multi-family residential buildings in an urban context. The participants of the module will learn the principles of creating desired relations between the various elements that shape space.

Mastery of the knowledge and skills of shaping the proper relations between a multi-family residential building with its immediate surroundings: the relationship between the building with the urban public space and the semi-private space communally used by residents.

Mastering the knowledge and skill of shaping the appropriate functional and spatial relations between apartments and buildings, the relations between structural and material solutions and technical ones (building services, modern pro-environmental solutions) with architectural form and with the comfort of living of residents.

Familiarising students with current legal regulations in terms of the project's subject. Developing aesthetic sensitivity and creativity. Developing social skills
related to working in a group, taking responsibility for one's individual work, as well as the development of the skill of the presentation of a design and the argumentation and defence of one's conceptual design.

**Content:**

The factual programme of the module covers the architectural and urban planning-related problems of the shaping of modern residential buildings in a city. The subject of the design studio project is a conceptual design of a building or of a complex of several buildings featuring a residential form of use (with a diverse typology and apartment sizes) along with a commercial section and a conceptual design of the development of the site.

The project featured in the design constitutes a supplementation of existing urban tissue. The basis for the formulation of the functional programme and determining the spatial and functional relations with the immediate surroundings is an urban analysis covering the site and its immediate area, to be performed in groups.

The individual design covers the preparation of a site development plan drawn to a scale of 1:500, a 1:100 conceptual design of a selected building (floor plans, cross-sections, elevations), as well as structural details in the form of a cross-section across the external envelope of a building drawn to a scale of 1:20, presenting technical and material solutions constituting an original concept of architectural detail.

Presentation format: multimedia presentation (*ppt, *pdf) as well as A3 sheets (black and white graphics + colour), as well as a set of sketches presenting the design process and a digital model of the building (complex) along with its immediate surroundings and digital visualisations. An integral part of the design studio project is an essay combined with a written description of the adopted conceptual and technical solutions.

**Assessment:**

*project, essay, written documentation, presentation, discussion, defence

<table>
<thead>
<tr>
<th>II-C-7</th>
<th>Projektowanie arch.-urb. II-C-7 sem 1 A-3 MG Architectural and urban design</th>
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<tbody>
<tr>
<td>Director:</td>
<td>dr hab. inż. arch. Mateusz Gyurkovich</td>
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<tr>
<td>Number of hours:</td>
<td>105 design studio</td>
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<tr>
<td>ECTS credits:</td>
<td>7</td>
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<tr>
<td>Format:</td>
<td>Design studio</td>
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</table>

**Design studio:**

**Objectives:**

The goal of the module is the further expansion of the principles of design and composition in architecture and urban design that have been learned by students during Engineer's students, performed through the application of knowledge and the perfecting of acquired skills.
The participants of the module will learn the principles of establishing desired relations between elements that shape space: the significance of the cultural and spatial context of a place and the creation of new aesthetic values, the role of the natural environment, as well as the contemporarily understood hybrid urban space to the quality of the urban housing environment, shaped on the basis of the latest tendencies and technologies.

Another goal of the module is familiarising students with current legal regulations and administrative procedures, the development of creativity and innovativeness, the development of the skills associated with working in a group, design presentation skills, as well as those of the argumentation and defence of one's concept.

Content:

The subject of the design studio project is a spatial and programmatic urban conceptual design of a complex of multi-family residential buildings in the context of existing urban development, understood as a residential hybrid, on an area of around 5 - 15 ha. The basis for the formulation of the functional and spatial programme is an urban analysis performed in groups.

The urban conceptual design (that is to be prepared in two-person student teams) requires the establishment of appropriate relations between the site of the project with the city and the surrounding areas, including circulatory, functional and spatial links, the formulation of a composition of hybrid residential buildings and the resulting functional programme of accompanying service buildings, the layout of the vehicle, bicycle and pedestrian circulation scheme, recreational and sports equipment and compositions of tall greenery.

The students are required to prepare an urban conceptual design employing the 1:2000 or 1:1000 scale (depending on the site) along with urban diagrams. The students have to prepare a digital model and a visualisation of the entirety of the layout and prepare characteristic urban cross-sections.

Sheets with drawings drawn to a scale of 1:500 are to illustrate a design covering a selected fragment of the site and constitute its development conceptual design associated with the semi-private space of the surroundings of the complex of residential buildings, as well as public space (it can be prepared in a two-person team or individually). The individually prepared part of the project is an architectural conceptual design of a selected hybrid residential building - as an innovative application and expansion of the knowledge and skills gained during Engineer's studies. Presentation format: multimedia presentation (*ppt, *pdf) as well as A3 sheets (black and white graphics plus colour), essay and written documentation.

Assessment: *project, essay, written documentation, presentation, discussion, defence
**II-C-16**  
Seminarium specjalistyczne II-C-16 A-3 MG Specialist seminar

**Director:**  
dr hab. inż. arch. Mateusz Gyurkovich

**Number of hours:** 49 seminar  
**ECTS credits:** 6  
**Format:** Seminar

### Design studio:

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>The seminar is integrated with the diploma design module, which is scheduled during the same semester. Its basic goal is to create a theoretical foundation for the solutions adopted in a Master's project. The goal of the module is to expand the knowledge of students about the principles of design and composition in architecture and urban design, with particular emphasis on the knowledge associated with the preparation of urban and architectural designs of hybrid building complexes located in urban locations. Broadening knowledge regarding the significance of the cultural, natural and spatial context to the identity of a place and the creation of new aesthetic values, as well as the role of the urban public space and the problems of circulation and transport (on the scale of the city, metropolis and the region, and even on the global scale) to the sustainable shaping of cities and metropolises. Familiarisation with the functional and spatial programmes of hybrid architectural and urban complexes within the structure of the modern city, especially those built in areas undergoing regeneration. Selection of the subject of the Master's project and its specific site, as well as performing an urban analysis tailored to the planned design. Preparing an initial functional and spatial programme for the design task featured in the Master's project.</th>
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<tbody>
<tr>
<td>Content:</td>
<td>The selection of the subject of a Master's project impacts the profile of the module, which is individually adapted to every participating student. Familiarisation with the functional and spatial programmes of urban and architectural complexes. Preparing an assignment associated with the subject of the Master's project. Critiques of assignments, preparation of a multimedia presentation, writing an essay associated with the Master's project. Scope: Presentation (*pdf lub *ppt) in the form of a seminar lecture. An essay - an analysis of at least three selected designs or built projects, either national or foreign, associated with the subject of the Master's project and the conclusions - a written description of the urban conceptual design with original commentary and evaluation (a minimum of 20 000 characters + illustrations), confirming individual studies and knowledge of the subject.</td>
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<td>Assessment:</td>
<td>*attendance, discussion</td>
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Lecture:

<table>
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<tr>
<th>Objectives</th>
<th>Gaining basic knowledge about urban transport.</th>
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<tbody>
<tr>
<td>Content</td>
<td>Basics: streets versus roads; streets: definition, classification of streets; the hierarchy and composition of the street network; parking, fire access routes, legal basis; vehicular traffic in a city, calming and reducing traffic, systematics of street layouts (grid and ring layouts); pedestrian and bicycle traffic, modern trends and associations with urban planning, the participation of disabled persons in public spaces; bicycle traffic in a city. Sustainable transport - environmental conditions referring to modes of transport. Characteristics of modes of public transport in relation to the city: tram, rapid transit tram, bus, BRT, underground urban rail, monorail, maritime transport, metropolitan rail and TOD. The significance and function of road layouts and circulation in the composition of cities from historical times to the present, including nineteenth century models, functional urbanism, exurbanisation processes, New Urbanism.</td>
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<tr>
<td>Assessment</td>
<td>Attendance, final test</td>
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Seminar:

<table>
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<tr>
<th>Objectives</th>
<th>Supplementing theoretical knowledge with practical skills enabling the solving of circulation-related problems in reference to designed architectural and urban planning solutions. The seminars are integrated with the subject of architectural and urban design, covering the subject of context analysis, the design of a selection of elements of the circulation grid that are harmoniously subordinate to spatial composition, taking into account pedestrian and bicycle circulation.</th>
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<tr>
<td>Content</td>
<td>Seminar 1. Design of a legible circulation system for a large urban complex while preserving the hierarchy of the layout of streets, taking into account the current classification of streets, as well as the compositional and functional cohesion with the layout of buildings, the protection of public and green spaces; drawn to a scale of 1:5000. Seminar 2. A design of the circulation layout of a residential housing estate taking into account the composition of the estate, the layout of the surrounding</td>
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<td>Assessment</td>
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120
streets, public transport, public and green spaces, the cardinal directions and parking; drawn to a scale of 1:2000.

Seminar 3. Site development design taking into account the circulation layout of a complex of residential buildings, the rules of architectural and urban design, including fire access roads, parking spaces, underground parking entrances, pedestrian crossings and paths, bicycle paths and parking spaces, parking spaces for disabled persons; drawn to a scale of 1:500.

Seminar 4. Cross-section and perspective view of a designed street in the vicinity of the designed building (integrated with the design of residential or commercial architecture), preferred elements of traffic calming, pedestrian priority, elements of low and tall greenery - drawn to a scale of around 1:200 (1:100).

Assessment: Class attendance, drawn exercises during classes

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A-4

INSTITUTE OF BUILDING DESIGN A-4
Institute Director: Prof. D.Sc. Ph.D. Arch. Waclaw Celadyn

A-41 Chair of Building Construction and Construction Materials
Chairman: Prof. D.Sc. Ph.D. Arch. Waclaw Celadyn
30-084 Kraków, ul. Podchorążych 1, pok. 8-9
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Strona WWW: riad.pk.edu.pl/~a-41

1. Ph.D. Arch. Bogdan Dziedzic
2. D.Sc. Ph.D. Arch. Sabina Kuc, Prof. PK
3. D.Sc. Ph.D. Arch. Jan Kurek, Prof. PK
4. Ph.D. Arch. Robert Marcinkowski
5. Ph.D. Arch. Przemysław Markiewicz
6. Ph.D. Arch. Paweł Mika
7. Ph.D. Arch. Iwona Piebiak
I- C-11 BUDOWNICTWO OGÓLNE I - BUILDING CONSTRUCTION I

Director: prof.dr hab.inż.arch. Wacław Celadyn
Number of hours: 90
ECTS credits: 8
Format: Lectures and design studio

LECTURES:

Objectives: Transferring knowledge regarding the design of basic construction systems, the elements of a building and their structural details, imparting the skill of the appropriate use of building materials, preparation of the technical design documentation of a building and its components, basic technical standards and building regulations.

Content: Methods of designing flat roofs, terraces, different types of windows and doors as well as information about the various materials used in their construction. Daylight in buildings. The construction technologies used in the design and construction of single-family houses and other small buildings. The principles of designing buildings using light timber and steel frame technologies. Material solutions and design details. Systems of external finishes - applied technologies and materials. Structural principles governing external walls, as well as physical and moisture-related phenomena. Internal finishes in buildings - floors, walls, ceilings and the materials employed in their construction. Fire safety in buildings. Fire safety regulations and rules.

Assessment: Written and oral examination

DESIGN STUDIO:

Objectives: Imparting the skills of designing the basic elements of a building featuring commonly used technologies, the use of appropriate construction materials for the right situations while maintaining compliance with building regulations and technical standards.

Content: Project 1: An individually developed technical design in the form of a drawn assignment, prepared for the given functional and spatial situations involving a flat roof or rooftop terrace along with the necessary structural details. It features physics and moisture-related calculations proving the prevention of the occurrence of steam condensation within the structure of the designed building components.

Project 2: An individually developed technical design of the spatial, technical and material solutions of selected windows, doors or skylights, taking into account the issues of access to daylight in interiors and the relevant building regulations.
Project 3: An individually developed technical design of a single-family house, constituting a synthesis of a student's technical and construction-related knowledge and featuring selected technologies, based on a spatial and programmatic conceptual design previously developed during design studio classes hosted by a different didactic unit. The scope of the project involves preparing a site development plan along with connections to building services, as well as a written design documentation. The project reflects the scope of the graphical and written part of design documentation required by the building administration when filing for a building permit.

Project 4: Individually developed technical design of the construction and material solutions used in selected interiors of a public building.

Assessment: *Attendance, project, test

I- C-12  BUDOWNICTWO OGÓLNE II - BUILDING CONSTRUCTION II

Director: prof.dr hab.inż.arch. Wacław Celadyn
Number of hours: 45
ECTS credits: 2
Format: Lecture and design laboratory

LECTURE:


Assessment: *Final test

DESIGN LABORATORY:

Objectives: Transferring knowledge regarding the principles of design and the graphical representation of construction solutions on the example of technical designs of public buildings and the manners of using contemporary building technologies. Confronting them with technical problems in construction and the practical application of building and fire safety regulations.
### Content:
Subjects associated with preparing the spatial development plan of a site and the necessary building services and connections. Design solutions of entrance zones in public buildings, elements of vertical circulation, hygienic and sanitary rooms, furnishings for disabled persons. Design and analysis of building evacuation systems.

### Assessment:
*Attendance, project, test*

### II-C-3  BUDOWNICTWO OGÓLNE II - BUILDING CONSTRUCTION II

**Director:** prof. dr hab. inż. arch. Waclaw Celadyn  
**Number of hours:** 30  
**ECTS credits:** 2  
**Format:** Lecture and design laboratory

### LECTURE:

**Objectives:** Transferring knowledge regarding energy in architecture and building construction as a paradigm of sustainable architecture, with particular emphasis on solar energy. Presenting methods of solving technical problems associated with generating energy from renewable sources and the energy conceptual designs of energy efficient and environmentally friendly buildings.


**Assessment:** *Final test*

### DESIGN LABORATORY:

**Objectives:** Imparting skills of working on a technical design in a group, including dividing tasks, discussing solutions and making design decisions as a group. Developing an interdisciplinary technical design of a public building in a group. Introducing the latest solutions in terms of energy efficient and environmentally friendly
technologies. Directing knowledge and imparting the skills necessary to apply it in practice for each member of the design team.

| **Content:** | Developing a technical design of a public building, along with technical analyses and methods of cooperating with the client during the design phase. Dividing work among design group members in order to develop a conceptual design of the technical solutions employed in a building. Matters of balancing financial and deadline-related factors. Analysis of building services solutions and interdisciplinary coordination. Solving problems related to fire safety within a building. Practical application of knowledge through the assessment of technical designs developed by other design groups. Verification of designs in terms of international certification systems. |
| **Format:** | *Attendance, project, project defence, test* |

### II- C-3 WA-ANG GENERAL BUILDING CONSTRUCTION II

**Director:** prof. dr hab. inż. arch. Wacław Celadyn  
**Number of hours:** 30  
**ECTS credits:** 2  
**Format:** Lecture and design laboratory

#### LECTURE:

| **Objectives** | Transferring knowledge regarding energy in architecture and building construction as a paradigm of sustainable architecture, with particular emphasis on solar energy. Presenting methods of solving technical problems associated with generating energy from renewable sources and the energy conceptual designs of energy efficient and environmentally friendly buildings. |
| **Assessment:** | *Final test* |
DESIGN LABORATORY:

Objectives: Imparting the skills necessary to perform multi-threaded work on a technical design, coordinate interdisciplinary problems and the mutual interdependencies between fields of work during the making of decisions. The application of the latest achievements of energy efficient and environmentally friendly technologies. Mastering the methods used in the process of the multi-criterial selection of appropriate technical and technological solutions for the purposes of realising original concepts of the visual forms of buildings.

Content: Developing the technical part of a detailed design of a mixed-use residential and commercial building being designed during design studio classes as a part of an integrated module. The initial selection of the structural system and the analysis of its impact on the function featured in the design. Analysis of the optimal structural layout for the form and function of a building. Discussing the rationality of the selected solutions in terms of finances, construction time, the specialisation of work teams and machinery, as well as sustainable development. The development of assembly details of the building’s envelope while preserving compliance with the architectural concept of the building. Selection of appropriate facade materials and assembly elements, insulation and structural layers. The practical application of knowledge through the defence of the design in front of an interdisciplinary commission (architecture, urban design, building services, structures).

Assessment: *Attendance, project, project defence

II- C-16 A-4 WC SEMINARIUM SPECJALISTYCZNE - SPECIALIST SEMINAR

Director: prof.dr hab.inż.arch. Waclaw Celadyn
Number of hours: x
ECTS credits: 6
Format: seminar

SEMINAR:

Objectives: Transferring skills necessary to identify significant problems associated with functional, technical and material solutions in a diverse array of buildings. Demonstration of knowledge regarding the design of buildings developed during Master's project design classes based on independent studies of built projects featuring a similar form of use.

Content: Specialist subjects associated with buildings and structures or their fragments - featuring a broad range of forms of use and associated with their form, structure, technical and material solutions. Analysis of the distinct characteristics of buildings and the ideas of their authors constituting the basis of conceptual designs and the technical solutions employed in buildings. Attempts at comparing
structures with similar conceptual assumptions and functions. Developing the skills required to participate in professional discussion on architecture and construction-related subjects within a group of students.

Assessment: *Attendance, presentation, participating in a discussion

II- E-1  A-4 WC  DIPLOMA DESIGN

Director: prof.dr hab.inż.arch. Wacław Celadyn
Number of hours: 10
ECTS credits: 20
Format: Design studio

Design studio:

Objectives: The perfecting and demonstration of the skills necessary to independently solve a design problem by a student by applying the design principles and methods known by the student, in accordance with current standards of developing Master's projects. Verification of a student's readiness in terms of knowledge, skills and competencies necessary to take up professional activity as an architect and the possible taking up of PhD. studies.

Content: Conceptual architectural design with elements of construction details and textual design documentation containing the parameters of a building and an essay regarding built projects that feature the same function as the building that is being designed, enabling the verification of a student's familiarity with the subject matter associated with their design and the appropriate competencies gained through this during this early stage of their professional career.

Assessment: *Attendance, project

I- E-1  A-4 SK  PROJEKTOWANIE DYPLOMOWE - DIPLOMA DESIGN

Director: dr hab.inż.arch. Sabina Kuc, prof.PK
Number of hours: 5
ECTS credits: 15
Format: Design studio

DESIGN STUDIO:

Objectives: Students are to demonstrate the skill to properly apply their knowledge and practical skills in the form of an Engineer's project - either an architectural or a technical one, of a functionally uncomplicated building. Preparation for the taking up of work as an assistant to a designer (architect) at an architectural practice.
<table>
<thead>
<tr>
<th>Content:</th>
<th>Engineer's project. Development of a conceptual design. Preparing a site development plan. Developing an architectural design according to the following scope: According to the Higher Education Statute of the Cracow University of Technology, specific provisions of the Faculty of Architecture of the Cracow University of Technology and the individual requirements of the supervisor. Preparing the written documentation of a design.</th>
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<tr>
<td>Assessment:</td>
<td>*Attendance, project</td>
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</table>

FAKULTET II- C-1912 WA PARKI WODNE - ELECTIVE MODULE, WATER PARKS

Director: dr hab. inż. arch. Sabina Kuc, prof. PK
Number of hours: 15
ECTS credits: 2
Format: Seminar

SEMINAR:

| Objective: | The basic objective is familiarising students with the possibilities and problems that are introduced by water into the shaping of the space of water parks. The equivalent goal is familiarising students with various types of technologies and technical machinery that is encountered in water parks (both street furniture and infrastructure). |
| Content: | Water as the main inspiring and creative element in the design of places of entertainment and recreation. Water-related structures and installations (that employ water as the main creative factor). Basic concepts, definitions, classifications. The definition of the function and scale of water-related structures and installations. Water-related structures in buildings and outside of them. Differences and their impact on the shaping of functional layouts and architectural, structural and technological solutions. Water parks - relations with the landscape. Examples of designs and built projects - analysis and synthesis. Architectural and technical solutions of water-related structures encountered in water parks: swimming pools, slides, stairs, bridges, climbing walls, trampolines, high diving towers, geysers, cascades, countercurrents, water massages, surfing and kayak courses, wild rivers, artificial waves. The development process of water parks. |
| Assessment: | Presentation, attendance, participation in a discussion |
## II- C-16 A-4 SK SEMINARIUM SPECJALISTYCZNE - SPECIALIST SEMINAR

| Director: | dr hab.inż.arch. Sabina Kuc, prof. PK |
| Number of hours: | 49 |
| ECTS credits: | 6 |
| Format: | Seminar |

### Objectives:
Imparting skills related to the perception of significant issues regarding function and technical and material solutions of various buildings to students. The students are to demonstrate their knowledge regarding the design of buildings developed as a part of their Master's project based on independent studies of buildings featuring a similar form of use.

### Content:
Specialist subjects associated with buildings and structures or their fragments - featuring a broad range of forms of use and associated with their form, structure, technical and material solutions. Analysis of the distinct characteristics of buildings and the ideas of their authors constituting the basis of conceptual designs and the technical solutions employed in buildings. Attempts at comparing structures with similar conceptual assumptions and functions. Developing the skills required to participate in professional discussion on architecture and construction-related subjects within a group of students.

### Assessment:
*Design exercises, discussion, multimedia presentations, attendance

## II- E-1 A-4 SK PROJEKTOWANIE DYPLOMOWE - DIPLOMA DESIGN

| Director: | dr hab.inż.arch. Sabina Kuc, prof. PK |
| Number of hours: | 10 |
| ECTS credits: | 20 |
| Format: | Design studio |

### Objectives:
The perfection and presentation of the skill to independently solve a design problem by the student, taking into account known design principles and methods, according to current standards of the development of Master's projects, the Higher Education Statute of the Cracow University of Technology and the individual requirements of the supervisor. The preparation of the student in terms of knowledge, skills and competence for the purposes of taking up professional activity, as well as taking up PhD. studies.

### Content:
A conceptual architectural design with elements of structural details and a written documentation containing the technical parameters of the building. An
essay detailing the functional and spatial assumptions of the design and architectural and construction-related solutions of built projects featuring the same form of use as that of the designed building.

Assessment: * Attendance, project

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**PRAKTYKA PROJEKTOWA - DESIGN INTERNSHIP / PROFESSIONAL PRACTICE - DESIGN INTERNSHIP**

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<tr>
<th>Director:</th>
<th>dr hab. inż. arch. Sabina Kuc, prof. PK</th>
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<tr>
<td>Number of hours:</td>
<td>120</td>
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<tr>
<td>ECTS credits:</td>
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**Objectives:** The practical preparation of students for: undertaking creative work in architectural and urban design; obtaining a legally required professional license; holding independent technical positions in construction; coordinating work in interdisciplinary design teams; the management of architectural and urban design practices; independently engaging in economic activity.

**Content:** Design phases (stages), form and scope of a conceptual, technical and detailed design. Preparing site development designs - the constituent parts of a design. Architectural and technical design - the constituent parts of a design. The project development process, interdisciplinary coordination, organisation and management in a design practice. Familiarising the student with the problems associated with an interdisciplinary design.

**Assessment:** Proof of internship / practice

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**DESIGN INTERNSHIP**

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</table>

**Objectives:** The practical preparation of students for: undertaking creative work in architectural and urban design; obtaining a legally required professional license; holding independent technical positions in construction; coordinating work in interdisciplinary design teams; the management of architectural and urban design practices; independently engaging in economic activity.

**Content:** Design phases (stages), form and scope of a conceptual, technical and detailed design. Preparing site development designs - the constituent parts of a design. Architectural and technical design - the constituent parts of a design. The project
**Development Process, Interdisciplinary Coordination, Organisation and Management in a Design Practice.** Familiarising the student with the problems associated with an interdisciplinary design.

**Assessment:**
- Proof of internship / practice

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**A-4 INSTYTUT PROJEKTOWANIA BUDOWLANEGO - INSTITUTE OF CONSTRUCTION DESIGN**

Director: dr inż. arch. Małgorzata Melges

Number of hours: 120

ECTS credits: 3

Format: Professional construction practice:

### LECTURE:

**Objectives:**

The goal of the practice is to familiarise second-year architecture students with problems associated with the modern construction site and its impact on architectural design. During the practice, students - future engineers - will complement their theoretical knowledge based on the example of practical processes and activities typical of construction sites. They will learn about issues of the planning and organisation of construction. They will follow the form in which the developer, designer and contractor cooperate during construction. The students are to familiarise themselves with matters related to the frame stage and the finishing stage of a construction project. They will familiarise themselves with the structures of historical construction sites and modern technologies.

**Content:**

| a) | Students familiarise themselves with the character of the work performed by and the organisation of a construction company. They familiarise themselves with construction health and safety regulations. |
| b) | Students familiarise themselves with the construction sites they are assigned to /the organisational structure of the work being performed, the materials that are applied, machinery and other equipment, construction site planning, vertical and horizontal transport, safety during work associated with the frame stage. |
| c) | Students familiarise themselves with the design documentation of the building that is being constructed /working architectural and structural drawings, as well as familiarisation with the documentation of the construction site - construction site journal, measurement protocols, etc. |
| d) | Familiarisation with the technical conditions of construction work approval regarding frame and finishing state work, methods of controlling the course and quality of performing work and embedded materials. |
| e) | Students familiarise themselves with the production and service section of a construction site, complementary production facilities or prefabrication plants. |
f) Familiarisation with the technology, mechanisation and organisation of construction work through observation and direct participation under the supervision of a qualified worker, foreman or supervisor.

Assessment: Practice journal approved by the construction site director. Exhaustive report: photographs, drawings, textual information about construction work.

A-42 Chair of Structures and Construction Techniques
Chairman: Prof. D.Sc. Ph.D. Arch. Janusz Rębielak

30-084 Kraków, ul. Podchorążych 1, pok. 2
31-155 Kraków, ul. Warszawska 24, pok. 4
Tel. (+48) 12 628 2456; (+48) 12 628 2453
Website: riad.pk.edu.pl/~a-42

Division of Building Structures
Director: Prof. D.Sc. Ph.D. Arch. Janusz Rębielak

1. Stanisław Jurczakiewicz Ph.D. Arch.
2. Stanisław Karczmarczyk Dr inż.
3. Wojciech Kopka Dr inż.
4. Roman Paruch Ph.D. Arch.

II-C-4 BUILDING STRUCTURES
Director: Janusz RĘBIELAK, Prof.dr hab.inż.arch.
Number of hours: I semester: Lectures - 15h, Seminars – 15h, ETCS 2
II semester: Lectures - 15h, Seminars – 15h, ETCS 2E
ECTS credits: 2 + 2 = 4
Format: Lectures and seminars

LECTURE:

Objectives: Students are acquainted with the basic principles of shaping structural systems applied in modern architecture, as well as with problems related to the protection and renovation of historical buildings, the types of structural systems used in construction of roof covers, medium-span buildings, multi-storey buildings and structures featuring various forms of use.


Assessment: *Attendance, written and oral examination.

SEMINAR:

Objectives: Students are acquainted with the basic principles of shaping of the structural systems applied in modern architecture, as well as with problems of protecting and renovation of historical buildings, types of the structural systems used in construction of roof covers, hall buildings, multi-story buildings and objects of various functional purposes.

reinforcement systems. Examples. Reinforcing historical layer walls through injection and transverse anchoring. Calculations.

<table>
<thead>
<tr>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Attendance, Consultation of structural solutions in architectural designs</td>
</tr>
</tbody>
</table>

### II – E -2 SPECIALIST CONSULTATIONS

Director: Janusz RĘBIELAK, Prof.dr hab.inż.arch.
Number of hours: 1,00
ECTS credits: 1,00
Format: Consultations

**Objectives:**
Getting students acquainted with the basic principles of shaping the structural systems applied in modern architecture as well as with the innovative technical solutions proposed or applied in buildings featuring unique architectural forms.

**Content:**
Consultation of the structural system used in the designed building.

Knowledge in the area of the basic types of building structural systems. Ability to apply suitable structural systems for the conceptual design of various forms and types of buildings.

Knowledge in the area of the basic ways of shaping various forms of roof covering structures. Ability to apply basic engineering rules in the conceptual design of various forms and types of roof coverings.

**Assessment:**
* Attendance, Consultation of structural solutions in Master's projects

### I-C-14 KONSTRUKCJE BUDOWLANE BUILDING STRUCTURE

Director and lecturer: dr inż. Stanisław Karczmarczyk
Number of hours: 15
ECTS credits: 3
Format: lecture
### I-C-14 KONSTRUKCJE BUDOWLANE - BUILDING STRUCTURE

**Seminar instructor:** mgr inż. Roman Paruch  
**Number of hours:** 15  
**ECTS credits:** -  
**Format:** seminar

#### CLASSES/SEMINAR:

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>The graphical and mathematical presentation of the theoretical foundations of designing structural elements. Transferring practical knowledge about structural solutions and structural systems.</th>
</tr>
</thead>
</table>
| Content:    | Discussing basic regulations contained in professional standards. Discussing technological loads along with a presentation of the mechanics of materials.  
Discussing the typology of presented structural elements through practical exercises associated with designing load-bearing systems.  
Determining initial cross-sections of steel, timber and concrete structural elements subjected to bending (calculation examples).  
Discussing the design of subfloors supported by steel and timber beams, as well as monolithic slabs with calculation examples.  
Discussing the selection of the timber structures of roof trusses, along with calculations (simple examples).  
Discussing underground structures, along with calculation examples (direct foundations such as strip and pad foundations, as well as retaining walls). Basic concepts of geotechnical engineering required by architects.  
Discussing problems of the design of single and double-nave steel warehouses or similar medium-span buildings. Discussing the impact of thermal stresses on the operation of structural systems along with examples of calculations.  
Discussing the design of reinforcements for simple building structural load-bearing schemes.  
Discussing load-bearing elements subjected to compression depending on the material and horizontal cross-section involved (concrete and steel structures). |
| Assessment: | *Attendance, two exercises, two technical designs (floor plans, cross-sections, written documentation), final test* |
DIVISION OF CONSTRUCTION TECHNIQUES  
Director: Teresa Kusionowicz D.Sc. Ph.D. Arch.  

1. Tomasz Gaczoł Ph.D. Arch.  
2. Dorota Machowska Ph.D.  
4. Łukasz Wesołowski Ph.D. Arch.  

I-C-13 MATERIAŁOZNAWSTWO/MATERIALS SCIENCE  
Director: dr inż. arch. Bogdan Siedlecki  
Number of hours: 30  
ECTS credits: 3.00  
Format: lecture  

I-C-11 BUDOWNICTWO OGÓLNE I, 1 i 2 SEMESTR, STUDIA 1 STOPNIA/ GENERAL BUILDING CONSTRUCTION I, FIRST AND SECOND SEMESTER, ENGINEER'S STUDIES  
Director: DR HAB. INŻ. ARCH. TERESA KUSIONOWICZ  
Number of hours: 60 during the first semester (3 ECTS credits) and 60 in during the second semester (3 ECTS credits)  
ECTS credits: first semester - 3 ECTS credits, second semester - 3 ECTS credits  
Format: lecture and exercises  

LECTURE:  

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>Transferring the basic scope of theoretical knowledge regarding the principles of design and graphical representation during the stage of developing a technical design, basic construction techniques and traditional and modern technologies in building construction.</th>
</tr>
</thead>
</table>
| Content:    | W1. General problems of building construction: building classification, material, structural and construction requirements, durability of structures, loads and stresses affecting structures, standards and catalogues, elements of building regulations, design documentation, general principles of designing structural systems and their operation - 5 hours.  
W2. Building foundations and their construction: delineating the building on a site, types of soils, rules of performing excavation work and the securing of the walls of excavations, methods of founding buildings, types of foundations, the waterproofing of foundations, waterproofing and thermal insulation of underground sections of buildings - 7 hours  
W3 The structures of the walls of buildings: timber frame and traditional timber walls, masonry walls: principles of building walls from brick, concrete masonry units, stone blocks and silicate blocks, multi-layered walls, load-bearing walls, |
<table>
<thead>
<tr>
<th>Format:</th>
<th>Attendance</th>
</tr>
</thead>
</table>

**EXERCISES/SEMINAR:**

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>Familiarising students with technical construction problems and graphical presentation methods used during the stage of developing a technical design, solutions required by building regulations featuring the use of modern construction technologies.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Content:</th>
<th>P1 Initial design. Fragment of a floor plan of a residential building /apartment and stairwell / as well as a cross-section fragment of a storey outlined through a staircase. Scale: 1: 50, 1: 200. The design needs to be prepared in accordance with Polish Standards listed in the literature list, 6 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P2 Foundation design. Prepare a 1: 50 floor plan and cross-sections of the underground part of the foundations for the building featured in the initial design, taking into account the given conditions in structural details /1:20 and 1:10/, prepare cross-sections and plans of the foundations and underground walls.</td>
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<td></td>
<td>P3 Wall design. Details of the structure of external walls above ground level /external and internal/ in 1:10 plans and cross-sections, including the lintel - 8 hours.</td>
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<td></td>
<td>P4 Design of a floor for the building featured in the initial design, prepared in the form of a 1:50 plan of the structural elements of the subfloor and two cross-sections /across the length and breadth of the floor/, in addition to 1:10 characteristic structural details, 8 - hours.</td>
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<tr>
<td></td>
<td>P5 - Staircase design - scope: a) perspective sketch and draft model of the stairs, b) 1:200 structural diagram, c) calculations of the dimensions of the stairs, landings and the entire stairwell, d) 1:50 (1:20) floor plans - ground floor with a reference to the ground level - basement - standard storey - uppermost storey, e) 1:50 vertical cross-section through the landing and stair run, f) 1:50 vertical cross-section through the landings with a view of the stair runs, g) details of the stair runs, landings, steps, railings, including both structural elements and finishes,</td>
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<td></td>
<td>using 1:10, 1:2, 1:1 scales, h) graph of the balancing of the stair run line (only for winder stairs), i) extension of the cross-section along the stair run axis (only for curved stairs), j) final model, 14- hours</td>
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<td></td>
<td>P6 Roof design - scope: a) 1:50 plan of the roof structure, b) 1:50 cross-section across the length of the roof, c) cross-section across the breadth of the roof, d) 1:10, 1:2, 1:1 details of structural nodes, including roof cladding, flashing and drainage using plans and cross-sections, e) listing of the elements of the roof truss, f) model of a fragment of the roof truss, 16- hours</td>
</tr>
<tr>
<td>Assessment</td>
<td>Attendance, exercise, project, assignment</td>
</tr>
</tbody>
</table>

**LECTURE:**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Transferring basic knowledge of building materials, their production technologies, types, properties and applications, as well as familiarising students with the rigours associated with their use in case studies of built projects. Comparing design solutions with specific built projects in the aspect of designing construction details - referring to damage and accidents involving specific buildings.</th>
</tr>
</thead>
</table>


Construction chemicals. Selected topics regarding new types of sealants, plasters, adhesives, concrete admixtures, cements, repair preparations and technologies, etc. The technology of plasters used in renovation. Adhesive anchors - technology.


| Assessment | *Written examination. |
### I-C-11 BUDOWNICTWO - INFRASTRUKTURA - CONSTRUCTION - INFRASTRUCTURE

**Director:** dr inż. Dorota Machowska  
**Number of hours:** 15  
**ECTS credits:** 1  
**Format:** lecture

| **LECTURE:** |
|---|---|
| **Objectives:** | Familiarising students with the principles and legal conditions of the design and construction of municipal service grids and their influence on site development. Presenting the principles of the design of technical infrastructure for buildings, such as a fountain, garden pond, a backyard stream, etc. Familiarising students with the principles of designing irrigation and drainage systems used in landscape architecture. |
| **Content:** | Principles of the design and the basic elements of sewerage networks: combined sewers, separated sewers and semi-separated sewers. Systems of wastewater management. On-site sanitation featuring septic drain fields with biological filters and activated sludge. Principles of the design and the basic elements of roof rainwater drainage systems. Point-based and linear surface runoff drainage systems. Surface runoff management systems - leaching fields, leaching chambers, dry wells. Open and sealed retention tanks. Principles of the design and basic elements of water supply networks. Irrigation systems and machinery - permanent and mobile sprinklers, microsprinklers and drop lines. Principles of the design and basic elements of the infrastructure of backyard streams, fountains, garden ponds, etc. Principles of the design and basic elements of gas, power, heat and telecommunication grids. External electric and gas-powered heating. |
| **Assessment:** | Test |

### I-C-15 INSTALACJE BUDOWLANE - BUILDING SERVICES

**Director:** dr inż. Dorota Machowska  
**Number of hours:** 30  
**ECTS credits:** 2  
**Format:** Lecture and seminar

| **Lecture:** |
|---|---|
| **Objectives:** | Familiarising students with modern solutions regarding sewerage, water, gas and electric power supply which constitute a part of the building services employed in structures fulfilling various purposes. Presenting the influence of the application of these solutions on the architecture of a building. |
**Content:**
Transferring knowledge regarding municipal service grids and the influence of their location on site development.


**Assessment:**
Test

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**SEMINAR:**

**Objectives:**
Transferring knowledge regarding the principles of the design of sewerage, water supply and gas installations, as well as their impact on the architecture of a building.

**Content:**
Individual exercises in the form of drawing, using a survey map, focusing on the presentation and design of municipal services. Individual exercises involving the development of a building services design of sewerage, cold and domestic hot water, circulating water and gas installations, as well that of a boiler room in a single-family building, along with sewerage, water supply and gas connections.

**Assessment:**
Exercises, test

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**I-C-15 INSTALACJE BUDOWLANE - BUILDING SERVICES**

Director: dr inż. Dorota Machowska
Number of hours: 30
ECTS credits: 2
Format: lecture and seminar

**LECTURE:**

**Objectives:**
Familiarising students with modern heating and HVAC installations constituting the infrastructure of buildings featuring various forms of use. Presentation of
technical solutions employed in energy efficient and passive buildings, as well as the impact of those solutions on a building’s energy performance.

| Format: | Test |

**SEMINAR:**

| Objectives: | Transferring knowledge regarding the selection of radiators, determining heat loss for rooms and the principles of the design of central heating installations. Familiarising students with the principles of selecting the proper dimensions of the elements of HVAC installations and their impact on the architecture of a building. |
| Content: | Individual exercises including the performing of design calculations of heat loss using the detailed method for a selected room, the selection of radiators and floor heating circuits, as well as the design of a central heating installation with radiators and floor heating for a single-family building. Individual exercises based on performing calculations for the purposes of selecting appropriate dimensions for elements of a HVAC installation for a hall for several hundred users - a HVAC central unit, supply and return vents, outside air intakes and exhaust outlets. |
| Assessment: | Exercises, tests |
A-43 Division of Descriptive Geometry, Technical Drafting and Engineering Graphics
Director: Krystyna Romaniak, D.Sc. Ph.D., Prof. PK
31-155 Kraków, ul. Warszawska 24, bud: WiiTCh (W-12) pok. 38-39
Tel. (+48) 12 628 2992

1. Magdalena Bień
4. Renata Górska Dr inż.
5. Marcin Jonak Dr inż.
6. Anna Kulig Ph.D. Arch.
8. Farid Nassery Ph.D. Arch.
12. Dariusz Zachara

I-B-1 MATEMATYKA/MATHEMATICS

Director: dr hab. Krystyna Romaniak prof PK
Number of hours: 45 [30 + 15]
ECTS credits: 4 [2 +2]
Format: classes

First semester
Number of hours: 30

CLASSES:

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>Familiarising students with mathematical analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>Functions of one variable, basic concepts, properties and types. Boundaries of number sequences, function boundaries, continuity of functions. Calculus: derivatives of functions, differential calculus, analysing the course of the continuity of functions. Integrals: Riemann integral, antiderivatives. Calculating the surface area and volume of a solid using calculus - preparing a poster illustrating the solid being analysed.</td>
</tr>
<tr>
<td>Assessment:</td>
<td>Attendance, exercises, poster</td>
</tr>
</tbody>
</table>


**Second semester**

**Number of hours:** 15

**CLASSES:**

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>Introduction to matrix calculus. Familiarising students with selected problems of analytical geometry.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>Matrix calculus: main types of matrices, operations on matrices, determinants of matrices. Solving equation systems using Cramer's rule. Vector calculus: vector on an axis, surface and in a space. Calculations on vectors, angles between vectors. Selected problems of analytical geometry: the Cartesian, spherical and polar coordinates of a point; determinant, directional, general and parametric derivate of lines. Outlining a flat curve using structural annotation, preparing a poster containing information about the analysed curve and a three-dimensional solid modelled using the curve.</td>
</tr>
<tr>
<td>Assessment:</td>
<td>Attendance, exercises, poster</td>
</tr>
</tbody>
</table>

**I-B-2 GEOMETRIA WYKREŚLNA/ GEOMETRY**

**Instructors:** dr inż. arch. Anna Kulig, dr inż. arch. Barbara Wojtowicz

**Number of hours:** 75 [45 + 30]  
**ECTS credits:** 6 [4 + 2]  
**Format:** lecture and laboratories

**First semester**

**Number of hours:** Lectures 15e + Laboratories 30

**LECTURE:**

<table>
<thead>
<tr>
<th>Objectives:</th>
<th>Transferring knowledge regarding the projection of space and its restitution, enabling students to present a design using basic geometric structures, as well as read the presentations of spatial works based on a drawing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content:</td>
<td>The definition of view space as a supplemented Euclidean space. Classification of projection methods used to present three-dimensional objects (3D) on a plane (2D). Projection invariants. Orthographic projections, the European method. Types of projection: 1. Parallel projection (isometric projection, dimetric projection). 2. Perspective projection: projecting a point, line and surface, as well as basic structures (membership of elements, common elements, parallel elements, perpendicular elements, revolutions and rotations, measurement points). 3. Two-point perspective.</td>
</tr>
</tbody>
</table>

4. Projection with elevations; projecting a point, a line and a surface, basic structures (membership of elements, common elements, parallel elements, perpendicular elements, revolutions and rotations) as well as engineering applications.
5. Monge's views: projecting a point, a line and a surface and structures (affiliation of elements, common elements, parallel elements, perpendicular elements, revolutions and rotations).

Assessment: Attendance, examination.

LABORATORIES:

Objectives: Transferring knowledge regarding the projection of space and its restitution, enabling students to present a design using basic geometric structures, as well as read the presentations of spatial works based on a drawing.

Content: Drawing an object viewed in orthographic projection using isometric and dimetric projection. Exercises featuring basic structures of perspective projection.
Drawing an object viewed in an orthographic projection using perspective projection. The applied perspective of an object viewed using orthographic projection, taking into account the appropriate selection of the viewpoint.
Exercises featuring basic structures of projection with elevations. Topographic surfaces: designing the escarpments of excavations and escarpments around a square and a road, as well as terrain profiles. Exercises featuring basic structures in Monge's views.

Assessment: Attendance, passing drawing assignments, test

Second semester:

Number of hours: Lectures 15e + Laboratories 15

LECTURE:

Objectives: Transferring knowledge regarding the projection of space and its restitution, enabling students to present a design using basic geometric structures, as well as read the presentations of spatial works based on a drawing.

Content: Monge's views: transformation of the layout of views. Classification and construction of regular polygons. Geometric transformations: similarity, homothety, affinity and central collinearity as applied to cross-sections of solids.
Outlining roof surfaces, determining the cutting angle of a corner beam, the orthographic projection of a roof, the rotation of roof surfaces. Spheres - orthographic projection. Points of intersection between a sphere's surface and a line, the tangency of a sphere and a line and of a sphere and a surface.
Surfaces used in building construction and their classification. Cross-sections...

Assessment: Attendance, examination

LABORATORIES:

| Objectives: | Transferring knowledge regarding the projection of space and its restitution, which will make it possible, using basic geometric structures, to record a design, as well as read the recordings of spatial works based on a drawing. |
| Content: | Monge's views: transforming the layout of views - true lengths in a given polygon: length of side edges, angles between surfaces, angle between an edge and the viewing plane, the true sizes of side surfaces. Monge's views: the structures of regular polygons resting on a given surface. Cross-section (in a given dimetric projection) of a given shape with a given plane, defined using three points. Defining roof surfaces for a given roof plan, rotation of one roof surface, and the cutting angle of a corner beam. Monge's views: cross-section of a sphere, performed using a surface outlined by parallel lines, tangency of spheres resting on the horizontal plane, cross-section of a cylinder of revolution using two surfaces that are perpendicular to the horizontal plane, as well as the cylinder's development, cross-section of a cylinder of revolution using three surfaces that are perpendicular to the horizontal plane. Vaults in architecture: plans and axonometric projection. Monge's views: own shadow and cast shadow of a sphere using parallel and point-based lighting, a shadow cast by a portal using parallel lighting. |
| Assessment: | Attendance, drawing assignments, test |

I-C-6 TECHNIKI KOMPUTEROWE W PROJEKTOWANIU

COMPUTER TECHNICS IN DESIGN (COMPUTER TECHNIQUES IN DESIGN)

Director: dr hab. Krystyna Romaniak prof.PK
Number of hours: 30
ECTS credits: 1
Format: laboratory

LABORATORY:

| Objectives: | The skills to graphically project architectural ideas on a plane as a part of the technical documentation of buildings. |
Mastering skills of shaping architectural ideas within a virtual space based on project data using CAD technology.
Mastering teamwork skills.
Development and shaping of spatial recognition

| Content | Learning how to work online. Introduction to preparing the visual documentation of an architectural design (Word, PowerPoint, Publisher). Shaping street furniture (SketchUp). Modelling urban complexes and visualising the model (SketchUp). The geometric construction of an architectural detail drawing or elements of architecture. Drawing structural details. Drawing a 1:100 and 1:50 floor plan of a building using a technical design stage precision level (AutoCAD). Preparing a site development plan and a surface listing (AutoCAD, Excel). Introduction to preparing the visual documentation of an architectural design. Importing and exporting to various graphical programs. (Photoshop, Gimp, Illustrator, Microsoft GIF Animator, Publisher, PowerPoint). Creating 3D models of architectural objects (AutoCAD). Making renderings of objects modelled in 3D (AutoCAD, 3ds Max, V-Ray, Lumion, Artlantis, SketchUp). |
| Assessment | Attendance, assignments, quizzes, presentation of assignments. |

I-C-6 TECHNIKI BIM w PROJEKTOWANIU/ BIM TECHNICS IN DESIGN (BIM TECHNIQUES IN DESIGN)

Director: dr hab. Krystyna Romaniak prof.PK
Number of hours: 60 [30 + 30]
ECTS credits: 2 [1 + 1]
Format: laboratory

Second semester
Number of hours: 30

LABORATORY:

| Objectives | Learning how to work with BIM programs. |
| Content | A BIM model of a single-family house (ArchiCAD). Work on schedules as a database tool. Presentation of BIM building surveying documentation in ArchiCAD coupled with the Flexijet system. Preparing the technical documentation of a single-family house, principles of working using sheets, preparing them for print. Writing the textual part of the technical documentation of a single-family house (ArchiCAD, Word). Digital modelling of a building using BIM technologies (ArCADia, Vectorworks). Visualisation of an architectural design using BIM technology, importing and exporting to various graphical programs. |
| Assessment | Attendance, assignments, quizzes, assignment presentation. |
Third semester

Number of hours: 30

LABORATORY:

| Objectives: | Mastering the shaping of architectural ideas within virtual space on the basis of design parameters in BIM technology. |
| Assessment: | Attendance, assignments, quizzes, assignment presentation. |

Master's studies

II-C-1921 Fakultet PROJEKTOWANIE PARAMETRYCZNE BIM/PARAMETRIC BIM DESIGN ELECTIVE MODULE

Director: dr hab. Krystyna Romaniak prof.PK
Number of hours: 15
ECTS credits: 2
Format: seminar

SEMINAR:

| Objectives: | Mastering advanced techniques of shaping architectural ideas in virtual space based on design parameters using BIM technology. Mastering basics of the parametric shaping of architectural ideas within virtual space. Learning how to work in a team. Development and shaping of spatial imagination. Forming the skills of using and applying innovations in the manner of designing buildings. |
| Content: | Rhinoceros - introduction, basic tools. Creating a model of street furniture. Rhinoceros - surface modelling (architectural details), advanced tools. |
Elective module

II-C-1920 BIM MODELOWANIE INFORMACJI O BUDYNKU/BUILDING INFORMATION MODELLING

Director: dr inż. Wojciech Kopka
Number of hours: 15
ECTS credits: 2
Format: Computer laboratory

Computer laboratory:

Objectives: Familiarisation with the basics of Building Information Modelling. Imparting the skills necessary to create an architectural and structural BIM model of a building and its site, followed by visualisations.
Familiarisation with the capabilities in regards to documentation and simple analyses.


Assessment: Attendance, exercises, project
5. Ph.D. Arch. Magdalena Marx-Kozakiewicz  
6. Ph.D. Arch. Anna Pawlak  
7. Ph.D. Arch. Wojciech Wójcikowski  
8. Ph.D. Arch. Anna Ziobro  

II-B-1 EKOLOGIA, OCHRONA ŚRODOWISKA / ECOLOGY & ENVIRONMENTAL PROTECTION

| Director: | prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska |
| Number of hours: | 30 |
| ECTS credits: | 2 |
| Format: | lecture and seminar |

**LECTURE:**

| Objectives: | Transferring knowledge about ecology and environmental protection to students, as well as about efforts to implement sustainable development as a foundation for the shaping of human living conditions in urbanised areas. Familiarising students with the impact of human activity on the extant environment and methods of countering various threats. Presentation of the method of assessing the impact of various projects on the environment. |
| Content: | The module is meant to present the basic principles of implementing sustainable development, based on existing qualities and a rational management of environmental assets. Students become familiar with information about human impact on the environment and well as forms of countering various threats. The subject of lectures covers the basic legal documents that raise awareness about protecting the natural environment, as well as definitions associated with the problem of environmental protection. The lectures also cover elements like Polish legal regulations involving the protection of the environment, discussing the Environmental Protection Law Act, principles of performing environmental impact analyses, forms of protecting the natural environment in Polish law, devices and systems used in generating energy from renewable sources and the influence of the idea of environmental protection on architectural and urban design. |
| Assessment: | Test |

**SEMINAR:**

| Objectives: | Transferring knowledge about ecology and environmental protection to students, as well as about efforts to implement sustainable development as a foundation for the shaping of human living conditions in urbanised areas. Familiarising students with the impact of human activity on the extant environment and |
methods of countering various threats. Presentation of the method of assessing the impact of various projects on the environment.

| Content: | The effect of the module is the ability to perform an objective evaluation of the effect of planning and construction efforts on the different elements of the environment. The additional effect is an improvement of group work-related skills. The basic goal is the identification of existing threats to the natural environment within a selected urbanised area. The next stage is the drafting of an action programme meant to minimise the identified environmental threats. The final effect is the adoption of spatial solutions - proposals of the placement of elements that minimise threats to the natural environment. |

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**FAKULTET II-C-1904 ZAPIS PLANISTYCZNY W URBANISTYCE - ELECTIVE MODULE - PLANNING PRESENTATION IN URBAN DESIGN**

Instructors: Prof. dr hab. inż arch. Elżbieta Węcławowicz- Bilska  
Dr inż. arch. Monika Gołąb- Korzeniowska

Number of hours: 15  
ECTS credits: 2  
Format: seminar

**LECTURE:**

| Objectives: | Shaping the skills necessary to interpret the regulations of local spatial development plans and training the ability to assess the spatial impact in terms of shaping urban form that results from those regulations. |

| Content: | Analysis of the regulations of a local spatial development plan as guidelines for the construction of urban layouts. Proposition of shaping buildings based on the plan's regulations, including the layout and shape of buildings, as well as their forms of use - including a number of alternatives. Verification of the proposals with the regulations of the plan and building regulations. Discussion about the possibilities of shaping space in accordance with the regulations of the local spatial development plan - the spatial consequences of the plan's regulations. |

| Assessment: | Preparing a drawing of alternative spatial layouts, presentation of conclusions. |
OBJECTIVES:
The consultations focus on problems associated with the shaping of transport architecture within a city, as well as methods of making its development more sustainable. Their goal is to verify familiarity with practical principles and legal regulations - in terms of the problem of transport infrastructure - featuring requirements of shaping circulation structures and areas for buildings and urban complexes, as well as methods of eliminating inconveniences associated with this form of use.

- The consultations refer to the principles of sustainable development within cities in order to verify the compliance of the Engineer's project with the latest methods and current regulations, employing appropriate proportions of built-up and open areas and ensuring that environmental balance indicators mandated by law are maintained.

CONTENT:
The consultations are performed for the Engineer's project and are adapted to its subject, scale and site-specific problems.

Consultations of design solutions in terms of considering available methods of maintaining environmental balance. Consulting of design solutions ensuring the safety and effectiveness of transport infrastructure and methods of limiting its inconvenience.

ASSESSMENT:
Individual project
### Assessment of the correctness of the implementation of the aforementioned principles in the design.

**Content:** Consulting design solutions ensuring environmental balance for Master's projects whose conceptual designs feature significant changes to the current state of the environment.

Consultation of design solutions that guarantee the effectiveness of the functioning of transport systems used in Master's projects whose conceptual designs indicate the need to establish a comprehensive transport infrastructure and a redevelopment of the existing road network.

**Assessment:** Individual project

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**I-E-2 KONSULTACJE SPECJALISTYCZNE – ZASADY RÓWNOWAŻENIA ROZWOJU - SPECIALIST CONSULTATIONS - PRECEPTS OF INTRODUCING SUSTAINABLE DEVELOPMENT**

**Instructors:**
- dr inż. arch. Monika Gołąb Korzeniowska
- dr inż. arch. Magdalena Marx Kozakiewicz
- dr inż. arch. Urszula Nowacka Rejzner

**Number of hours:** 1

**ECTS credits:** 1

**Format:** seminar

### SEMINAR:

**Objectives:** The consultations refer to the precepts of sustainable development within a city in order to verify the compliance of the Engineer's project with the latest methods and current regulations, employing appropriate proportions of built-up and open areas and ensuring that environmental balance indicators mandated by law are maintained.

**Content:** The consultations focus on the Engineer's project, its subject, scale and site-specific problems. Consulting design solutions from the perspective of considering available methods of maintaining environmental balance.

**Assessment:** Individual project
11 II-C-21 PRAKTYKA URBANISTYCZNA - URBAN PLANNING PRACTICE

Director: Prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska
Number of hours: 30
ECTS credits: 1
Format: seminar

SEMINAR:

Objectives: Familiarisation with methods of assessing the function of structures and open areas within the given urbanised area - on the scale of a small city as well as that of a selected fragment of a city centre. Evaluation of the quality of urban structure and the identification of visual and compositional values, as well as natural and cultural ones, within the selected urbanised area. Identifying the main problems, threats and conflicts.

Content: Performing a site survey in the form of notes, featuring the marking of identified forms of use, as well as compositional and visual elements of the surveyed area, performing a detailed photographic survey and sketches depicting the character of the space. Analysis of available source materials about the surveyed area, including: publications, archival maps and underlays, iconographic sources, websites, current planning documents. The graphical documentation of the functional surveying of the entire city and an analysis of visual and compositional conditions drawn to a scale of 1:5000, as well as a selected fragment of the city centre drawn to a scale of 1:2000 or 1:1000 (adequately to the size of the selected area)

Assessment: Assignment in the form of a graphical and textual survey documentation, documented by notes.

I-C-22 PROJEKTOWANIE URBANISTYCZNE / URBAN DESIGN

Director: Prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska
Number of hours: 90
ECTS credits: 8
Format: design studio

Objectives: Designing an urban complex featuring a dominance of services-related forms of use and learning methods of the rational design of the urban form on the scale of areas on which modern, medium-sized urban centres are being designed.

Content: Detailed analysis of the connections between the selected area and its surroundings as well as determining the functional and compositional significance of the area on the scale of the city or its larger fragment. Synthesis of extant conditions, including the analysis of the function of the given area, visual and
compositional elements, as well as indicating the main threats and conflicts. The conceptual design of the solution of the compositional layout within the designed central urban area and the elements of its urban composition. Formulating a functional programme of the redevelopment of the selected area. Conceptual design of the spatial development of the selected central urban area employing a 1:2000 or 1:1000 scale - shaping the structure of the built environment through the use of draft models and the presentation of design proposals in the form of hand-drawn sketches of perspective views. Solving a fragment of the city employing a 1:500 scale - design of the main public space along with urban details and the transformation of the built-up area in the immediate vicinity. Preparing a hand-drawn perspective view illustrating the adopted design solutions.

Assessment: Attendance, project, presentation, defence

<table>
<thead>
<tr>
<th>II-C-11 PLANOWANIE PRZESTRZENNE / SPATIAL PLANNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director: prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska</td>
</tr>
<tr>
<td>Number of hours: 105</td>
</tr>
<tr>
<td>ECTS credits: 7</td>
</tr>
<tr>
<td>Format: design studio</td>
</tr>
</tbody>
</table>

DESIGN STUDIO:

Objectives: Familiarising students with the principles of the current functioning of cities and the problems associated with the quality of urban space. Presenting matters associated with studies preceding spatial development plans. Presenting methods of development a design of a spatial development plan of a city. Familiarising students with the principles and strategies of spatial operations in the design of cities.

Content: The design of a spatial development plan of a small city is integrated with the regional planning design studio. The tasks given to students are divided into a number of stages:

- synthesis of local conditions and a conceptual design of the development of the region, presented using 1: 100 000/1: 50 000 scales in four-person groups.

- synthesis of complex conditions within the extant state of a city, which - apart from the values associated with the natural and cultural environment - also include threats and conflicts, as well as conditions related to geography, transport, etc., presented using a 1: 10 000 scale, in 4-person groups.

- development directions of a city, featuring the determining of the scope and character of operations that are significant to the improvement of the quality of the urban space through the solving or alleviation of problems and conflicts, as
well as the appropriate use and protection of existing values, presented using a 1:10 000 scale in two-person groups.

- diagram of the concept of the development of the entire city based on identified development foundations and an assumed programme, with proposals of the placement of new elements of the spatial structure of the city, integration of the urban space - developing and making the system of public spaces more legible, basing it on forms of use associated with services and a layout of open areas, developed on a 1:5000 scale in two-person groups.

- design of a spatial development plan of a fragment of the city with a detailed documentation of regulations regarding forms of use and development of each area of the city in compliance with the principles of sustainable development and the preservation or reintroduction of spatial order using a 1:2000 scale, to be prepared individually.

Group work is to be included.

**Assessment:**
Attendance, project, presentation and defence of the adopted elements of the conceptual design.

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### II-C-12 PLANOWANIE REGIONALNE / REGIONAL PLANNING

**Director:** prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska

**Number of hours:** 30

**ECTS credits:** 2

**Format:** lecture and laboratories

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#### LECTURE:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Having the students learn and understand the basics of regional planning. Familiarity with the mechanisms and problems associated with European integration, regional cooperation in terms of spatial planning, urbanisation processes on the regional scale, the significance of technopolises and privileged regions. Awareness of the significance of regions as important elements in the shaping of space and development - on the local, regional and superregional scale.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>The effect is understanding the basic problems of spatial planning in Poland in comparison to other countries. The student learns the mechanisms and problems associated with European integration, regional cooperation in the field of urban planning, urbanisation processes on the regional scale, the significance of technopolises and privileged regions and becomes aware of the significance of regions as important elements in the shaping of space and development - on the local, regional and superregional scale. The subject of lectures covers, among other things: basic problems of regional development in Poland, designs</td>
</tr>
</tbody>
</table>
and built projects on the regional scale in Poland and around the world - urban agglomerations, urbanisation areas, the contribution of Polish architects and urban planners to the development of European regional planning theory and practice, as well as instruments of regional planning in the Polish legal system compared to the spatial planning systems of other countries.

Assessment: Test

DESIGN STUDIO/LABORATORIES

Objectives: Having the students learn and understand basic problems and mechanisms of regional planning.

Content: The student gains the ability of the practical application of the principles and methods of preparing planning documentation for the regional scale. The task is to determine the specifics of a selected region on the basis of available materials - publications, planning and strategic documents, websites and others. The next step is a synthesis of conditions and a diagnosis of the current state - indicating the fundamental values and threats present in the region. During the following stage the student develops a conceptual design of the spatial development of the region of the selected city. The design studio is integrated with the design of the spatial development plan being developed as a part of the spatial planning module.

Assessment: Attendance, assignment

II-C-10 TEORIA PLANOWANIA PRZESTRZENNEGO / SPATIAL PLANNING - THEORY

Director: prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska
Number of hours: 15
ECTS credits: 2
Format: lecture

LECTURE:

Objectives: Having the students understand the interdisciplinary conditions of spatial planning. Transferring knowledge regarding the principles of developing various planning documents, taking into account requirements featured in Polish legal regulations. Familiarising students with the goals, scope and methods of developing spatial development plans and the role these plans as acts of local law. Understanding the function and significance of architects in the development of planning documentation of various scales and demonstrating the need for designers of other specialisations to participate in the process of the development of these documents.
**Content:**
The lectures are meant to familiarise students with the interdisciplinary conditions of spatial planning. Transferring knowledge regarding the principles of developing various planning documents, taking into account requirements featured in Polish legal regulations. Over their course, students will learn the problems of studies preceding spatial development plans, including their scope and level of detail - dependent on the scale and type of documentation, the role and significance of the spatial development plan as an act of local law in the shaping of the space of a city or its fragment. The function of the spatial development plan as the foundation of land management and carrying out of development projects is demonstrated. The lectures touch on the subject of the role and significance of architects in the creation of the design of a spatial development plan and the need for the participation of designers from other specialisations in the process of developing planning documentation. Students are familiarised with the types of spatial development plans and their scale.

**Assessment:**
Oral and written examination.

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**II-C-16 SEMINARIUM SPECJALISTYCZNE / SPECIALIST SEMINAR**

**Director:** Prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska  
**Number of hours:** 49  
**ECTS credits:** 8  
**Format:** seminar

**Objectives:**
The students learn about issues and methods of design necessary for the independent and correct preparation of a Master's project involving urban design and/or spatial planning.

**Content:**
The subject of the seminar is established individually for each student, in strict reference to the specifics of the design problem that has been undertaken.

**Assessment:**
Attendance, assignment, presentation

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**I-C-24 TEORIA I ZASady PROJEKTOWANIA MIAST / THEORY OF URBAN DESIGN OF CITIES**

**Director:** Prof. dr hab. inż. arch. Elżbieta Węcławowicz-Bilska  
**Number of hours:** 15  
**ECTS credits:** 1  
**Format:** lectures

**Objectives:**
Having the students understand the spatial and functional complexity of cities. Transferring knowledge regarding the contemporary problems of Polish and foreign cities and describing the mechanisms of the development of these cities.
Familiarising students with the main principles of the correct shaping of urban space, with particular emphasis on the need to protect existing values and adhere to the principle of sustainable development. Presenting the legal conditions of the transformation of Polish cities and comparing them to laws in other countries.

| Content: | The definition of the city, basic elements that define an urban space. The causes and mechanisms of the historical and contemporary development of cities. The structure of a city as a material record of its history. Types of cities. Dividing cities based on their population count. The evolution of the principles of the development of cities in Europe and in Poland. The impact of function and compositional factors on the shape of the urban structure. |
| Assessment: | Final test |

II-C-13 TEORIA I ZASADY PROJEKTOWANIA MIAST / THEORY AND PRINCIPLES OF URBAN PLANNING

**Director:** Prof. dr hab. inż. arch. Elżbieta Węclawowicz-Bilska

**Number of hours:** 15

**ECTS credits:** 1

**Format:** lecture

**Objectives:**
Teaching students about the tradition of designing cities, historical urban layouts distinct of specific development periods, modern tendencies in the design of urbanised areas and the problem of suburbanisation, as well as the sociological, cultural and natural conditions affecting the development of the spatial structure of a city.

**Content:**
Influence of function and compositional factors on the shape of the urban structure. The idea of the traditional city in modern built projects in European cities. The problems of urban communities. The needs, preferences and aspirations of city residents referred to the structure of society. The modern problems of cities: social, economic, functional, environmental and compositional. The legal basis for the creation and redevelopment of cities in Poland and in other countries.

**Assessment:** Written examination

A-52 Zakład Odnowy Miast
Kierownik Zakładu: D.Sc. Ph.D. Arch. Bogusław Podhalański

1. Ph.D. Arch. Tomasz Bajwoluk
2. Ph.D. Arch. Monika Gołąb-Korzeniowska
3. Ph.D. Arch. Andrzej Hrabiec
5. Ph.D. Arch. Agnieszka Wójtowicz-Wróbel
DESIGN STUDIO:

| Objectives: | Transferring basic knowledge to students about the needs, conditions and principles of the modernisation and development of rural areas in terms of rural and architectural design while respecting local cultural, natural and landscape values, in accordance with the precepts of sustainable development. The skills necessary for students to understand their future role as co-authors and advisors to local communities that are able to cooperate with local governments in the effort to create modernisation concepts for rural areas. Having the students obtain knowledge regarding the mechanisms of the functioning of a system involving: settlement, forest and agricultural production, recreational functions, protection and shaping of natural and landscape values, as well as circulation, in rural areas. The students must know what are the main interdependencies that connect each element of the system and what are the consequences of the impact of accepted socio-economic and cultural tendencies. In what manner does industrialised or environmental agricultural technology affect the shape of settlements and natural and landscape qualities, as well as how does the decline of the participation of |
the rural population in agriculture affect the spatial, architectural and planning-related shape of settlement in rural areas.

In terms of the detailed scope, the students must be able to analyse and diagnose the current planning, spatial and architectural situation (tendencies) of a selected rural area and, taking into account current legal regulations, formulate the main theses of a reparatory (modernisation) project through the use of drawings and a textual elaboration.

Content:
The Rural Architecture and Planning module has the objective to produce a spatial and planning sketch of a selected rural area and an architectural conceptual design of a farm located in its area (a production facility featuring a selected profile excluding agricultural tourism or a limited production profile including agricultural tourism), an animal farm, a structure associated with the production, processing or storing of products obtained in rural areas (e.g. fruit, vegetables, milk, meat, fish, mushrooms, timber, wicker, hay, reed), a shelter, a hotel, an animal shelter or a veterinarian practice, or an adaptation of a historical enclosure or farm.

The project, developed for the selected site, is to include: field studies and a sketchbook along with an archetype analysis, a planning section employing the 1:10 000 scale, composed of an analysis of the extant state with physiognomic elements, a critical analysis of the current Local Spatial Development Plan or Spatial Development Conditions and Directions Study for the selected rural area with indicating and illustrating the identified faults and the presentation of the student's own proposal of the correction of selected elements of the aforementioned planning documents, e.g. on the basis of an on-site visit.

The architectural conceptual design of a selected structure or complex, which should be designed in the spirit of environmentally-friendly architecture, including the use of natural materials, renewable energy sources and other pro-environmental and energy efficient technologies, while its form should have a modern character that nevertheless refers to the local archetype and must be composed into the landscape surroundings, it is to contain: a 1:500 site development plan, 1:200 plans of every storey and cross-sections through every building, featuring the neighbouring elements and the landscape (at least 1 mandatory frontage of the student's choice, "in colour"). 1:20 structural detail (cross-section from the roof ridge or flat roof fragment to the foundations), as well as a digital or hand-drawn visualisation of the entirety of the designed complex, including the landscape context.

It is required to present the compositional relationships between all of the buildings and the on-site greenery, as well as the relationships between the structures being designed and the existing surroundings. The entire project should be submitted in a file with a signature table and contain: B2 sheets, the sketchbook and written A4 documentation according to the provided templates and a digital version on a CD.

Assessment: Attendance, presentation during review, written documentation, project
I-E-1 PROJEKTOWANIE DYPLOMOWE - DIPLOMA DESIGN
Director: dr hab. inż. arch. Małgorzata Droźdź-Szczybura

Number of hours: 5
ECTS credits: 15
Format: design studio

DESIGN STUDIO:

Objectives: Transferring the basic knowledge about the needs and conditions of the development of rural areas - as well as the transformations that are taking place as a part of it - in terms of rural and architectural design while respecting spatial order and the local cultural, natural and landscape qualities, in accordance with the precepts of sustainable development.

Content: The independent development of a planning and spatial conceptual design of a selected rural area and an architectural design of a selected fragment of a village (e.g. the centre of a village, a farm, an animal farm, an environmental education centre, hipotherapy or dogotherapy, an animal shelter, horse ranch, etc.). It is acceptable for Engineer's candidates to develop their design proposals in rural areas and other areas associated with problems of ruralism. The project is to be developed in accordance with the Higher Education Statute of the Cracow University of Technology, specific provisions of the Faculty of Architecture of the Cracow University of Technology and the individual requirements of the supervisor.

Assessment: Attendance, project, written documentation, defence

II-C-15 ARCHITEKTURA I PLANOWANIE WSI II RURAL ARCHITECTURE AND PLANNING II
Director: dr hab. inż. arch. Małgorzata Droźdź-Szczybura

Number of hours: 30
ECTS credits: 2
Format: lecture and seminar

LECTURE:

Objectives: Preparing students for informed and competent participation in solving one of the most important socio-economic problems of Poland, which is the elimination of civilisational negligence in Polish rural areas and the implementation of an eco-development modernisation programme. Transferring knowledge regarding urban agriculture and the planning and spatial development of rural areas, as well as shaping their architecture.
### Content:

| The emergence and historical development of rural forms of settlement - the first temporary dwellings and settlements, foundings, colonisation campaigns. Villages and rural areas in Poland and around the world. Farming and non-farming buildings for animals. Urban agriculture. Vertical farms - development of the concept, theoretical solutions and built projects. Sustainable development and rural problems (selected issues on the example of the agricultural complex in Kietrz). The spatial problems of transient settlement zones. Colour in the architecture and landscape of rural areas. The role of architecture in the process of the redevelopment of the structure of rural areas on the example of selected designs and built projects. Traditional materials in modern technologies. |

### Assessment:

| Attendance and oral examination |

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### SEMINAR:

#### Objectives:

Preparing students for informed and competent participation in solving one of the most important socio-economic problems of Poland, which is the elimination of civilisational negligence in Polish rural areas and the implementation of an eco-development modernisation programme. Transferring knowledge regarding urban agriculture and the planning and spatial development of rural areas, as well as shaping their architecture.

#### Content:

| Individual classes in the form of a graphical assignment: architectural, rural, a landscape intervention - introducing the principles of spatial order in the presented cases. Individual classes in the form of a graphical assignment: developing a conceptual design of a vertical farm at the given location - 3 versions (sketches), final version - site plan, 4 frontages with preserved proportions (the immediate vicinity, the context of the landscape), perspective view. |

#### Assessment:

| Attendance, a series of graphical assignments, project |

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**II-C-16 SEMINARIUM SPECJALISTYCZNE - SPECIALIST SEMINAR**

**Director:** dr hab. inż. arch. Małgorzata Drożdż-Szczybura

**Number of hours:** 49

**ECTS credits:** 8

**Format:** seminar

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**SEMINAR:**

#### Objectives:

Perfecting the skills required to independently gather and make use of information (regarding agriculture, sociology, agricultural economics, economics, technology, etc.) necessary to implement a correct design process, as well as to understand and implement specialist and detailed design procedures associated with urban...
agriculture and the modernisation of the planning and spatial development of rural areas, as well as shaping their architecture. Improving the students’ skills in the selection and balancing of the share of modern and traditional technical, functional and compositional tools in their design proposals. Transferring knowledge regarding the mechanisms of the functioning of rural areas, including: settlement, forest and agricultural production, circulation, recreational and protective functions, spatial order, natural and landscape qualities, etc. Having the students learn about the dependencies that occur between rural and urbanised areas, as well as the consequences of this polarity: threats and opportunities for development.

**Content:**
Architectural and urban composition versus urban composition, principles of shaping space, theory of the structure of form and the technologies used in agriculture and urban agriculture. Planning, spatial or architectural issues associated with the use of rural areas or agricultural areas within cities in the selected detailed context: e.g. a residential, educational, cultural, tourism-related, agricultural and production-related etc. Matters regarding the development of design and functional proposals in terms of planning, space, architecture and construction or selected design subjects in consultation with appropriate specialists from other disciplines, with particular emphasis on the problems that are key to rural areas. The detailed subject of the assignment is individually approved for every student in accordance to their suggestions regarding the selection of a particular region.

**Assessment:**
Attendance, participation in discussion, essay.

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**II-E-1 PROJEKTOWANIE DYPLOMOWE - DIPLOMA DESIGN**

Director: dr hab. inż. arch. Małgorzata Drożdż-Szczybura

Number of hours: 10

ECTS credits: 20

Format: design studio

**DESIGN STUDIO:**

**Objectives:**
The practical use of knowledge regarding the needs, conditions and transformations that occur in the development of rural areas and urban agricultural areas in terms of rural and architectural design in a project, while respecting spatial order and local cultural, natural and landscape qualities, in accordance with the precepts of sustainable development.

**Content:**
Solving specific planning, spatial and architectural design tasks in the natural and cultural landscape of rural areas. Analysing and diagnosing the existing planning, spatial and architectural tendencies of a selected area and formulating the main theses of a design using drawings, a model and a textual elaboration. In
accordance with the Higher Education Statute of the Cracow University of Technology, the specific provisions of the Faculty of Architecture of the Cracow University of Technology and the individual requirements of the supervisor.

Assessment: Attendance, project, written documentation, model, defence

A-7

DIVISION OF FREEHAND DRAWING, PAINTING AND SCULPTURE A-7
Director: Andrzej Białkiewicz, D.Sc. Ph.D. Arch. Prof. PK
30-084 Kraków, ul. Podchorążych 1
Tel. (+48) 12 628 24 38
Website http://www.a7.arch.pk.edu.pl

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4. Andrzej Domarzewski Ph.D. Arch
5. Prof. art. rzeźb. Stefan Dousa
6. Marek Firek Ph.D form przemysłowych Arch.
7. Prof. art. mal. Ewa Gołogórskia-Kucia
9. Piotr Idzi M.Sc. sztuki
10. Agnieszka Kucia M.Sc. sztuki
12. Piotr Setkowicz Ph.D. Arch.
15. Iwona Zuziak, D.Sc. Ph.D. szt. art. mal. Arch Prof. PK
17. Paweł Nowicki

I-C-4 FREEHAND DRAWING AND SCULPTURE III (Freehand drawing)
Director: prof. sztuki Ewa Gołogórskia-Kucia
Number of hours: 30
ECTS credits: 1
Format: classes

Objectives: Familiarising students with:
- basic means of artistic expression
- manual artistic techniques
- basic precepts of composition
- possibilities of the graphical interpretation of nature
- shaping artistic awareness
- developing reality perception skills

**Content:**
- studies and drawing sketches of plant forms
- sketches and painting studies touching on fundamental problems associated with phenomena related to colour
- compositional exercises
- work in the open air: preparing sketches using various techniques, as well as drawing and painting studies

**Assessment:** Mean grade calculated for all the visual assignments

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**Course:** Architecture

**II-C-1901 Elective module: THE STREET - A SIGN OF A CITY**

**Director:** prof. sztuki Ewa Gołogórska-Kucia

**Number of hours:** 15

**ECTS credits:** 2

**Format:** classes, individual consultations

**Objectives:** Developing skills associated with using visual language in the design process and in the presentation of designs:
- shaping artistic awareness
- developing the ability of individual visual creation
- developing technical skills

**Content:**
1. street- space - place: drawing, painting, photographic documentation
2. conceptual sketches of the solutions of a subject
3. original proposal of depicting the symbolism that defines a place
4. visual preparation of the presentation of a design

**Assessment:** Evaluation of the entire process of developing a design presented in the form of 4 sheets

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**ELECTIVE MODULE:** The art of a place - in search of meanings.

**Director:** prof. sztuki Ewa Gołogórska-Kucia

**Number of hours:** 30

**ECTS credits:** 2

**Format:** seminar

**Objectives:**
- shaping artistic awareness
- developing technical skills
- developing skills of individual visual creation in an existing space

**Content:** Multimedia project, whose essence is the creation of new values in the landscape through intervening in its extant form.

**Assessment:** Evaluation of the entire project
I-C-4 FREEHAND DRAWING

Director: prof. sztuki Ewa Gołogórski-Kucia
Number of hours: 30
ECTS credits: 1
Format: classes

Objectives: Familiarising students with:
- basic means of visual expression
- freehand drawing techniques
- basic precepts of composition
- possibilities of interpreting nature through graphics

Content: Drawing and painting studies of presented compositions, visual interpretation of a given problem
- assignments focusing on surface composition
- space and time dependence in visual interpretation
- graphical imaging

Assessment: Based on an average of all grades for each visual assignment

A-8

INSTITUTE OF LANDSCAPE ARCHITECTURE A-8
Institute Director: Agata Zachariasz D.Sc. Ph.D. Arch., Prof. PK

A-81 Division of the Open Landscape and Engineering Structures
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A-83  Division of Green Areas and Garden Design  
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2. Jacek Konopacki M.Sc. Arch. krajobrazu  

LANDSCAPE ARCHITECTURE DESIGN TEAM  
Kierownik Zespołu: Przemysław Kowalski Ph.D.

1. Miłosz Zieliński Ph.D. Arch. arch. krajobrazu

II-C-2 ARCHITEKTURA KRAJOBRAZU LANDSCAPE ARCHITECTURE

Director: dr hab. inż. arch. Agata Zachariasz prof. PK  
Number of hours: 30  
ECTS credits: 2  
Format: lecture

LECTURE:

| Objectives | Transferring knowledge regarding the historical development of landscape architecture with the complex styles of landscape architecture works across various scales and characteristic forms. The skills of solving problems related to the context of the historical landscape in modern planning. The skill of the use of domestic experiences in terms of the protection and shaping of the landscape. |
The skills of performing comparative analyses. The skill of achieving pro-landscape goals using legal instruments.

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<td>The beginnings of the landscape architectural profession and its modern context. Shaping the landscape in ancient times. Between the ancient period and the Renaissance. The Renaissance and the Baroque. The landscape of England up to the twentieth century. The public park and systems of urban open areas. The terminology of garden design and landscape architecture, as well as the typology of forms of greenery. The Garden city and the evolulational current. Avant-garde concepts and new tradition. New Urbanism versus Landscape urbanism. Trees in the landscape. Analysis of selected examples: e.g. New York, Washington; Lusathia. Planning and the landscape in Poland from the 1920's to contemporary times. Legal forms of the shaping of the landscape in Poland.</td>
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