



**RE-ACCREDITATION OF THE FACULTY OF ARCHITECTURE,
UNIVERSITY OF ZAGREB**

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COMPOSITION OF THE EXPERT PANEL

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INTRODUCTION

Short description of the evaluated institution

The Faculty of Architecture is a part of the University of Zagreb. The Faculty of Architecture, University of Zagreb continues today the tradition of almost a hundred years of higher education which started in 1919 when the Polytechnic was established. In 1925 the Polytechnic was integrated into the University of Zagreb, and on 31 August, 1926 the Technical Faculty was founded.

After World War Two the Technical Faculty became too big a school with versatile departments, which hindered further development and progress, and it was decided in March 1956 that the Technical Faculty would be divided into four independent faculties: the Faculty of Architecture, Civil Engineering and Geodesy, the Faculty of Mechanical Engineering and Naval Architecture, the Faculty of Electrical Engineering and the Faculty of Chemistry and Food Technology. The faculties started their operation on July 1, 1956. According to the Parliament decision of 26 September, 1962 the Faculty of Architecture, University of Zagreb was established as an independent scientific and HEI whose task is to educate engineers with a degree in Architecture. In academic year 2005/2006, the tuition in the new three-year Undergraduate Architecture and Urban Studies (Bachelor Study) was started, the first students finished these studies in academic year 2007/2008, and the first undergraduate diplomas in Architecture and Urban Planning were to follow suit (baccalaureus). In academic year 2008/2009 the first cycle of a two-year graduate course of Architecture and Urban Planning studies was started which is the continuation of the previous undergraduate studies.

Along with the start of the Undergraduate studies in academic year 2005/2006, in the period 2005 – 2008, the project „Reform of Architectural Curricula in Croatia“, the international project aimed to reform the system of architectural education in the Republic of Croatia, was carried out in accordance with the Tempus programme.

The project is aimed at the harmonisation of the curriculum at the Faculty in Zagreb with the curricula of other European universities pursuant with the Bologna vision of higher education, quality assurance through permanent evaluation and comparison, and to promote mobility of students and teachers, as well as to establish new methods of tuition and studying through providing comparability and mobility of students and teachers within the framework of European higher education. After three years of intensive work and significant changes in structure, content and organisation of studies programmes, the current undergraduate and graduate curriculum of Architecture and Urban Studies was implemented.

School of design

After more than three decades of different initiatives (mostly coming from a cultural sphere) the time was ripe to understand design as an essential factor of economic and cultural prosperity. Back in 1989, the School of Design was founded as an interdisciplinary cross faculty study programme.

Faculty of Architecture, Academy of Fine Arts, Faculty of Philosophy, Faculty of Forestry, Faculty of Economics, Faculty of Mechanical Engineering and Naval Architecture, and the University of Zagreb agreed to establish, organise and implement education at the School of Design. When the agreement was renewed in 1998, the Faculty of Forestry was left out.

The first generations who were awarded a Degree in Design (regardless of the initial difficulties) have considerably raised the level of designer performance.

After receiving accreditation in academic year 2005/2006 the undergraduate study programme in harmonisation with the Bologna process was started.

On the 20th anniversary of the School of Design in academic year 2008/2009, the graduate study programme was started. To date two generations of students have gained a graduate degree.

School of Design is responsible for the high level of designer performance in Croatia (both in Visual Communications Design and Industrial Design). Most Croatian designers are alumni of this School. An objective problem is underdeveloped (production) economy.

The Faculty has been accredited to carry out full-time and part-time programmes. The provision includes undergraduate and graduate studies which are offered on a 3+2 basis. In addition to graduate studies the Faculty offers postgraduate doctoral study. The degree awards are Bachelor and Master as well as Doctor of Architecture.

The work of the Expert Panel

For its work the panel drew upon the self-evaluation report, prepared by the Faculty of Architecture of the University of Zagreb. They carried out a site visit to the Faculty on 26 and 27 March and they saw the premises and physical resources. During the visit the meetings were held with the following groups:

- Faculty Management Board;
- The Self-Evaluation Group and the QA Committee;
- Heads of the departments;
- Teaching Assistants;
- Students;
- The Vice-Dean for Curriculum and Student Affairs, Heads of Study Programmes (undergraduate, graduate and postgraduate);
- The Vice-Dean for International Affairs and the Vice-Dean for Science and leaders of research projects.

The facilities and accommodation were also examined as well as the classrooms at the Faculty where some few classes were visited, during one of which a brief question and answer session with the students was held.

DETAILED ANALYSIS BASED ON STANDARDS AND CRITERIA FOR RE-ACCREDITATION

1. Institutional management and quality assurance

- 1.1. The section of the mission statement that sets out the institution's mission is relatively brief, focused on synthesis of educational, scientific and professional work. The mission states that institution provides expert knowledge based on ethical scientific and artistic ideas as well as practical skills on national and international level.
The expert panel didn't find the clear evidence that the institution carries out appropriate strategic planning in developing its position and defining its vision, goals and strategy in line with its mission. **The institution should more clearly define its goals and strategy in line with its mission.**
- 1.2. Currently the institution has relevant legal documents that set out formally its organisational structure. However, with four separate institutes and two schools this organisational structure lacks in hierarchy process and is likely not to provide the most efficient basis for operation.
It is therefore recommended that the institution review the organisational structure with a view to achieving greater clarity and hierarchy.
- 1.3. **As there is no clear evidence of well-defined strategy of University of Zagreb the panel finds this criterion not applicable.**
- 1.4. The study programmes offered by the institution are aligned with its mission of providing higher education related to architecture and design.
- 1.5. Study programmes are mostly aligned with the Baseline of Croatian Qualification Framework on bachelor and master level.
- 1.6. The institution has formally implemented systems of quality assurance and continuous quality improvement for its education programmes although in relation to its research activities such systems are less well developed and there is limited formalised control.
It is recommended that the systems for quality assurance and continuous quality improvement for research outputs be strengthened and that the involvement of staff and students in all such systems be formalised and strengthened.
- 1.7. The panel finds the institution is in the early stages of implementation of formal mechanisms for the monitoring and improvement of the quality of its teaching.
It is recommended that a formal system of regular feedback of quality monitoring, especially from the student survey, be instituted for staff and students on an institutional level.
- 1.8. The panel finds the institution is in the early stages of implementation of formal mechanisms for the monitoring and improvement of the quality of its teaching.
The internal mechanisms for research quality should be established.

- 1.9. The institution has formal mechanisms for ethical behaviour, **but also should develop their own internal questionnaires on ethical activity within the institution.**

2. Study programmes

- 2.1. The enrolment quotas are determined by the needs of the architecture industry and by employment opportunities.
- 2.2. The enrolment quotas are in line with the institutional resources for quality teaching and the analysis of pass rate.
- 2.3. Student learning outcomes at the level of a study programme are set by the teachers and are clearly communicated to the students.
- 2.5. Appropriate arrangements are in place to calculate the allocation of ECTS credits so that it reflects the work load of the students. The students generally understand the arrangements for the allocation of credits although they reported that there was some imbalance in the implementation of the associated workloads. At present the institution does not carry out regular assessment of the appropriateness of the relative credit weightings.
It is recommended that monitoring of the credit weighting and associated workload is carried out on a regular basis and with input from the students.
- 2.6. The content and quality of each study programme conforms to internationally recognised standards in a way that the qualifications can be internationally recognised.
- 2.7. A range of different teaching methods is used and all learning materials are available on-line. The approach to eLearning is well supported by a well-developed platform although the approach to eLearning needs further development. The students' views about the appropriateness of the teaching strategies were mixed. In some cases the students indicated that the strategies and teaching material were not well matched. Notably, they complained of some out-dated material, lack of international case studies and lack of practically relevant exercises.
- 2.9. Students have some opportunities to experience practical applications on campus in the form of internships. However, the number of internships available is relatively limited.
It is recommended, as EU standards require, to implement the full internship semester.
- 2.10. The institution has defined formal processes for the proposal, approval and implementation of new study programmes and has appropriate arrangements in place for the development, innovation and improvements of programmes.

3. Students

- 3.1. The information packages available to potential students clearly inform them about the level of the programmes, qualifications and academic titles as well as possibilities for further education and employment. Application for enrolment is made via the Croatian Agency for Science and Higher Education which publishes the Faculty's programmes and a call for enrolment is made in the press and on the Faculty web pages. The Faculty web pages and printed material provide information about the programmes, modules, courses of study and academic titles.
- 3.2. Based on the State matura, the admissions criteria and procedures are publicly stated and consistently applied.
- 3.3. Given that acceptance is based on the State matura there is no need for additional criteria to determine acceptance.
- 3.4. The institution supports the students in a number of ways in their extra-curricular activities, including sport, cultural and other activities.
- 3.5. The institution offers counselling and mentorship to the students.
- 3.8. The institution publishes its methods and procedures for student assessment. The students understand the assessment arrangements.
- 3.9. Although the institution gains information about employment of graduates from connections with professional associations and surveys, the amount of information that the institution has about the employability of its graduates is relatively limited.
- 3.10. Its contact with its alumni is limited.
It is recommended that the institution strengthen its statistical information relating to employment and that it broadens its contact with its alumni.
- 3.11. With student membership of the deliberative committees of the institution, appropriate opportunities are provided for the students to participate in decision making processes and in the resolution of matters affecting their experience.
- 3.12. Information provided by the institution to the public about its study programmes, learning outcomes, qualifications and employment opportunities is well-developed.
- 3.13. Opportunities are provided for the students to express their views and to suggest areas for improvement, including through the student membership of deliberative committees. However, the students are not always well informed about the results of their comments or provided with feedback.
It is recommended that the institution gives more attention to ensuring that reports are made to the students so that they can understand the response to their comments.

4. Teachers

- 4.1. Number of teachers is sufficient but the structure has to be changed as there is lack of teaching assistant personnel.
- 4.2. The institution carries out good policy for the growth and development of human resources.
- 4.3. The institution demonstrates the employment of sufficient members of full-time teachers at a study programme to ensure quality and continuity of teaching and learning.
- 4.4. The institution takes into account the number of full-time teachers, maintaining the optimal ratio between students and full-time teachers.
This criterion is not applicable for the School of Design.
- 4.5. The institution has mostly implemented policies for teaching staff to ensure their development, but should develop policies to avoid inbreeding.
- 4.6. The expert panel finds clear evidences on institutional procedures for teacher's advancement.
- 4.8. The institution has partly implemented assurance of teacher's commitments external to the institution.

5. Scientific and professional activity

- 5.1. The institution has some policies but no clear strategic programme of scientific research.
The institution should implement such policies which are monitored, evaluated and reviewed via defined success indicators.
- 5.2. In planning and implementing its research agenda, the institution clearly envisions and provides for cooperation with other scientific organizations and industry both within and beyond Croatia.
- 5.3. At all levels of the institution, research is acknowledged as a contributing component of its overall activity as may be evidenced by intellectual contribution to the institution and its reputation.
- 5.4. The research students indicated that they had some structural problems (lack of strategy on university and ministry level for young researchers) but a survey of students shows that they are satisfied with their mentors.
- 5.5. The panel finds some evidence that institution has developed but only partly implemented a policy for promoting research excellence.

- 5.7. The institution uses evidence of productivity of its research activities including publications and presentations at conferences but the scientific research of the Faculty is not at present systematically monitored. Also there is little evidence that information is being used in a strategic way to enhance the quality of research by, for example, distinguishing clearly between types of outputs.
The institution is recommended to take a more strategic approach to indicators of research activity so that they will support the improvements in research quality.
- 5.8. The institution supports the professional activities of its researchers in line with its mission and it monitors most of these activities.

6. International cooperation and mobility

- 6.1. The institution has arrangements for acknowledging ECTS credits gained by incoming students but actually the inward mobility of students from other Croatian Higher Education Institutions is very limited. Most PhD students also completed their studies within the faculty.
The institution is recommended to attract more regular foreign guest lecturers.
- 6.2. The students have opportunities to take some proportion of their studies abroad.
It is recommended that the institution continues to develop the opportunities for more students to benefit from international experience.
- 6.3. The extent of international cooperation and mobility of teachers is satisfactory. The institute provides support and encouragement for this although opportunities for extended periods abroad are limited by the demanding teaching schedules given the high student numbers. Teachers from the institution have attended other universities as guest lecturers. The summer schools also brought a large number of international scholars to the institution, fostering international dialogue between the teachers.
- 6.4. The institution is involved as a member of a range of international organisations associated with its areas of study.
- 6.5. The opportunities for attracting students from abroad at present are fairly limited because only very limited parts of the programmes, confined to electives, are delivered in English or in a language other than Croatian. The development of ECTS credits for all programmes will support future developments in attracting foreign students.
It is recommended that the institution takes steps to improve the resources offered to international students.
- 6.6. The institution's involvement in the EU Life Long Learning (LLL) Programme is not developed yet.
It is recommended that the institution explores opportunities for cooperation in the EU LLL programme.

- 6.7. The institution has developed other forms of international cooperation by, for example, welcoming guest foreign lecturers, visits by foreign student groups, arranging international conferences.
The institution is recommended to continue to develop and extend its international links.

7. Resources: administration, space, equipment and finances

- 7.1. Many of the resources for enrolled students are good. These include the IT resources and the virtual learning environment which provides access to course information as well as electronic journals. Classroom and practical work rooms have appropriate equipment but has not enough studios space. The institution also provides group and individual study spaces, library resources and appropriate equipment. Some of the spaces, including the library, are limited in size for the number of students. In addition, the School of Design is situated on multiple locations so the students have serious remarks on it.
The institution is recommended to improve the quality and the amount of the studios.
- 7.2. The laboratory equipment and usage protocols are not according to international standards.
- 7.5. The institution collects analyses and uses information about its activities although this could be available and used in a more systematic way to support programmes of improvement. Notably the system for feedback of information to students from the student satisfaction surveys is not well developed.
It is recommended that information is obtained and used more systematically.
- 7.6. There is an active purchasing programme for the library resources. However, the library space is very small for the number of students, and it has very limited study areas. Also there are inadequate multi-copies of some key texts.
- 7.8. Financial stability of the institution is partly harmonised with its mission and enables all students to graduate from their programmes.

FINAL REPORT AND RECOMMENDATIONS BY THE EXPERT PANEL FOR THE ACCREDITATION COUNCIL

ADVANTAGES (STRONG POINTS)

High Ranking Institution

It was the immediate impression that the Zagreb Faculty of Architecture ranks very highly within the European standard of education in architecture. The results of student work are equal to the standards of many good schools within Europe.

Strong Identification of Students with Faculty

It is very clear that the students strongly identify with the goals of the faculty of architecture and display a strong sense of community with tutors and professors.

State of the Art Equipment

The school is equipped with modern technology and students are provided with state of the art facilities: these range from lecture halls, library and studios. The technical equipment is also excellent.

Committed Faculty

The faculty of the school of Architecture is very committed to their mission. Unlike in many European architecture schools, teaching staff is present during the entire week and accessible for students. Especially at the mid-level, assistants and tutors show a strong commitment to education and many contribute far more time to teaching than their contracts require. Furthermore, within the group of young researchers we noticed a strong dedication to integrate the practice and research of architecture.

It should be noted that students from Zagreb usually perform very well in the European Erasmus Exchange program and that most students are multi-lingual.

DISADVANTAGES (WEAK POINTS)

Bologna Transition

The Faculty of Architecture converted from a diploma program to a consecutive Bachelor/Master program according to the Bologna requirements in the academic year 2005/2006. While this transition was used to restructure the program as a whole and to abolish a number of unnecessary components of the curriculum, there are a number of problems resulting from the compression of a program formally extending over five years into three years. As a result, stress upon students and teachers alike has increased and the mobility of students within the European educational realm has decreased. The Faculty should re-evaluate the structure and the workload within the curriculum and consider transferring some of the course work from the Bachelor program into the advanced Master's level, therefore allowing for a more integrated study program.

Long-term Goals

The faculty should develop a long term strategy for the next ten years taking into account demographic change in Croatia and considering opening up the program to international students. While there is a strong interest on the side of the Croatian students to study abroad, and most of them speak several foreign languages, there is very little incentive for students from other countries to study at Zagreb University. Thus, the faculty might want to consider including and strengthening particular aspects in their profile which would be especially unique and thus attractive to students from outside Croatia.

Furthermore, the development of a long term strategic plan should take into consideration attrition of faculty members through retirement as a chance to implement new subjects into the curriculum.

The faculty should also distinguish their profile in order to distinguish it from other architecture programs within Croatia. This might be done by placing an emphasis on the technical facets of architecture, the urban design focus and building in traditional contexts.

Hiring Policy

The faculty should seriously re-evaluate its hiring policy. Presently it appears as if the path to professorship begins as a student at the Faculty in Zagreb, moves along through the doctoral program, then to assistant teacher and finally to various professorial ladder ranks. It should be considered that the requirements for professorship demand a minimum period of time in one's professional development to be spent outside of this department. This and the hiring of teachers from other universities would ensure vital dialog and the implementation of more teaching and research diversity.

Doctoral Program

There was noticeable discontent with the situation amongst the group of doctoral students and young researchers. Presently, only a limited number of professors are permitted to supervise doctoral studies which are mostly connected to government funded projects. This limits the range of topics for research and hinders prospective doctoral students from developing their own topics and research agendas. Essentially, this means that the structure of funding dictates the research agenda of the department. Good ideas that might not be backed by funding have very little chance to be developed through research. The faculty should seriously consider changing the current policy and find means to support doctoral research that does not receive external funding by hiring those researchers as tutors and assistants.

Internships

The UIA/UNESCO regulations for architectural education require a minimum period of one semester of professional internship as part of the curriculum. The faculty should seriously consider adopting these requirements within their program. This might be implemented by adding another semester with thirty credit points, so that this period of professional exposure does not come at the expense of normal course work.

Quality Management

While the department has developed an elaborate quality management system, this instrument remains an isolated statistical construction with little direct impact on improving the quality of teaching. This may be achieved by more involvement from teachers and students in the development of the quality management system. Participation of the students in this task should

be mandatory and the questionnaires from the university should be custom tailored to the needs of the Architecture Faculty.

Lack of Construction Courses on the Master Level

A lack of technical instruction at the Master level is a noticeable deficiency in the curriculum. Most of the technical subjects were moved into the Bachelor component. Design projects at the Master level show no integration of the subjects of: structures, construction, building technology and the like, and therefore, lack the connection to the reality of planning in architecture.

Research Policy

While some departments within the faculty have a strong focus in research others do not. No research policy of the faculty as a whole exists. It is also not clear which role research plays in the promotion of faculty members. Likewise, it is also not clearly spelled out how the pedagogical competencies of the individual teachers figure into the promotion of teachers.

Lack of communication on faculty level

A lack of communication on the faculty level has been noticeable. Especially communication regarding the medium and long term strategy seemed missing and there was no sufficient level of information regarding strategies and goals amongst the faculty members.

Design Faculty

The most serious problem facing this faculty is the relationship between the programs of architecture and the study programs of design. While the Department of Design is part of the architecture school, the faculty members teaching design are not on an equal administrative level with the architecture faculty members. It is recommended that the Design Department is either administratively severed from the Faculty of Architecture or is given a status of autonomy that allows them to formulate their own curriculum and manage their own financial affairs.

While it is certainly obvious that architects need an education in the fundamentals of design and therefore rely on the input of the Design Faculty for their program, there is very little the architects can contribute to strengthen the areas of emphasis within design such as: product design, graphic design or media design.

Talks with individual faculty members of both areas have revealed that the relationship between the two areas is considerably strained, and therefore a greater autonomy in the area of design would help to repair this.

Student work places

Currently there is an insufficient number of studio spaces for architectural students. It is essential that this be communicated to the university administration as well as to the Ministry of Education. It is the very nature of the on-going learning process that large models and drawings are produced and these cannot be easily transported from home to school and back several times a week, and therefore, studios on campus are essential.

RECOMMENDATIONS FOR IMPROVEMENT OF QUALITY

1. Management of the Higher Education Institution and Quality Assurance

- The institution should more clearly define its goals and strategy in line with its mission.
- It is recommended that the institution review the organisational structure with a view to achieving greater clarity and hierarchy.
- It is recommended that the systems for quality assurance and continuous quality improvement for research outputs be strengthened and that the involvement of staff and students in all such systems be formalised and strengthened.
- It is recommended that a formal system of regular feedback of quality monitoring, especially from the student survey, is instituted for staff and students on an institutional level.
- The internal mechanisms for research quality should be established
- The institution should develop its own internal questionnaires on ethical activity within the institution.

2. Study programmes

- It is recommended that monitoring of the credit weighting and associated workload is carried out on a regular basis and with input from the students.
- It is recommended, as EU standards require, to implement the full internship semester.

3. Students

- It is recommended that the institution strengthens its statistical information relating to employment and that it broadens its contact with its alumni.
- It is recommended that the institution gives more attention to ensuring that reports are made to the students so that they can understand the response to their comments.

4. Teachers

- The institution should develop policies to avoid inbreeding.
- The institution should improve internal communication between faculty and the level of information on faculty level regarding strategic issues.

5. Scientific and professional activity

- The institution should implement such policies which are monitored, evaluated and reviewed via defined success indicators.
- The institution is recommended to take a more strategic approach to indicators of research activity so that they will support the improvements in research quality.

6. International cooperation and mobility

- The institution is recommended to attract more regular foreign guest lecturers.
- It is recommended that the institution continues to develop the opportunities for more students to benefit from international experience.
- It is recommended that the institution takes steps to improve the resources offered to international students.
- It is recommended that the institution explores opportunities for cooperation in the EU LLL programme.
- The institution is recommended to continue to develop and extend its international links.

7. Resources: Administration, Space, Equipment and Finance

- The institution is recommended to improve the quality and the amount of the studios.
- It is recommended that information is obtained and used more systematically.