

STUDY PROGRAMME ARCHITECTURE AND URBAN PLANNING

Introduction

The Faculty of Architecture of the University of Zagreb is the successor of a hundred year long tradition and experience in the education of architects in Croatia, which is being carried out through university studies, scientific, research and artistic practice in the field of architecture and urban planning, as well as through the tradition of providing postgraduate studies for more than 35 years. Providing postgraduate studies begun at the Faculty of Architecture in the academic year 1969/70 and it has continued until today. The postgraduate studies were reorganized in 2005 in accordance with Bologna processes. Since 2007, the doctoral studies have taken place as the third cycle of architectural education. Until today, six generations of doctoral study candidates have been enrolled in the doctoral scientific study Architecture and urban planning.

Social relevance of the studies

The Faculty of Architecture of the University of Zagreb is responsible for and provides the doctoral scientific study *Architecture and urban planning*. Continued interest in these topics is due to social and economic importance of the fields of architecture, urban planning, spatial planning and environmental protection. This interest can also be seen outside of the higher education system, in business and public sectors (ministries of the Republic of Croatia, institutes, counties and cities, architectural design offices, Croatian chambers of architects and civil engineers).

Organization of the studies

Postgraduate scientific study *Architecture and urban planning* has been organized and performed as a study for achieving the academic title Doctor of Technical Sciences (Dr. Sc.) in the field of *Architecture and urban planning*. Upon completing the postgraduate study programme for achieving the academic doctoral title, the candidate is awarded the academic title Doctor of Technical Sciences (Dr. Sc.) in the field of *Architecture and urban planning*. The programme lasts for six semesters and it takes place over the course of three years, during which time the doctoral candidate has to achieve at least 180 ECTS points. In line with the statute of the University of Zagreb, a doctoral candidate's student's status is lost after eight years from the date of enrolment.

International recognizability and comparability

Current projects of the Faculty of Architecture and its cooperation with numerous Croatian, European, American, and especially Middle-European faculties, in the area of teaching and scientific collaboration, reflect the openness and active participation in the research of current challenges in the field of architecture and urban planning. The proposed study programme uses the experiences of numerous other institutions and its organization can be compared to the programmes of similar European universities, such as TU Wien, Politecnica di Milano, IUAV Venezia and ETH Zurich.

Objective of the studies

The objective of the studies is education and preparation of young scientists for responsible dealing with complex and demanding subject-matter of architecture and urban planning in challenging conditions. The programme is being carried out by introducing participants to theoretical knowledge of numerous diverse ancillary disciplines, by encouraging and developing capabilities of intellectual response and thinking, and familiarization with foundations and methods of scientific-research work. As a successor of technical tradition, the Faculty of Architecture nurtures the width and tradition of engineering skills and training, which are supplemented by artistic principles and considerations.

Openness of the studies

This programme will be carried out by the teaching staff of the Faculty of Architecture, members of other faculties of the University of Zagreb, and other universities from Croatia and abroad. Lecturers will adhere to the curriculum and detailed plan established by the Council for doctoral studies of the Faculty of Architecture of the University of Zagreb.

Candidates from other fields of expertise can also enrol and attend this doctoral scientific study. This programme allows mobility of students because, provided that certain criteria are met, it is possible to switch between different programmes. Moreover, some of the courses can be taken at other faculties or universities.

Organization of lectures and learning objectives

Doctoral scientific study lasts for six (6) semesters. Educational forms are distributed by semester in the following way: intense seminar as critical dislocation (I semester); interactive workshop for research into the subject-matter area (II semester); interactive workshop for the methodological elaboration of research interest (III semester); mentorship for achieving the structure of the thesis (IV semester); mentorship for the development of the thesis (V semester), mentorship for the elaboration of the thesis (VI semester). During the course of the doctoral studies, a doctoral candidate has to achieve at least 180 ECTS points. Upon defence of his or her doctoral thesis, the candidate achieves the academic title Doctor of Sciences in the field of technical sciences, scientific field architecture and urban planning.

Courses in doctoral studies are organized in such a way as to allow the candidates to gain scientific insights, knowledge, experience and skills. It is important to ensure the understanding of the core of scientific and applied scientific research in the field of architecture and urban planning. Doctoral candidates are especially encouraged to develop the capability of independent research work, critical analysis, evaluation and synthesis of new and complex ideas, and to form opinions on complex topics which include relevant social, cultural, scientific and ethical responsibility. Written works and public presentations test the capability of demonstration of the results and conclusions of the original research in a clear and efficient way. Doctoral candidates are expected to understand standards of international scientific publishing. During the course of their studies, they are also expected to become involved in exchange of ideas and discoveries by publishing the results of their own research.

All teaching materials and methodological approaches which are being applied in the doctoral studies are aimed at attaining work competences and the development of generic and transferable skills. Generic skills developed through all courses include the following skills: basic (language and technical literacy – partly also in a foreign language), social (communication, teamwork), conceptual (collection and organization of data, defining and solving problems, “learning how to learn”; creative, innovative and systematic thinking), personal (responsibility towards one's own academic and research work, flexibility, time management, meeting deadlines, self-assessment), and socially relevant skills (civic participation, social responsibility, social activism of a professional, collaboration with local community). In order to encourage them to attain transferable skills, students are included into the preparation of teaching materials and mandatory reading for certain courses, class organization, accepting minor administrative tasks, setting up teaching materials and updating the intranet content of the doctoral studies.

Prerequisites for enrolment

Candidates apply based on a public call for applications. Applicants who have completed the (under)graduate university study of architecture in the Republic of Croatia or abroad, and have achieved 300 ECTS points, or they attained the diploma in the (under)graduate study of architecture and urban planning in line with the earlier, pre-Bologna process. Persons enrolling in doctoral studies have to be fluent in the English language.

Applicants who have completed related university studies/programmes (civil engineering, geodesy, agronomy, art history etc.) can also apply, if their scientific-research interest is focused on architecture and urban planning, which can be corroborated by their past work and results.

Applicants who have completed other study programmes can be required by the Council for doctoral studies to take supplemental exam. Supplemental exam tests their knowledge of architecture and urban planning, which is a prerequisite to attend lectures at this postgraduate study, and the contents and mandatory reading for the exam are defined by the Council for doctoral studies in accordance with the study programme of the Faculty of Architecture of the University of Zagreb.

Candidates who have achieved academic degree master of science (Mr. Sc.) in the field of technical sciences, scientific field architecture and urban planning, can apply for enrolment in the fourth semester (mentoring).

Application for the study contains: (1) application form, (2) citizenship certificate, (3) curriculum vitae, (4) certificate of completed studies, (5) certified transcript of the grades achieved at all of the previously completed studies stating the average grade, (6) two (or in specific cases, three) letters of recommendation, (7) description of scientific-research interests, (8) selection of scientific papers, (9) list of published papers. Applications of foreign citizens are evaluated under the same terms and criteria as the applications of the citizens of the Republic of Croatia. The documents submitted by foreign citizens need to be in the original form or in certified copies (depending on the document), written in the first language of the candidate and with accompanying certified translation into English. If necessary, foreign citizens have to submit certified Croatian translation of the appropriate documents (diploma, transcript of grades). After receiving the notification of acceptance in the doctoral study programme, the persons who completed their studies abroad have to have their higher-education qualifications accredited. The process should not be initiated before the candidate receives the confirmation of acceptance in the doctoral study programme.

The Council for doctoral studies will consider all complete and timely received qualified applications and will conduct interviews before the selection of candidates. During the selection process, the Council will demonstrate high regard for total academic and scientific success of the applicant, the results he or she has achieved, and his or her scientific-research potential, relevance of the expressed scientific-research interest and opinions of the referees.

The Council for doctoral studies independently and collectively decides on the selection of candidates. The Council reserves the right not to admit a candidate, without providing additional explanations, for whom they decide that he or she does not fulfil the academic standards of this study programme, that he or she has not demonstrated the appropriate level of excellence, motivation and/or scientific-research potential, or the candidate for whom they cannot provide the appropriate study programme or advisor/mentor with regard to proposed thematic area.

Applications which are not in line with these instructions will not be considered.

Tuition fees

For all doctoral candidates enrolled in the doctoral scientific study in the academic year 2020/21 the tuition fees will amount to 80.000,00 kn. The tuition fee is 20.000,00 kn for the first semester, 15.000,00 kn per semester for the second and third semesters, and 10.000,00 kn per semester for the fourth, fifth and sixth semesters. This price includes the price of the doctoral thesis. The tuition fee is the same for Croatian and foreign citizens. The tuition fee should be paid upon enrolment in each semester.

Institutional management of the study

Doctoral scientific study has the study leader, deputy leader and the Council for doctoral studies. The members of the Council are nominated from the faculty staff of the Faculty of Architecture of the University of Zagreb and the doctoral candidates. An advisor is at doctoral students' disposal for questions related to organization of courses and formal processes.

The Council for doctoral studies determines the terms of enrolment and enrolment quota and conducts the enrolment procedure, decides on the requests of the students of the doctoral studies, conducts annual evaluation procedures and assesses the quality of the work of the doctoral students. It also oversees the quality of the doctoral study programme and makes necessary decision in order to ensure the quality, it also manages and makes necessary steps in order to implement the required changes to the doctoral study programme, and it participates in the creation of development strategy of doctoral studies.

The direction and organization of the doctoral scientific study are defined by:

- Regulations on doctoral studies of the University of Zagreb (2016)
- Regulations on doctoral studies of the Faculty of Architecture of the University of Zagreb (2018)
- Strategy of the development of scientific-research work at the Faculty of Architecture for the period 2018-2025.

CURRICULUM

Vision

The vision of the doctoral study is to promote the high level of research and critical addressing of the problems faced in contemporary challenges in design and planning.

Strategy

Using intense seminar methods, interactive workshops and encouraging mentoring, we try to articulate specific research areas as a contribution to the contemporary discourse in the area of architecture and urban planning. We encourage individual research based on understanding of complex influences within a wider area of built and unbuilt environment. We believe that the knowledge stemming from such research process represents the foundation for formation of our society in the future.

Focus

In our wish to affirm and cultivate international perspective, during the course of the studies we focus on the four characteristic areas important for architecture and urban planning: heritage, living spaces, cities and environment.

Thematic orientation

Study programme has been organized in a way that there are four directions prepared for each generation, identifying the contemporary context and challenges in the field of architecture and urban planning. Thematic directions are a result of detailed discussions at the Council for doctoral studies which include current research and interests of the Faculty. Such approach allows fluctuation of the teaching staff across the studies. The Council suggests four seminar and workshop leaders (semesters I-III) from the ranks of active researchers and project leaders who will be responsible for elaborating the themes and proposing lecturers. The curriculum provides the format, while the organization and contents of lectures are provided in the detailed education plan for each semester. (Please find below the detailed education plan for the 6th generation).

Development of research capabilities

Three year study is divided into two parts. The first part consists of three semesters where the participants define their problem area within the context of contemporary architectural and urban planning challenges and they develop their research capacity and methodological precision through a number of workshops. Research workshops are also the working framework for creation and presentation of one's own research for the doctoral thesis. From the outset, workshop leaders encourage the participants to focus their work towards the subject-matter area of their future thesis and to develop it during two semesters. At the end of each semester there is a group presentation where each candidate demonstrates his/her own one-semester research in front of the workshop leaders and lecturers of the doctoral studies, as well as in front of all other candidates. It is followed by a collegial discussion, conversations, comments, advisory sessions, recommendations for continuation or supplementation of the research. Finished research can be found on the Internet site of the Faculty (virtual.arhitekt.hr), where it is can be viewed as draft by candidates and lecturers of the doctoral studies. Past experiences have shown that group presentations and collegial discussions in the workshops are an excellent way to develop one's own research self-awareness and capability of critical assessment of others (in this case, peers in the study programme). Upon defence of the synopsis in the second part of the studies, candidates proceed with the preparation of the thesis with their mentors and they have to be involved in scientific activities (writing and research).

Academic obligations of the participants

Doctoral studies follow the principle semester after semester. In order to enrol in the subsequent semester candidates have to meet certain criteria. In order to enrol the second semester candidates need to receive positive grades for their scientific essays (2000 words). In order to enrol the third semester they need to receive positive grades for their research work (2500 words) and they have to have presented the structure of the research. In order to enrol the fourth semester candidates need to have fulfilled their educational obligations, and to have submitted papers for publishing as well as their final DR.SC.1. forms. As prerequisites for the fifth and sixth semesters candidates need to acquire the appropriate number of ECTS points from scientific activities (published works, participation in international conferences, participation in research projects, elective courses, scientific exchange, etc.).

Doctoral scientific study: ARCHITECTURE AND URBAN PLANNING

Doctoral scientific	1 st year	1 st semester			
		Lect*	Sem*	Exe*	ECTS
	Mandatory courses				
A	Intense seminar	15	0	10	5
B	Intense seminar	15	0	10	5
C	Intense seminar	15	0	10	5
D	Intense seminar	15	0	10	5
A or B or C or D	Scientific essay				10
	TOTAL	60	0	40	30
		2 nd semester			
	Mandatory courses	Lect*	Sem*	Exe*	ECTS
A or B or C or D	Research workshop	0	60	0	10
Karač	Introduction to methodology of scientific-research work	15	0	10	5
Leader of the studies	Scientific work – proposition and acceptance of the thesis theme	0	0	15	15
	TOTAL	15	60	25	30
Doctoral scientific	2 nd year	3 rd semester			
	Mandatory courses	Lect*	Sem*	Exe*	ECTS
A or B or C or D	Methodological workshop (with potential mentors)	0	20	30	10
Obad Šćitaroci	Introduction to writing the thesis	5	10	0	5
Karač	Introduction to scientific publishing	5	10	0	5
Chairperson of the Committee	Scientific work – preparation of the synopsis of the thesis	0	0	20	10
	TOTAL	10	40	50	30
		4 th semester			
		Lect*	Sem*	Exe*	ECTS
Mentor (proposed)	Scientific work – defence of the synopsis of the thesis	0	0	30	15
	Elective work and courses **				15
Leader of the studies	Published category 'A' scientific paper (WoS)				15
Leader of the studies	Published category 'B' scientific paper (out of WoS)				10
Leader of the studies	Published professional paper or presentation				5
Leader of the studies	Attendance at an international (national) conference with a paper				10 (5)
Leader of the studies	Chapter in an international (national) book				10 (5)
Leader of the sci. proj.	Participation in a competitive (other) project***				10 (5)
Leader of the studies	Sci. exchange (depending on the duration and character)				5 - 10
Course lecturer	Elective course				5
	TOTAL				30
Doctoral scientific	3 rd year	5 th semester			
		Lect*	Sem*	Exe*	ECTS
Mentor	Doctoral thesis (mentorship)	0	0	30	15
	Elective work and courses **				15
	TOTAL				30
		6 th semester			
		Lect*	Sem*	Exe*	ECTS
Mentor	Doctoral thesis (mentorship)	0	0	30	15
Chairperson of the Committee	Defence of the doctoral thesis				15
	TOTAL				30
TOTAL 1 + 2 + 3 year					180

* the number of hours expressed above represents workload during the semester

** possibilities to choose are the same in the 4th and 5th semester (in addition to the ones above, other unspecified activities providing 5 ECTS points can be chosen as well, supported by the decision of the DSC, for example: being a member of the editorial staff of a scientific or professional journal or a collection of papers, membership in a conference committee, public presentations with the aim of popularization of the field, scientific-professional award...)

*** competitive projects – Croatian Science Foundation, Horizon, other international projects; other (additional) projects – national, 'small Faculty of Architecture, 'institutional Faculty of Architecture