



University of Zagreb
Faculty of Graphic Arts



Self-evaluation
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Faculty of Graphic
Arts
2012/2013 – 2016/2017

28. September 2018

SELF-EVALUATION

University of Zagreb
Faculty of Graphic Arts,
Zagreb, Getaldićeva 2

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At the 10th regular session of the Faculty Council held on 16 July 2018, the Self-Evaluation Committee was appointed for the purpose of re-accreditation of the Faculty of Graphic Arts.

Self-Evaluation Committee

1. prof. dr. sc. Klaudio Pap, dean
2. prof. dr. sc. Nikola Mrvac, vice dean for finance and general affairs, member
3. prof. dr. sc. Vesna Džimbeg Malčić, vice dean for science and international relations, member
4. doc. dr. sc. Miroslav Mikota, vice dean for academic affairs, member
5. doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee, member
6. izv. prof. dr. sc. Dubravko Banić, ISVU coordinator, member
7. doc. dr. sc. Mile Matijević, a representative of scientific-teaching staff, member
8. Teo Žeželj, mag. ing. techn. graph., assistant, employee representative in associate title, member
9. Jaka Mustapić, dipl. iur., Faculty secretary, member
10. Lea Tijan, dipl. iur., head of student administration, member
11. Sanja Babić Getz,, administrator, member
12. Iva Komesar, bacc. ing. techn. graph., student representative (graduate study), member
13. Magdalena Smoljan, student representative (undergraduate study), member

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Introduction



INTRODUCTION

History, organization, mission, vision and strategy of the Faculty

Continuous development of higher education of graphic designers in the Republic of Croatia can be traced back to the 1950s when, in 1951, *Grafički tehnikum* began with the education of graphic technicians, which was an incentive to launch an initiative for the establishment of the High School for Graphic Arts in Zagreb. The initiative resulted in the passing of the law on the Higher Graphic School, and the first generation of students were enrolled in 1960. In 1979 the Graphic School became part of the University of Zagreb. In 1982 Graphic technology has been introduced as an extra curricular program, and in 1986 it was introduced as a full time study program. This resulted in additional vocation – graduate graphic engineer along with the previous education for the vocation of graphic engineer. This has been the basis for founding the Faculty of Graphic Arts in 1990. The first postgraduate course at the Faculty had been established in 2000.

In 2005 the Faculty of Graphic Arts had developed new curricula and programs according to the criteria of the Bologna process, within guidelines of the Ministry of Science, Education and Sports., and introduced new undergraduate and graduate study programs: Technical-Technological and Design of Graphic Products. With the permission of the Ministry of Science, Education and Sports, in 2007 the Faculty introduced its first Postgraduate program in Graphic Engineering and Graphic Product Design.

The Faculty of Graphic arts today comprises 6 departments: the Department for Basic and General Knowledge, the Department for Graphic Design and reproduction photography, the Department of Multimedia and Information Systems, the Department for Printing Processes, the Department for Bookbinding and Packaging and the Department for Materials in Graphic technology and Printing plates. In addition to the six departments, the Faculty also comprises administrative and professional affairs units: the Faculty Administration (subdivided into: Dean Office, Student Administration, Office for International relations, Information Systems and General Service), as well as Accounting, Financial Services and Library. The Dean and the Faculty Council manage the Faculty. The internal organizational structure of the Faculty of Graphics consists of organizational units, the new Statute of the Faculty was adopted at the 5th Session of the Faculty Council held on February 24, 2014. The organizational structure of the Faculty is presented in Fig. 1.1.

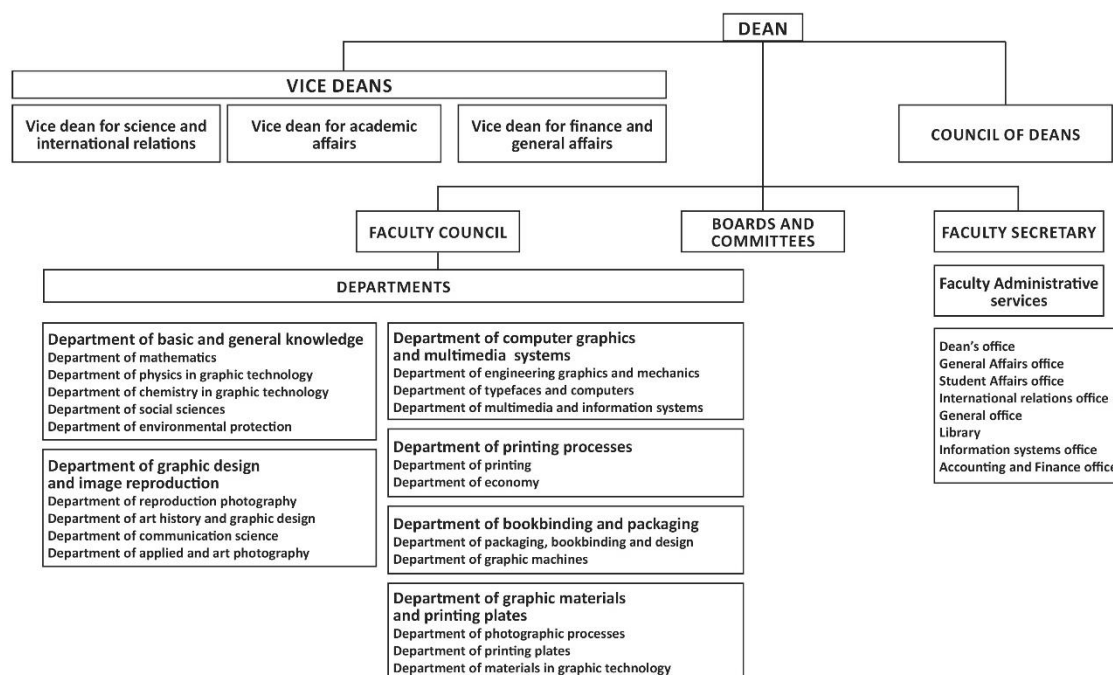


Fig. 1. Organizational structure

* Decision enacted by the Faculty Council on 14. April 2014 effectuated a transformation of the organizational structure of the Faculty: 19 departments were subsumed (according to the Statute - revised text, 4. July 2011) into six larger departments in accordance with the Faculty Statute (February 24, 2014). Newly established departments started their activities on May 13, 2014 ([Decision on the Appointment of Heads of Departments and their deputies](#), [Decision on allocation of employees to single departments](#)).

The Dean works with his fellow vice deans: vice dean for academic affairs, vice dean for science and international relations, vice dean for finance and general affairs and faculty secretary. The deans' advisory body is the deans board comprising of dean, vice-deans, and heads of department, Faculty Secretary and one student representative in the Faculty Council. The Faculty Council consists of employees in scientific / artistic-educational titles, and three employee representatives elected to associate and educational titles, a representative of an employee who is not elected to the scientific-educational, artistic-educational, professional or teaching positions and student representatives. Furthermore, the Faculty Council establishes permanent and temporary committees for the purpose of studying individual issues, preparing draft decisions or performing certain tasks from their jurisdiction at the proposal of the Dean.

Permanent members of the Faculty Council, as well as expert and advisory members are:

1. Education Committee
2. Graduate and Undergraduate Examination Committee



3. Postgraduate Studies and Science Committee
4. Lifelong learning Committee
5. Committee for Electing teaching staff
6. Committee for the Implementation of the Procedure for Breach of Employment Obligation
7. Student Disciplinary Committee
8. Quality Committee
9. Ethics Committee

Temporary members of the Faculty Council

1. Curriculum Committee
2. Awards and Recognition Committee
3. Compensation Committee
4. Procurement Committee
5. Textbooks and Publications Committee
6. Library Committee (with four year mandate)
7. Committee for Scientific Research (Rector's Award, Technology, etc.)
8. Selection Committee for Applicants Appointed to the ERASMUS Contest - Teachers and Students
9. E-Learning Committee

The Faculty Council is the board of experts of the Faculty, its permanent members are:

1. Dean
2. Vice deans
3. All researches and senior lecturers
4. Three representatives in associate and teaching positions
5. One staff representative with no teaching position
6. Student representatives (Student representatives make 15% of the total number of all members of the Faculty Council as listed above. Out of the total number of student representatives six of them are students of undergraduate and graduate studies, and the rest are students of postgraduate studies.)

The representatives listed under 4, 5, and 6 of Faculty Council serve two-year terms and are eligible for re-election. Student representatives serve two-year terms and are also eligible for re-election.

Members of staff whose presence in Faculty council meetings is required due to particular agenda items (Student affairs office, International relations office, Information Systems office, General Service, Financial office, Library) attend Faculty Council meetings by invitation with no voting rights.

Organizational units of the Faculty are departments have been established in accordance with their respective teaching and research activities. Heads and laboratories are constituents of the departments. Some laboratories do not necessarily belong to the



departments, but are independent laboratories. Department laboratories are responsible for carrying out adequate research, teaching and professional tasks.

The Faculty is entered into the Register of Scientific Institutions under number 128, in the fields 2.00 technical sciences.

The Faculty is a constituent of the University of Zagreb. Although a legal entity and public institution in its own right, the Faculty operates under the name of the University and its own name. The University has established the rules of conduct, included in the Statutes and other regulations of the University. The Faculty has an important role and responsibility in the areas of science and society in general of the Republic of Croatia. It is the institution with the longest tradition in its field (67 years of existence), Scientific work is carried out through local scientific projects financed by the Croatian science foundation (two active projects) as well as through specific contracts with the Ministry of science and education. The Faculty has its own publishing unit for scientific papers as well as textbooks and journals (Acta Graphica cited in DOAJ, Hrčak and EBSCO databases). The interdisciplinary nature of graphic technology enables staff members to collaborate on projects with other Faculties of University of Zagreb (Faculty of textile technology, faculty of electrical engineering, faculty of mechanical engineering and naval architecture, Faculty of Chemical Engineering and Technology, School of dental medicine, etc.). In respect to international relations the Faculty has signed bilateral contracts with 19 European Universities. Furthermore the Faculty is engaged in professional activities through collaboration with the business sector as well as the wider local community. Thus achieving its mission and vision in accordance with the Faculty's Quality Policy document. The professional activity of the Faculty is based on expertise, expert reports, studies, reviews, publishing papers in journals and conference proceedings, and to activities related to the popularization of the profession through round tables, discussions, workshops etc. The aim is to encourage continual development of professional competencies and skills of the Faculty staff in the context of constant changes in society and the need to strengthen market competitiveness. Professional activity enables the collection and interpretation of scientific theories and insights with the aim of increasing the scope of their usability and application.

The Faculty Development Strategy

The Development Strategy of the Faculty of Graphic Arts for the period 2017 - 2022:

- Mission and vision of the Faculty of Graphic Arts,
- Strategic goals,
- Measures and action plans,
- Indicators of monitoring progress in the implementation of the Strategy
- Persons and bodies required for the implementation of specific measures, i.e. monitoring the indicators of the Strategy.

The implementation of the Strategy shall depend on the engagement of all Faculty staff. Consequently, the implementation of strategic activities shall be distributed as evenly as



possible to the largest number of holders in order for the strategy to be adopted as a guideline for personal development of the individual within the larger system.

The Strategy of the Faculty of Graphic Arts is primarily based on the previously adopted documents of the Faculty, the Statute, the Faculty Regulations, Dean Decisions, plans and programs of studies, performance plans, Action Plan etc. Some of these documents are permanent documents, while others are revised periodically for a particular academic or calendar year. All these documents are available on the web pages of the Faculty of Graphic Arts (www.grf.unizg.hr), thus ensuring full public access.

The Mission and Vision of the Faculty of Graphic Arts are defined in accordance with the [Quality police document](#).

The Mission of the Faculty systematically develops nationally and internationally recognized excellence in education and research within the field of graphic technology - graphic engineering, visual communication, multimedia and design, which is based on the establishment of quality systems, transfer and application of knowledge ensuring progress of society as a whole.

The Faculty of Graphic Arts is the oldest and leading national institution in its field of activity. Creation and dissemination of knowledge is based on contemporary scientific knowledge, and faculty's priority are its students for whom educational programs have been developed ensuring they become specialists in their respective fields of work. The Faculty actively participates in the creation of knowledge and technology in the fields of graphic engineering, visual communication, multimedia and design, and transfers knowledge and research results to the private and public sector in cooperation with other institutions of higher education in Croatia and other countries.

The Mission of the Faculty is determined by:

- The field of activity of other affiliated Faculties,
- Contemporary European and global trends in the development of higher education
- Constant dynamic and significant market changes that require the transfer of knowledge and application of scientific research results

The vision of the Faculty of Graphic Arts is an active component of the European Higher Education and Research Area, which carries out internationally recognized experts and conducts internationally recognized expert research. The basic purpose of the Faculty is to create, analyse and exchange ideas through teaching, mobility, and research, professional and public activity. The aim of the Faculty is to continuously develop educational resources by creating and applying new scientific knowledge ensuring the quality of education of experts according to the needs of society.

The vision of the Faculty of Graphic Art highlights:

- Continuous identification of new areas of interest of the Faculty of Graphic Arts,
- The excellence of scientific research,



- Quality in higher education through the application of the latest knowledge and standards,
- Transfer of acquired knowledge obtained through research in the business sector.

A significant component of the Faculty's activities are quality assurance through the work of the Quality Assurance Committee. At the Faculty level, evaluation procedures are continuously conducted and internal mechanisms (Internal QAS Forms) developed to ensure and improve the quality of teachers, students and other expert staff members of the Faculty. The tasks and responsibilities of the Committee are set out in the Regulations on the quality assurance system.

The previous evaluations, e.g. self evaluation 2011 and Internal evaluation of quality assurance system 2016 resulted in the issuing of the licence and certificate of harmonization of the quality assurance system with the Standards for Quality assurance in the European Higher Education area as well as in the action plans for improvement based on recommendations in the reaccreditation evaluation reports and internal evaluation reports on quality assurance.

Study programs

Key activities of the Faculty of Graphic Arts are teaching at undergraduate, graduate and postgraduate level, as well as scientific work and research. The structure of studies and the curriculum are comparable to the programmes of related studies at other European universities.

The Faculty of Graphic Arts offers a number of courses at the undergraduate, graduate and postgraduate level within the framework of two study programmes: The Undergraduate Study Programme of Graphic Engineering, the Undergraduate Study Programme of Graphic Product Design; the Graduate Study Programme of Graphic Engineering, the Graduate Study Programme of Graphic Product Design; and the Postgraduate Study Programme of Graphic Engineering and Graphic Design.

Nearly 140 students are admitted annually to the Undergraduate Study Programme, around 100 students enrol annually into the Graduate Study Programme, whereas the Postgraduate Study Programme receives approximately 10 applications. Teaching is carried out by 61 tenure-track professors (of different academic ranks and appointment in different scientific fields) and external associates. The courses are taught in three major lecture halls, the Faculty Council, in several classrooms and laboratories. In addition to its premises in the Marin Getaldić Street 2, the Faculty envisages holding classes in the new premises at the Borongaj Campus.



STUDY PROGRAMMES ON FACULTY OF GRAPHIC ARTS			
Study	Duration	Program	Titula
Undergraduate (Bachelor's program Printing technology) 180 ECTS	6 semesters	Graphic Engineering Technical - technological Graphic Products Design	univ. bacc. ing. techn. graph.
Graduate (Master program Printing technology) 120 ECTS	4 semesters	Technical - technological <i>Moduls:</i> <i>Printing Technology,</i> <i>Multimedia</i> Design of printed products	mag. ing. techn. graph.
Postdoctoral program 180 ECTS	6 semesters	Graphic Engineering Graphic product design	PhD

Fig. 2. Structure of undergraduate, graduate and postgraduate study programmes

Undergraduate programmes (Undergraduate Study Programme of Graphic Engineering and the Undergraduate Study Programme of Graphic Product Design) take six semesters during which the students are required to earn 180 ECTS credits, and graduate programmes take two years and the students are required to earn 120 ECTS credits. Within the framework of the Graduate Study Programme of Graphic Engineering the students can opt for one of two modules: Multimedia or Graphic Technology. Different courses and modules are offered to all students of undergraduate and graduate programmes, from the first semester.

The postgraduate programme of Graphic Engineering and Graphic Design is carried out in two study programmes: Graphic Engineering and Graphic Design throughout six semesters where students are required to obtain 180 ECTS credits. PhD students can opt for their preferred study programme after the first, common, semester.

Curricula and syllabi at the Faculty of Graphic Arts offer flexibility in the choice of course. Each student can, depending on their interests and preferences, choose the area of further personal development and professional training. The Faculty of Graphic Arts is an environment in which competencies for the 21st century are acquired. In addition to the professional knowledge in the area of graphic technology, engineering, natural and social sciences, the Faculty strongly encourages development of generic competencies (entrepreneurship, presentation skills, teamwork, etc.).

Description of the process of compiling the Self-Evaluation report

Upon invitation by the Croatian Agency for Science and Higher Education (ASHE) to participate in re-accreditation for the academic year 2018, the Faculty administration



proposed members of the staff who were to become a committee responsible for compiling the 2nd Self-Evaluation report and for carrying out the re-accreditation process.

At its session held on 19 September 2017 The Faculty Council appointed the **Self-Evaluation and Re-accreditation Committee** comprising:

1. prof. dr. sc. Klaudio Pap, dean
2. prof. dr. sc. Nikola Mrvac, vice dean for finance and general affairs, member
3. prof. dr. sc. Vesna Džimbeg Malčić, vice dean for science and international relations, member
4. doc. dr. sc. Miroslav Mikota, vice dean for academic affairs, member
5. doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee, member
6. izv. prof. dr. sc. Dubravko Banić, ISVU coordinator, member
7. Teo Žeželj, mag. ing. techn. graph., assistant, employee representative in associate title, member
8. Jaka Mustapić, dipl. iur., Faculty secretary, member
9. Lea Tijan, dipl. iur., head of student administration, member
10. Sanja Babić Getz, administrator, member
11. Iva Komesar, bacc. ing. techn. graph., student representative (graduate study), member
12. Lea Grčić, student representative (undergraduate study), member

At the 10th session of Faculty Council held on 16 July 2018 The Faculty Council appointed the **Self-Evaluation and Re-accreditation Committee** comprising:

1. prof. dr. sc. Klaudio Pap, dean
2. prof. dr. sc. Nikola Mrvac, vice dean for finance and general affairs, member
3. prof. dr. sc. Vesna Džimbeg Malčić, vice dean for science and international relations, member
4. doc. dr. sc. Miroslav Mikota, vice dean for academic affairs, member
5. doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee, member
6. izv. prof. dr. sc. Dubravko Banić, ISVU coordinator, member
7. doc. dr. sc. Mile Matijević, a representative of scientific-teaching staff, member
8. Teo Žeželj, mag. ing. techn. graph., assistant, employee representative in associate title, member
9. Jaka Mustapić, dipl. iur., Faculty secretary, member
10. Lea Tijan, dipl. iur., head of student administration, member
11. Sanja Babić Getz, administrator, member
12. Iva Komesar, bacc. ing. techn. graph., student representative (graduate study), member
13. Magdalena Smoljan, student representative (undergraduate study), member

The Committee members work in five teams to cover the assessment areas as follows:

1st area: Internal quality assurance and the social role of the higher education institution

- Doc. dr. sc. Suzana Pasanec Preprotić, team leader
- Prof. dr. sc. Klaudio Pap
- Jaka Mustapić, dipl. iur.
- Sanja Babić Getz, IT administrator

2nd area: Study programmes

- Doc. dr. sc. Miroslav Mikota, team leader
- Prof. dr. sc. Klaudio Pap
- Prof. dr. sc. Nikola Mrvac
- Jaka Mustapić, dipl. iur.



3rd area: Teaching process and student support

- Doc. dr. sc. Miroslav Mikota, team leader
- Lea Tijan, dipl. iur.
- Izv. prof. dr. sc. Dubravko Banić
- Prof. dr. sc. Vesna Džimbeg Malčić
- Teo Žeželj, mag. ing. techn. graph.
- Iva Komesar, bacc. ing. techn. graph.
- Magdalena Smoljan, student

4th area: Teaching and institutional capacities

- Prof. dr. sc. Klaudio Pap, team leader
- Jaka Mustapić, dipl. iur.
- Doc. dr. sc. Miroslav Mikota
- Prof. dr. sc. Nikola Mrvac
- Doc. dr. sc. Mile Matijević

5th area: Scientific-artistic activity

- Prof. dr. sc. Vesna Džimbeg Malčić, team leader
- Lea Tijan, dipl. iur.
- Sanja Babić Getz, IT administrator
- Teo Žeželj, mag. ing. techn. graph.

During the period of preparation for the self-evaluation report on self-evaluation the following members of the Faculty staff (members of the Committee and administrative staff) participated in numerous workshops:

1. Workshop on compiling a self-evaluation report, 24 October 2017 (members of the Committee: prof. dr. sc. Vesna Džimbeg Malčić, vice dean for science and international relations, doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee and Sanja Babić Getz, IT administrator);
2. Workshop on data entry and verification in the upgraded systems MOZVAG and CROSBI, 6 February 2018, (members of the Committee: Sanja Babić Getz, IT administrator and doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee);
3. Workshop for CROSBI administrators and database administrators for project activities in science and higher education of the Republic of Croatia, 28 March 2018 (participant: head of Faculty Library Nina Jelača, mag. bibl.)

The Dean appointed the following persons responsible for data entry and processing in MOZVAG2:

- Sanja Babić Getz, IT administrator
- Izv. prof. dr. sc. Dubravko Banić, ISVU coordinator
- Nina Jelača, mag. bibl., head of Faculty Library
- Doc. dr. sc. Suzana Pasanec Preprotić, head of the quality assurance committee
- Lea Tijan, dipl. iur., head of student administration

For the purpose of compiling the second Self-evaluation report data several meetings of members of teams and committees were held as well as meetings and consultations with administrative staff. The Dean and the Head of the Quality assurance committee coordinate the activities of all staff members responsible for data entry in MOZVAG2 system and for collecting data (QAS form ASHE reaccreditation 2018).



Furthermore, data from different data bases (ISVU, CROSBİ, project data bases) as well as data from Faculty's internal databases (Sharepoint) and data from particular Faculty offices have been used for the purpose of compiling the second Self-evaluation report. A number of already existing documents were used (Self-evaluation report 2011, Faculty development strategy 2011-2016, Faculty development strategy 2017-2022, Report on internal assessment of the quality assurance system of the University of Zagreb 2016, Annual reports on the quality assurance system for academic years 2014/2015–2016/2017, Scientific research strategy of the Faculty of Graphic Arts 2014–2020, Self-evaluation report for postgraduate studies 2016, Report on periodic evaluation of postgraduate studies 2013, Dean's annual report, Faculty regulations such as Statutes, Regulation on the Faculty organization and job classification 2018, Regulations on undergraduate, graduate and postgraduate studies, Regulations on quality assurance system - [Documents and guidelines for quality management](#)).

The Self-evaluation report was adopted by the Faculty Council at its regular meeting held on September 28th 2018.

The Self-evaluation report contains Introduction and five chapters (107 pages) and attached tables generated by the MOZVAG system.

I.

Internal quality assurance
and the social role of the
higher education institution



1. Internal quality assurance and the social role of the higher education institution (ESG 1.1., ESG 1.7., ESG 1.8.)

1.1. The higher education institution has established a functional internal quality assurance system.

Internal quality assurance system includes and evaluates all activities of the higher education institution (study programmes, teaching process, student support, support to students from under-represented and vulnerable groups, learning resources, scientific/artistic activity, professional activity, etc.) and provides underlying documentation.

Internal quality assurance system seeks to involve all stakeholders of the higher education institution (students and external stakeholders – employers, alumni, representatives of professional organisations, civil society organisations and internal stakeholders).

The higher education institution adopted a quality assurance policy, which is a part of its strategic management and is achieved through the implementation of the strategy, including the research strategy, involving a period of at least five years.

The implementation of the strategy includes SWOT or similar analysis, strategic goals, programme contract goals (where applicable), operational plan, defined responsibilities for implementation, monitoring mechanisms and the report on its implementation. The stakeholders recognize the strategy as an effective tool for improvement.

The higher education institution systematically collects and analyses data on its processes, resources and results, and uses them to effectively manage and improve its activities, as well as for further development.

The higher education institution is committed to the development and implementation of human resource policies (managerial, scientific-teaching, artistic-teaching, administrative, professional and support resources), in accordance with professional principles and standards.

According to the ESG Standards and Guidelines for Internal Quality Assurance in Higher Education 2015, the Faculty of Graphic Arts of the University of Zagreb continuously contributes to the promotion of transparency and mutual trust. The Faculty is focused on ensuring quality in the field of teaching and learning through relevant links with science and innovation in the field of graphic engineering, design and communication taking into account the national context within which the Faculty operates ([Faculty development Strategy – Faculty of Graphic Arts 2011. - 2016.](#) [Faculty development strategy 2017-2022](#), [Scientific research strategy of the Faculty of Graphic Arts 2014-2020](#)). The quality assurance system QAS includes and evaluates all Faculty activities and the system is being efficiently improved and further developed through internal and external evaluation results ([Faculty QAS form](#)). In this way, the Faculty has been supporting the development of cultural quality since February 2015. All students and scientific-teaching staff, the Faculty's administration as well as external associates of the Faculty and external stakeholders have accepted this cultural quality.

The activities of stakeholders in nine areas covered in the Quality Assurance Manual of University of Zagreb, Faculty of Graphic arts is continuously monitored for each academic year (Annual Report and Activity Plan) ensuring the continuous development of cultural quality on all levels including study programs, evaluation of student work and progress, study resources and student support, quality assurance for teaching staff, for scientific-research activities and artistic-research activities, expert activities, mobility and international relations, resources for educational scientific-research, artistic and expert activities, information system as well as Faculty transparency.



First Periodic internal quality assurance system evaluation was implemented by the University of Zagreb on 15 April 2016. A one-day visit of the expert committee followed the first stage of internal evaluation, in which the Faculty of Graphic Arts Quality Management Committee filled and sent for evaluation the Development Assessment Form for quality assurance system of the University of Zagreb. The form was completed in accordance with national standards and quality standards and guidelines for quality assurance in the European Higher Education Area 2015. The Quality Management Committee of the Faculty of Graphic Arts has clearly assessed the development phase for each defined area according to the instructions from the Quality Assurance Manual of the University of Zagreb Faculty of Graphic Arts including the Regulations on Quality Assurance System and the Regulation on Amendments to the Regulations on Quality Assurance System at the Faculty of Graphic Arts Zagreb. Based on the self-evaluation results, evidence submitted and consultations with expert Internal Assessment Committee for the Quality Assurance System, the University of Zagreb has adopted a harmonized assessment of the development of defined areas in the quality assurance system of the Faculty of Graphic Arts. The level of harmonization in the thirteen areas of activity is expressed by the average rating 1 (not defined), 2 (defined), 3 (implemented), 4 (partially effective) and 5 (effective) as follows:

- ESG area 1.1.1-1.1.10 – Quality Assurance policy – 3
- ESG area 1.2.1-1.2.9 – Design and approval of programs – 5
- ESG area 1.3.1-1.3.15 – Student-centred learning, teaching and assessment – 5
- ESG area 1.4.1-1.4.5 – Student admittance, progression, recognition and certification - 5
- ESG area 1.5.1-1.5.6 – Teaching staff (staff competence)- 4
- ESG area 1.6.1-1.6.8 – Learning resources and student support (funding for learning and teaching activities)- 4
- ESG area 1.7.1-1.7.8 – Information management - 5
- ESG area 1.8.1-1.8.9 – Public information (Information on Faculty activities) - 4
- ESG area 1.9.1-1.9.9 - on-going monitoring and periodic review of programs - 4
- ESG area 1.10.1-1.10.5 - Cyclical external quality assurance in accordance with ESG - 5
- ESG area 1.11.1-1.11.6 – Scientific-research and artistic activities - 4
- ESG area 1.12.1–1.12.7 – Expert activities (encouraging expert teaching staff activities) – 4
- ESG area 1.13.1- 1.13.9 - Mobility and international relations- 5

In accordance with the recommendation of the expert committee and the awarded thirteen ratings to the Faculty of Graphic Arts for the development of quality systems in respective areas and in accordance with the proposal of the Dean of the Faculty, the Quality Management Committee prepared the document [Quality Policy of the University of Zagreb Faculty of Graphic Arts](#). The Faculty Council approved the Policy at the 8th regular session held on 16 May 2016.



The official acknowledgement of eligibility for carrying out activities in higher education was obtained on 10 March 2016 for the re-accreditation process of the Faculty of Graphic Arts, University of Zagreb for academic year 2011/2012. The accreditation on the fulfilment of conditions for carrying out activities was preceded by a positive accreditation recommendation of the Agency for Science and Higher Education (15 December 2015) and the opinion of the Accreditation Council of the Agency and the Ministry of Science, Education and Sport of the Republic of Croatia.

Insight into the activities of the [Quality Management Committee](#) are available on Faculty's website. Activities are thematically systematised in order to improve the cultural quality of higher education. Documentation and *Internal QAS forms* are also publicly available to all stakeholders of higher education and are on the web site of the Quality Management Committee. All teachers of the Faculty of Graphic Arts yearly fill six internal QAS forms between 15 and 30 October. Systematization of activities in the form is defined in seven areas (PA: 3-9) according to the Quality Assurance Manual of the Faculty of Graphic Arts. Information on the activities of each teacher, including all six forms are implemented in two separate documents *Annual Report on Quality Assurance of the Faculty of Graphic Arts* for the previous academic year and *Activity Plan for Quality Assurance at the Faculty of Graphic Arts* for the following academic year. This type of participation of teachers in the system of quality assurance of higher education institutions began in the academic year 2014/2015 and has been successfully implemented for the past three years. Furthermore, the Quality Management Committee submits the proposals of the two documents for public hearing to teachers of higher education. Upon acceptance of any amendments to the document, the Faculty Council adopts the Decisions on their acceptance beginning of December. Subsequently, the documents are officially submitted to the Office of Quality Management at the University of Zagreb.

In accordance with the Final report, recommendations of the Expert Committee for the re-accreditation of the Faculty of Graphic Arts and the Rector of the University of Zagreb in the academic year 2012/2013 and in accordance with the Senate Decision of the University of Zagreb prof. dr. sc. Borivoj Modlic was appointed Dean of the Faculty of Graphic Arts. He was appointed the Dean for the duration of two years (31 Dec 2014) when the new Dean and Vice dean were elected. Prof. dr. sc. Klaudio Pap and the new vice dean were elected on 1 January 2015 for the duration of two years (30 September 2016).

The new acting dean of the Faculty of Graphic Arts, University of Zagreb since his appointment (3 October 2013) to 26 May 2014, submitted the Report on his activities to the Rector of the University of Zagreb (CLASS: 602-04 / 14-01 / 120, Reg : 251-80-14-1) in the field of organization and management structure, the development of new strategic documents in the field of scientific research and the election of the new administration of the Faculty of Graphic Arts, obligations from letters of expectation from the Ministers of 20 December 2012 and tasks derived from regular Faculty activities (Attachment -Records FC academic year 2013/2014).

The new elected administration of the Faculty of Graphic Arts with the Dean prof. dr. sc. Claudio Pap began its mandate on 1 January 2015 for the academic year 2014/2015, and



developed the Regulations on Amendments to the Regulations on Quality Assurance which was adopted by the Faculty Council at the 4th regular session of the Faculty Council held on 26 January 2015.

The amendments to the Regulation relate to the increase in the number of members in the Quality Management Committee consisting of a total of nine (9) members: the Faculty Administration (1 representative), Scientific / Artistic Teacher (5 representatives), student (1 representative), administrative or technical staff (1 representative) and a representative from the business sector (1 representative). Additionally, the new Faculty Administration complements the Decision on Appointment of the Quality Management Committee, and the Faculty Council adopts it at its 5th regular session held on February 9, 2015.

The Quality Management Committee began drafting the protocol of systematization of activities and appointed the leaders of the working groups for the preparation of the *Quality Assurance Manual of the University of Zagreb Faculty of Graphic Arts*. The head of the Quality Management Committee submits progress reports to the members of the Faculty Council. In the next academic year 2015/2016, the Quality Assurance Committee held a public hearing of the proposal of Quality Assurance Manual to teaching staff and Student Council. The Faculty Council adopted the proposal at the 6th regular session held on 14 March 2016.

The Faculty Statute adopted at the 5th regular session of the Faculty Council held on 24 February 2014 is also available on the web page of the Quality Management Committee. *The Faculty of Graphic Arts Development Strategy 2011-2016, The Faculty of Graphic Arts Scientific Research Strategy 2014-2020* and *The Faculty of Graphic Arts Action Plan for Quality Improvement in Science and Higher Education 2017/2018 and 2018/2019* was adopted at the 1st regular session of the Faculty Council on 16 October 2017.

Upon proposal of the Faculty Secretary the Quality Management Committee changed its title to the Quality Assurance Committee, members of the Faculty Council accepted the Decision at its 5th regular session held on 27 February 2017.

Furthermore, the Dean has appointed a working group to draft the proposal in accordance with the Accreditation Recommendation from 15 December 2015 of the *Action plan for improving the quality for the two academic years 2017/2018 and 2018/2019*, and the members of the Faculty Council adopted the proposal at its 1st regular session held 16 October 2017. The working group defined a total of seven objectives and systematized tasks in the following areas: managing and improving the quality system (10 assignments); study programs (9 assignments); teacher training and assessment (7 assignments); scientific-research activities (8 assignments). In accordance with the Action Plan, the Faculty Council developed the *Faculty Development Strategy 2017-2022*, which was adopted at the 4th regular session of the Faculty Council held on 22 January 2018. In accordance with the set of strategic goals from the second SWOT analysis in the academic year 2014/2015 the quality assurance system is constantly being improved. The SWOT analysis process included internal and external stakeholders of the Faculty of Graphic Arts, and the objectives of the working group were derived from the vision and mission of the Faculty, which are described in the



document "Quality Policy of the University of Zagreb Faculty of Graphic Arts 2016". The Working Group has defined nine strategic goals and a total of seventy-two activities in the Development Strategy that are available on the web site of the Quality Assurance Committee.

The definition of strategy and strategic goals based on the SWOT analysis (2014/2015) as follows:

<p>STRENGTHS</p> <p>Teaching quality supported by scientific-professional activity of teaching staff; Teaching based on modern and innovative approaches, the use of e-learning; High quality interdisciplinary work; Cooperation with industry in teaching, scientific and professional work.</p>	<p>WEAKNESSES</p> <p>Relatively modest spatial conditions; Relatively poor equipment of some laboratories/ practicums; Inadequate share of financial resources outside funds received from the Ministry of Science and Education.</p>
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Renovation of available spaces in the building of the Faculty of Graphic Arts and extension of the premises to the Borongaj Campus; • Increasing the number of staff with scientific and teaching titles as well as associates; • Qualified teaching and scientific-teaching staff and associate professions; • Modernization and procurement of new equipment; • Enhancement of publishing activities of the Faculty; • Expansion and emphasis on new areas of expertise; • Improvement of existing and introduction of new plans and study programs; • Increase in self-financing, co-operation with the industry and national and European institutions. 	<p>THREATS</p> <p>Reduced share of printed media in Croatia and globally; Reduced interest in traditional areas of graphic arts; Reduced teaching staff needs in some traditional areas of the profession</p>

The Quality Assurance Committee is dedicated to continuously improve the quality assurance system of the Faculty of Graphic Arts as of 12 February 2015. The Head of the Committee co-ordinates all activities needed to improve and ensure system quality and communicates between the Management Board and all stakeholders (teachers, students, professional services) at the higher education institution. From the beginning of her mandate the Head insisted on developing a large number of QAS internal forms specific to the Faculty



of Graphic Arts. The Head proposed that only by continuous monitoring of teachers, students, committees, coordinators and expert offices the cultural quality of higher education could be improved. The Faculty Board accepted the Head's proposal. A total of nine Internal QAS forms become an integral part of the protocol in the continuous monitoring and improvement of the quality of work of all involved in the academic year 2014/2015. This type of systematized communication protocol between the Quality Assurance Committee and the teaching staff of higher education institution enables a transparent and flawless work of all other Committees – permanent and temporary members of the Faculty Council. The systematization of staff activities is divided in accordance with the criteria and guidelines ESG 2015 derived from Faculty's Quality Assurance Manual and are integral part of QAS forms as follows:

- QAS form – Annual report – Student support, code: QAS/PA(5)
- QAS form – Annual report – Teaching staff expert activities, code: QAS/PA(8,11)
- QAS form – Annual report – Improving teaching staff competencies, code: QAS/PA(3,9)
- QAS form – Annual report – Teaching staff scientific activities, code: QAS/PA(7N)
- QAS form – Annual report – Doctoral/Postdoctoral scientific activities, code: QAS/PA(7)
- QAS form – Annual report - Mentors, code: QAS/PA(5M)
- QAS form – Teaching staff activity plan, code: QAS/PA(1-11)
- Evaluation form– Teaching staff evaluation
- QAS form - Teaching staff self-evaluation

Furthermore, the heads of committees, coordinators, student council, head of financial department and the faculty teaching staff continuously submit annual reports on their work no later than the end of October for the previous academic year. In early November, the Quality Assurance Committee prepares a public document containing all relevant information on the activities of all involved stakeholders. Following the public discussion, the document "Annual Quality Assurance Report of the Faculty of Graphic Arts" is adopted by the Faculty Council in December for the current academic year. The Quality Assurance Committee also prepares a second document of the "Quality Assurance Activity Plan of the Faculty of Graphic Arts". Both documents are publicly available on the web site of the Quality Assurance Committee. Dean's Annual reports are presented at Faculty Council meetings. These reports include indicators and analysis in the areas of teaching, scientific research, business sector cooperation and scientific productivity, human resources and investment, financial operations and the organization of the Faculty. The Faculty Management Board regularly reports to the Dean's Office and the Faculty Council on all relevant activities. The minutes of these reports are made available on the Intranet application in the [Sharepoint](#) system (Figure 3). In order to improve efficiency of communication between the Faculty administration, the departments, heads, offices and boards the Intranet application in the Sharepoint1 system was launched on 1 April 2011. The application allows insight into the activities of the above-mentioned organizational units. All employees of the Faculty may use the application.



The board meeting of Deans, Faculty Management and heads of departments began its sessions in accordance with the Faculty Statute in academic year 2014/2015. (The Faculty Statute was adopted on 24 February 2014). For the effective management of the Faculty regular monthly meetings are held a week prior to the Faculty Council meetings. The items on the agenda are related to the topics discussed in the Faculty Council meetings. Upon discussions and reaching conclusions, heads of departments inform members of their departments and other members of the Faculty Council about the conclusions Meetings are also regularly held between The Faculty Board and administrative and other faculty staff. Furthermore, the representative of the Student Council is a member of the Deans Council. The Faculty Administration supports students in scientific, research, artistic, professional and sport activities. Students are encouraged to continually demonstrate their creativity, innovation and develop their knowledge and skills in practical examples by incorporating their learning outcomes acquired through teamwork during their study programs. They also participate in international student competitions, workshops and congresses and where they have acquired numerous recognitions.

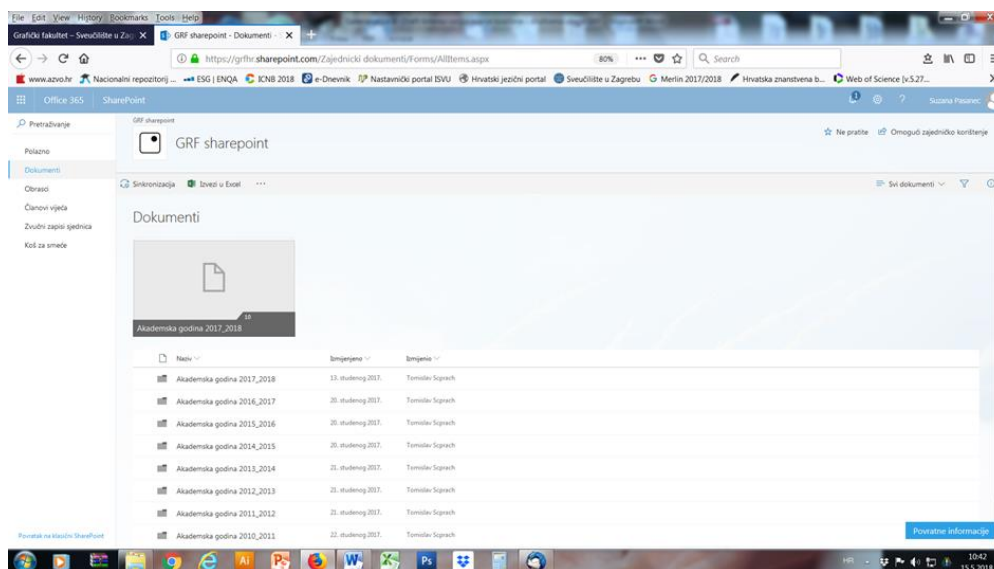


Fig 3. Intranet Sharepoint aplicacion

The Faculty is dedicated to the development of human resources and the implementation of management policies in accordance with the principles and standards of the profession. Teachers in departments and laboratories carry out teaching, scientific-research and professional work and care for the continuous training of scientific and expert staff. The Faculty also increased the proportion of teachers in science-teaching positions due to the obtained development coefficients from the University of Zagreb in the last four years ([Sharepoint](#)). The cultural quality policy of the Faculty is generally reflected through scientific research and professional work and the teaching methodology of students (Merlin, Ceroline, Faculty web site) ([E-Course catalogue](#)). The Faculty continually improves cooperation with partners from the business sector and international scientific communities ([Contracts](#)). The Faculty signed an Agreement on Mutual Cooperation with the [business sector](#) in order to continually improve the competences of teachers in the current methodologies of teaching as well as to develop new teaching methodologies through



student practice, final papers, diploma work and doctoral dissertation ([repository](#)). The aim of the Faculty is to continuously promote the knowledge and skills of teachers and students through scientific-research projects <http://www.grf.unizg.hr/Research/Projects> and to educate competent experts for active and successful lifelong learning. The Faculty also demonstrates the commitment to the mobility of teachers and students from the higher education institution to the business sector and vice versa. The Lifelong learning Committee has since March 2017 continuously promoted the cooperation of the Faculty with the business sector, as evidenced by partnerships of HEI stakeholders with the entrepreneurs and teachers of other higher education institutions in Croatia and abroad.

The Quality Assurance Committee continuously analyses student information on the quality of study programs only upon completing university undergraduate or graduate studies in February and September for each academic year [Dokumenti i smjernice upravljanja kvalitetom/ student evaluation survey results](#). Such internal analytical tables give an average rating of each question asked in the Student Survey of the University of Zagreb. The sectional part of the student survey and the average grades are used to produce the document "Quality Assurance Activity Plan of the Faculty of Graphic Arts" in December of each academic year.

The organization, activity and operating of the Faculty are stipulated by the Statute. The Faculty continuously transmit the results of science into practice through the fundamental structural teaching and research (six heads) units, while administrative and professional services ensure continuous cultural quality performance of higher education activities. By establishing a quality assurance system, a large number of higher education stakeholders are involved in continuous monitoring of activities through permanent and temporary committees. Permanent committees are comprised of the following: Quality Management Committee (9 members), Ethics Committee (3 members), Education Committee (5 members), Graduate and Undergraduate Examination Committee (5 members), Postgraduate Studies and Science Committee (3 members), Lifelong learning Committee (3 members), Committee for Electing teaching staff (3 members), Committee for the Implementation of the Procedure for Breach of Employment Obligation (3 members / 3 substitute members) and Student Disciplinary Committee (3 members / 3 substitute members). Temporary committees are comprised of the following: Curriculum Committee (12 members), Selection Committee for Applicants Appointed to the ERASMUS Contest - Teachers and Students (3 members), Committee for Student Scientific Research (3 members), Library Committee (3 members), Procurement Committee (3 members), Textbooks and Publications Committee (3 members), E-Learning Committee (3 members), Awards and Recognition Committee (3 members) and Compensation Committee (3 members). Alongside permanent committees expert committee have been appointed with specific tasks (election to scientific titles, scientific-teaching titles, expert titles and positions, vocational training, grading procedure and drafting of general acts). Furthermore, the Faculty has appointed the following: information Coordinator; protection of personal data; occupational safety, waste management; occupational safety personnel; for ECTS; for ISVU; vocational training; student support, students with disabilities support; for CarNet and he IT system. Administrative and professional services of the Faculty are: secretary; student office; library; finance and accounting office; Bursar's office; maintenance of electronic systems and general maintenance and cleaning services.



1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

The higher education institution analysed the recommendations for improvement and undertakes activities on the basis of previous internal and external evaluations.

The higher education institution analyses improvements and plans further development accordingly..

Under the Act on Quality Assurance in Science and Higher Education (Official Gazette no. 45/90) and the Ordinance on the Content of Licence and Conditions on Issuing Licence for Performing Higher Education Activity, Carrying out a Study Programme and Re-accreditation of Higher Education Institutions, in 2011 the Agency for Science and Higher Education carried out external evaluation of the Faculty according to *the Standards and Guidelines for Quality Assurance Systems in the European Higher Education area* (2005 version, seven standards of ESG).

The Expert Committee for the first re-accreditation of the Faculty of Graphic Arts, University of Zagreb visited the Faculty on 28 and 29 November 2012.

Upon re-accreditation of the Faculty of Graphic Arts and issuing of Reports and recommendations and upon issuing Reports and complaints of the Faculty of Graphic Arts ([cronology of previous evaluations](#)), a Letter of expectations of the Minister was issued on 20 December 2012 (CLASS: UP / 1-602-04 / 12-13 / 00084, Reg 533-20- 12-0005).

The Letter of expectation supersedes previously issued public documents of the re-accreditation process and gives recommendations to the Faculty of Graphic to carry out the following activities within the period of three years:

- to reduce the enrolment quotas for new generations of undergraduate students by meeting the minimum requirements for carrying out the activity;
- to submit to ASHE Reports in accordance with recommendations for improving the organizational structure of the Faculty (six months deadline);
- to submit to ASHE the strategic program of scientific research for a period of at least five years in the scientific field in which the Faculty carries out its activity (one year deadline).

The Faculty of Graphic Arts of the University of Zagreb regularly - every six months - informs ASHE, the Ministry of Science, Education and Sports and the University of Zagreb about the actions carried out in relating to the Letter of Expectations of the Minister ([short report](#)).

The Faculty of Graphic Arts submitted the Final report (CLASS: 602-04 / 15-04 / 84, REG: 251-80-15-5) in accordance with the Letter of Expectations by the Minister on 25 November 2015 to ASHE, the Ministry of Science, Education and Sport and the University of Zagreb. The Final report stated that all activities from the Letter of Expectation were fulfilled before the deadline, as follows:

- the (new) Statute of the Faculty of Graphic Arts, University of Zagreb approved by the Senate of the University of Zagreb and came into force on March 17, 2014;



- reduced number of departments from 19 to 6 departments;
- Board of Deans established (comprising members of the Faculty Administration, heads of departments, Professional Services, Student Representative) as an advisory body to the Dean;
- The Faculty Council elected a (new) Dean of the Faculty of Graphic Arts on 8 November 2014 and vice deans on 10 December 2014; Dean and vice dean's mandate began on 1 January 2015 and lasted until 30 September 2016;
- The Strategy of Scientific Research 2014–2020 at the Faculty of Graphic Arts of the University of Zagreb was adopted on 20 December 2013;
- fulltime teaching staff in the winter semester of undergraduate studies for the academic year 2014/2015 amounted to 46.07%, and in the summer semester to 55.95%. Thus, the total percentage of scientific-teaching and / or art-teaching staff in undergraduate studies was 50.90% for the academic year 2014/2015;
- total number of employees with the scientific and teaching titles assistant professor was increased, their activities included seminars and workshops in the undergraduate study program. The selection of candidates for prof. emeritus was carried out and confirmed by the Senate of the University of Zagreb. The ratio of the number of fulltime teaching staff with scientific and / or artistic titles to the total number of enrolled undergraduate students was one to twelve (1:12).

The confirmation of eligibility for the performing higher education and scientific activities of the Faculty of Graphic Arts, University of Zagreb (UP / I-602-04 / 12-13 / 00084, Reg 533-20-16-0014) was received from the Ministry of Science, Education and sport on 10 March 2016. The Minister issued a certificate of eligibility based on the accreditation recommendations of ASHE, with a prior opinion of the Accreditation Council given at the 69th session held on 21 December 2015.

In accordance with ASHE Accreditation Recommendation (CLASS: 605-04 / 12-04 / 0018; REG: 355-02-04-15-0024) of 21 December 2015, the Faculty of Graphic Arts submitted to ASHE on 19 October 2017 (GRADE: 605-04 / 12-04 / , REG: 251-80-17-1) documents: Action Plan for the University of Zagreb Faculty of Graphic Arts for Improving the Quality of Science in Higher Education (for two academic years; 2017/2018 and 2018/2019) and a specification of activities the Quality Assurance Committee, which preceded the adoption of the Action Plan (chronologically, from the last activity):

- adoption of the Action Plan for the University of Zagreb Faculty of Graphic Arts for Improving the Quality of Science in Higher Education for the academic year 2017/2018 and 2018/2019, at the 1st regular session of the Faculty Council, held on 16 October 2017;
- Report of the Head of the Quality Assurance Committee on the continuous work of the Committee since its establishment on 9 February 2015 to 15 October 2017 (The Committee has been active in improving the cultural quality of all stakeholders and has realised the following activities in the period of 28 months:
- February 2015 - organized activities in the development of the Faculty Development Plan (tasks appointed to the members of the Quality Assurance Committee,



coordinators, Expert Services and Faculty Management in accordance with the Quality Assurance Manual of the University of Zagreb);

- February 2015 - recapitulation and systematization of all general acts, regulations and decisions according to the mentioned areas of activity (area of activity from the Quality Assurance Manual: PA: 1-13);
- February 2015 – preparation of SWOT analysis, performing activities according to ESG 2015 guidelines (PA: 3-11);
- April 2015 - Recapitulation and systematization of all activities for the preparation of the Quality Assurance Manual of the Faculty according to ESG 2015;
- May 2015 – submitted report to FC members on progress and data collection for the preparation of SWOT analysis to be used for the preparation of the Action Plan of the Faculty according to ASHE Recommendation;
- May 2015 – appointing of two committees (for the development of e-learning strategy and for lifelong learning);
- June 2015 – submitted to FC a report on the draft of the Quality Assurance Manual of the Faculty (it was adopted after the public hearing on 14 March 2016);
- June 2015 - internal QAS forms for Quality Assurance (10 Forms) were designed for the purpose of continual data collection on teaching staff and their activities. Data from QAS Forms is used to produce documents of the Action Plan and the Annual Report on Quality Assurance of Higher Education;
- January 2016 - draft proposal for Faculty's quality assurance system protocols, showing its organizational structure and responsibilities of the committees, coordinators and expert services to the Faculty administration. It is important to emphasize that all Faculty bodies submit annual reports and quality assurance plans to the dean by the end of January of the current academic year;
- April 2016 - a one-day meeting of the Faculty Quality Assurance Committee with the three members of the Expert Internal Assessment of the Quality Assurance System Committee of the University of Zagreb (assessed the level of quality assurance system according to the ESG 2015 Guidelines for 13 areas of activity);
- May 2016 - FC members adopted the document "Quality Policy, Mission and Vision of the Faculty of Graphic Arts";
- May 2016 - an information package for the undergraduate, graduate and postgraduate studies of the Faculty was created;
- March 2017 - Working Group members actively participate in drafting the Action Plan for 2017/2018- 2018/2019 and the Development Strategy of the Faculty 2017-2022. (FC members adopted the document after a public hearing on 16 October 2017 and 22 January 2018).

In terms of recommendations received by the Ministry of Science, Education and Sports, ASHE and Rector of the University of Zagreb, Quality Assurance Committee has, in the second half of the academic year 2014/2015, significantly contributed to the development of cultural quality according to ESG 2015 guidelines. The Quality Assurance Committee from 18



February 2015 continually and systematically works on improving the quality assurance system for teachers and students and expert services. Teachers, Faculty Committees and Expert Services submit their Annual Report and Action Plans in a single internal QAS form for specific areas of operation according to the Quality Assurance Manual of the Faculty of Graphic Arts, University of Zagreb.

The head of the Quality Assurance Committee has participated in the development of the Self-evaluation report for the university postgraduate study of Graphic Engineering and Graphic Design. The postgraduate study has received the license for performance on 7 May 2018.



1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

The higher education institution supports academic integrity and freedom, upholds the ethical standards and preserves academic integrity and freedom.

The higher education effectively uses mechanisms for preventing unethical behaviour, intolerance and discrimination.

The higher education institution carries out activities related to the sanctioning of unethical behaviour, intolerance and discrimination.

The system for managing conflicts and resolving irregularities is functional at all levels of the higher education institution.

The work of employees of the higher education institution, its students and external stakeholders, is based on ethical standards in higher education.

The higher education institution systematically addresses issues of academic dishonesty (plagiarism, cheating, etc.).

The Faculty of Graphic Arts, University of Zagreb supports academic integrity, taking into account the principles of freedom of scientific and artistic creativity and the preservation of the dignity and reputation of a higher education institution. Teachers and employees of the Faculty adhere to the moral principles in their professional and public affairs as laid down in the Statute of the Faculty of Graphic Arts (Article 49) and the Code of Ethics of the University of Zagreb 2007. The Faculty's teaching and non-teaching staff have the right to professional development and improvement in accordance with personal capabilities and plans, to the extent that it does not violate the same rights of others. The Faculty of Graphic Arts meets the obligations and responsibilities towards other people and accepts the criteria of excellence in all activities through the 2015 ESG standards and guidelines. Teaching and non-teaching staff objectively evaluates and morally and professionally carry out activities from the Collective Agreement. Employees in scientific, teaching and associate titles are guided by the idea of integrity and freedom in their scientific and artistic work, which is clearly visible in their achievements in public life. They also fulfil their ethical obligations towards students, colleagues and other Faculty staff while respecting the principles of objectivity, impartiality, correctness, dialogue and tolerance.

The sole criteria for evaluation and promotion are expertise, ability and professional merit. Since 2015 the Faculty's Ethics Committee, Committee for the Implementation of the Procedure for Breach of Employment Obligation and Student Disciplinary Committee have been continuously submitting annual reports to the Quality Assurance Committee. Furthermore, teachers respect the criteria of expertise and excellence and, accordingly, are professionally trained within the chosen professional area. The Quality Assurance Committee collects annual reports on the enhancement of teaching competences in the field of teaching and scientific-professional activities. Since 2015 the teaching staff has been completing three internal QAS forms in the areas of: Improvement of Teacher Competences (1), Enhancement of Scientific Activity (2) and Improvement of Professional Activity (3). The teaching staff also maintains and encourage co-operation in professional relationships with the business sector and professional bodies and associations. Transparency Faculty public activities in the Republic of Croatia and abroad is also continuously monitored through annual reports-internal QAS teacher form. The Faculty of Graphic Arts supports the teachers' right to perform publicly supporting freedom of expression in front of an audience, on radio and television, in newspapers, books and magazines for the benefit of the community. Employees



take care of the Faculty's interests in the spirit of academic freedom-through examination, argumentation, criticism and tolerance.

The Committee, coordinators and expert service adhere to ethical rules in supporting students and teaching. Teachers transfer high-level (CROQF levels of learning outcomes) of scientific knowledge from subjects in their respective study programs, ensure representativeness of subject content, transparently and fairly evaluate study work while respecting the educational goals and the development strategy of the Faculty. Opinions and ratings of student surveys on teaching competence and study programs are taken into consideration in order to improve the quality of the teaching process. The Quality Assurance Committee collects annual reports – internal QAS form for teacher support in the field of student support (4) and mentor (5). The duty of each teacher is to continuously conduct the **internal student survey** (Evaluation form) for all subjects that are carried out in the study program and to complete the Self-evaluation form for the teacher. Transparency of activities in the teaching process is directly provided by the following committees: education, e-learning, scientific research, ERASMUS + competitions, final and graduate papers, awards and doctoral studies. Immediate support to students are mentors and coordinators, who are teachers and members of the academic community. Coordinators for professional student practice, for ISVU, for ECTS; for student support, for students with disabilities, for CarNet computer system communicate with the Vice dean for Education and Faculty Expert Services (student administration, secretary, library) ([Dean's office](#)),

The Faculty Ethics Committee is responsible for overseeing the upholding of the University Code of Ethics. The Ethics Committee meets as appropriate, either when they have become aware of or have received information about a case of unethical behaviour. The Ethics Committee comprises three members of teaching staff and their substitutes. The Faculty Ethics Committee is also responsible for the following regulations: Student Disciplinary Regulations, Labour Regulations, Regulation on conditions and methods of employment, Rulebook on Faculty Council and other faculty body activities, Regulation on administrative activities, Awards Regulation and Health and Safety at Work Regulations. The Quality Assurance Committee analyses the results of student satisfaction surveys and teaching staff internally evaluate the quality of teaching (Evaluation form). In this way students have a direct opportunity to report unacceptable behaviour of particular members of the academic community. The Quality Assurance Committee, the Vice-dean for education and the Dean inform the Ethics Committee if a problem occurs.

The Faculty systematically deals with problems of plagiarism, cheating and fabrication. The Board of Postgraduate Studies deals with ethics in research, paying close attention to possible unethical behaviour when doctoral theses are approved.

All employment competitions are announced on Faculty's web page, in printed media and in internationally on the EURAXESS portal (ec.europa.eu/euraxess) in both Croatian and English and in line with the European Charter for Researchers. The aim is to enable international co-operation of foreign researchers with Croatian scientific organizations under the provisions of the Charter for Researchers.



1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).

Information on study programmes and other activities of the higher education institution is publicly available in Croatian and at least one world language.

The higher education institution informs stakeholders on the admission criteria, enrolment quotas, study programmes, learning outcomes and qualifications, forms of support available to students.

The higher education institution informs stakeholders on scientific/artistic and/or professional topics, projects and results, and the transfer of knowledge and technology.

Information on the social role of the higher education institution is made available to stakeholders.

The higher education institution informs stakeholders about other indicators (e.g. pass rate analyses, graduate employment, drop-out rates, outcomes of previous evaluations, etc.).

The Faculty uses its website (<http://www.grf.unizg.hr/>) to provide prospective students information about the institution and activities that take place. The website provides information about the requirements to be met to be admitted in the first year of study, the study programmes the Faculty offers, rules and obligations of students, etc. At the University of Zagreb Festival Faculty brochures are also distributed to prospective high school graduates ([promotion materials](#)). The Quality Assurance Committee continuously publishes relevant information on all Faculty activities in the areas of management and quality assurance. General information about the study programs is available to students on the title page of Faculty's website and in menus / submenus and the search engine. Prospective and current students can find information on study programs and learning outcomes of these programmes in the "Information package of the Faculty of Graphic Arts – undergraduate and graduate studies" ([Information package 1](#)) and the "Information package of the Faculty of Graphic Arts – postgraduate studies" in both Croatian and English ([Information package 2](#)). Admittance criteria (for undergraduate, graduate and postgraduate studies) are publicly available through menus/submenus and electronic documents.

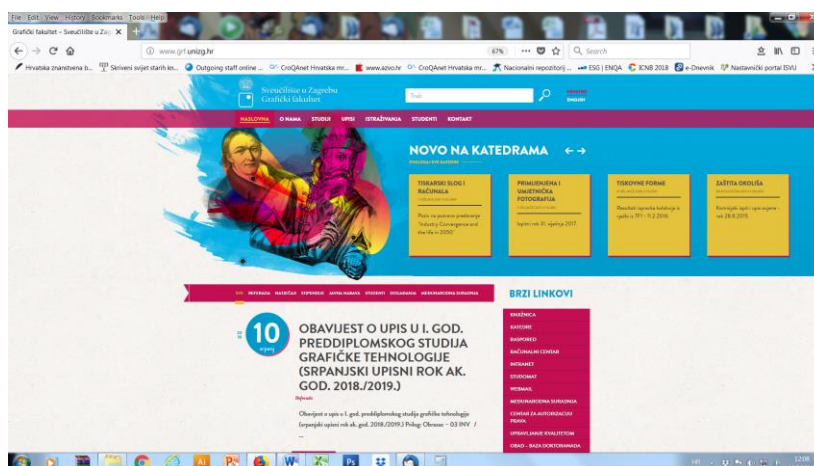


Fig. 4. The main website

Teaching and evaluation of student work in the teaching process is performed in the classroom and through [e-learning](#). Teachers encourage collaborative teaching methods using Merlin or Claroline platforms. Students and teachers are also provided with department web pages (for basic and general knowledge, graphic design and image information, computer graphics and multimedia systems, printing processes, bookbinding



and packaging, graphic materials and printing forms) which teachers use to publish relevant information about members of the teaching staff, subjects on the study program, consultations, course materials, literature and evaluation of students / exam results ([Departments](#)). Furthermore published presentations that teachers use in lectures, video and audio material, animations and simulations are also publicly available and free. Students can also find links to interesting documents and various web 2 educational tools. Particular importance is given to communication channels so that information can be exchanged within certain communities (for teams, seminar groups or for all students concerned).

Information on possibilities of further student employment is available in the main menu of Quality Assurance faculty's web page. Documents and Guidelines on quality management are systematized and divided according to the area of activity in the Quality Assurance Manual, 2015 (management regulations, re-accreditation evaluations, annual reports and action plans, internal QAS forms, student evaluation of study programs, other institution documents, reports from the business sector of the Republic of Croatia, publications of re-accreditation agency).

Information about Faculty activities is useful to the general public as it provides relevant information on the management structure, organization, public procurement and international cooperation of the Faculty. Current students are offered relevant information on the teaching protocol at all levels of study programs (teaching, information, final and graduate examinations, job offers). The [International relations office](#), together with the vice-dean for international relations offers students relevant information on possible student and mobility exchanges through EU programs. Information on scientific-research and professional work of all stakeholders in the field of higher education are also published on the web pages.

The Student administration and the ISVU administrator analyse the success of the students in the study programs, and the Quality Assurance Committee regularly monitors the students' satisfaction with the programs and the teachers.

The Faculty [Library](#) offers students the information necessary for the implementation of the teaching process through student scientific-research work of students (catalogues of standards, Faculty repository, online databases, CROSB, international organizations in the printing industry).

Current and potential students are continually using social networks ([Facebook](#)) available on Faculty's web site. The Student Council continuously participates at the University of Zagreb Festival, for which they have received numerous prizes in different categories. Students actively participate in scientific, professional and sport activities in Croatia and abroad.

The procedure of publishing information on the website of the Faculty was adopted at the extended session of the board of deans on 16 February 2015. Disclosure of information was carried out in accordance with the guidelines provided by the Public Information Disclosure Act ([Catalogue of information](#)).



The Quality Assurance Committee continuously collects and analyses **annual reports and activity plans** on the work of permanent and temporary committees, coordinators, expert services and student council in order to improve the quality of work of higher education institutions. Teachers also submit annual reports and activity plans by filling out internal QAS forms. The teachers send the completed form by email at the request of the Quality Assurance Committee and the Dean. Success / failure indicators in the work of the higher education institution are presented to the Vice deans of the Faculty who decide on the sequence of future activities at the Faculty.



1.5. The higher education institution understands and encourages the development of its social role.

The higher education institution contributes to the development of economy (economic and technological mission of the university).

The higher education institution contributes to the development of the local community.

The higher education institution contributes to the foundations of the academic profession and the accountability of teachers for the development of the university and the local community.

The development of its social role is a part of higher education institution's mission (e.g. development of civil society, democracy, etc.).

The Faculty is open to various forms of [collaboration with the business sector](#): education of PhD students who work on projects financed by the business sector, lifelong learning (seminars, workshops, lectures), preparation of expert studies, reports or opinions. The Faculty has established conditions for the organization and operation of research laboratories since 2016. Research is based on the research strategies of the Faculty and the needs of the community of the Republic of Croatia. The Faculty [Equipment Catalogue](#) is available to the public in order to familiarize all stakeholders with the faculty's equipment to ensure greater co-operation with the [business sector](#). The faculty is connected with the business sector through students attending [student practice](#) or visits to relevant industries. Teachers of higher education contribute to the development of the local business sector by solving complex problems, providing consulting [services](#), etc. Some of the Faculty's teachers are also certified expert witnesses, whose expert reports are accepted in court as an expert opinion.

The director of the IGT Institute from the Netherlands Dr. Wilco de Groot visited the Faculty of Graphic Arts in October 2016. The close cooperation of the two institutions started in 2015 by concluding a cooperation agreement. The IGT institute installed AIC2-5 printability testing pilot-machines, thus the Faculty employed graphic engineer Dominik Kapović to test them before placing the device on the market. The results obtained will be used to prepare the ISO standard for the printability testing prepared by the IGT Institute. In the meantime, Dominik Kapović has enrolled in a doctoral study at the Faculty of Graphic Arts. Other forms of co-operation have been accomplished such as professional lectures, [seminars](#) and workshops for teachers and businessmen from Croatia and abroad. During his visit to the Faculty of Graphic Arts, Dr. Wilco de Groot also held a lecture on Printability testing and toured laboratories of the Faculty of Graphic Arts.

The faculty of Graphic Arts signed Agreements on mutual business cooperation with the Croatian Association of Screen printers. Collaboration is based on joint scientific research and expert work in the field of thermo-chrome printing ink. PhD students, postgraduates, professors and undergraduate and graduate students participate in various activities (seminars, workshops) preceding their final and / or graduate thesis and doctoral dissertation (<http://croatia.fespa.com>). The Faculty of Graphic Arts also signed a co-operation agreement with the Croatian Society of Graphic Artists on 25 May 2015 with the intention of improving the graphic profession. The contracting parties have competences in the preparation and realization of various activities concerning the education and employment of students after completion of the study. The activities of teachers, students and external stakeholders relate primarily to the realization of scientific-research,



development-research and professional projects and the publication of research results at scientific and professional conferences. The main purpose of the cooperation is to strengthen the consulting activity and the social impact of graphic arts in Croatia and abroad (<https://hdg.hr>). Another cooperation agreement with Association Suncokret Oljin "Education, Love and Nonviolence", enabled students of the Faculty of Graphic Arts to participate in various types of creative workshops for elementary and high school students. Students who demonstrated excellent knowledge and skills (learning outcomes) in the undergraduate subjects of Handmade Books and Handmade packaging were invited to participate in designing and conducting thematic workshops by the Association and the subject teacher at the Faculty (www.suncokret-oljin.hr). Furthermore, the Faculty of Graphic Arts has been successfully cooperating with the Model Packaging company Ltd through the exchange of services of laboratory testing of mechanical properties of corrugated cardboard and obtaining the same for the purpose of holding exercises in the subject Packaging 2 on the graduate program. The purpose of the co-operation is to empower the students' competences by finishing their professional practice in the Model Packaging company and later these students. Mostly these students decide on their final or graduate thesis in the field of designing functional corrugated packaging (<http://www.modelgroup.com>). In addition to the aforementioned, graphic design students are continually participating in competitions for designing visual identity and graphic products, most often packaging.

The Faculty of Graphic Arts has signed one-time Cooperation Agreements with the Society Our Children, Vladimir Nazor Križ, Enigma Group, Dea Flores d.o.o., Tourist Board of Vukovar-Srijem County and Triathlon Club Zagreb. The firm ResPons Digitus d.o.o. and the Faculty of Graphic Arts cooperate in the field of research of user experience using eye-tracking devices (<http://eprints.grf.unizg.hr/2535/>). By exchanging professional experiences of all stakeholders, students complete their final and graduate theses, and young PhDs have been offered opportunities in the field of improving the experience of using Internet services and new possibilities of interacting with the insufficiently used secondary content of the site. The firm Podravka d.d. in cooperation with the Faculty of Graphic Arts supports the development through networking and conducting competitions for students in the field of industrial and graphic design of products in cooperation with the Packaging and Printing Institute and Tectus Ltd. Their joint activities in 2014 expanded scientific knowledge and strengthened the social influence of science and profession ([Podravka](#)).

II.

Study programmes



2. Study programmes (ESG 1.2., ESG 1.9.)

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.

There is evidence that general goals of all study programmes are in line with the mission and strategic goals of the higher education institution.

The justification for delivering study programmes is provided and includes analysis of resources of the higher education institution required for delivering study programmes.

If the higher education institution delivers study programmes leading to degrees in regulated professions, it accepts the recommendations of professional organisations that govern their licencing.

The higher education institution produces competitive professionals for national and international labour markets.

General goals of all study programmes are in line with the needs of society (e.g. justification for delivering study programmes at the University, delivering similar studies at the Faculty and University)

Visual communication conveyed through graphic technology is the backbone of the Information Age. Graphic technology, through graphic media and design, permeates all aspects of commercial and cultural activities. The Faculty of Graphic Arts is the leading academic institution with such profile in Croatia and its immediate surroundings, and has been educating experts in graphic technology since the mid-20th century. With respect to this long-standing tradition and its focus on the latest technological and cultural trends, it now incorporates a place where 21st century competencies and skills are acquired.

In addition to expert knowledge in the field of graphic technology, visual communication, engineering, natural and social sciences, the Faculty of Graphic Arts also encourages the development of other key competences of Modern Age.

The Faculty of Graphic Arts is accredited to offer undergraduate and graduate studies in the field of graphic engineering and design by virtue of the [Licence](#) for Performing Higher Education Activity, Carrying out a Study Programme issued by the Ministry of Science and Education on 10. March 2016 and for postgraduate degree on 7. May 2018.

Strategic goals of the Faculty of Graphic Arts are listed in the following documents: Development [Strategy of the Faculty of Graphic Arts of the University of Zagreb for the period 2011-2016](#) and [Development Strategy of the Faculty of Graphic Arts of the University of Zagreb for the period 2017-2022](#).

The achievement of strategic goals entitled “Mission 4” Development [Strategy of the Faculty of Graphic Arts of the University of Zagreb for the period 2011-2016](#): *Increase the number of study programmes and improve their quality* comprises a total of 8 activities (page 12 M4 / Rb. 32-39) that resulted from a SWOT analysis includes the following:

1. Providing stimulation mechanisms
2. Providing financial resources
3. Redistributing work load depending employee's interest and motivation
4. Analysing the needs of the labour market
5. Organizing work groups responsible of drawing up new study programs



6. Acquainting Faculty staff with the needs of the labour market
7. Knowledge profiling
8. Analysing the labour market for possible financing of new programmes

The strategic document acknowledges the need to reform the teaching process by introducing new study programmes and cooperate with other higher education institutions. Consequently, the Faculty of Graphic Arts has formed a *Curriculum Development Committee* that is working intensively on a draft of two new undergraduate and two new graduate study programmes.

The Faculty of Graphic Arts is accredited to carry out undergraduate and graduate study programmes in accordance with the Ordinance on the Content of a Licence and Conditions for Issuing a Licence for Performing Higher Education Activity, Carrying out a Study Programme and Re-Accreditation of Higher Education Institutions ([Licence](#)). The study programmes are conducted according to the [Regulations on Undergraduate and Graduate Studies](#) and [Syllabus](#), which are adopted for each academic year.

Analyses of adequacy of particular study programmes are conducted annually by adopting admission quotas for [Undergraduate](#) and [Graduate](#) programmes. Tuition fee for Undergraduate and Graduate Study Programme of Graphic Engineering is proposed by the Faculty Council of the Faculty of Graphic Arts and is approved by the Senate of the University of Zagreb.

Spatial and staff capacity (Appendix to the Analysis: Table 4 and Table 4.8), as well as Expert Reports of Economic Agents (Croatian Employment Service, Croatian Chamber of Economy, the Agency for Science and Higher Education - [HZZ](#), [HGK](#), [AZVO](#)), [Documents and Guidelines for Quality Management](#) / *Expert Reports of Business Agents*.

The adequacy of particular study programmes is also continuously verified by organizing panel discussions, round tables hosting relevant participants from the field of graphic arts (businessmen, expert associations, teachers, students) in the framework of the „Blaž Baronić“ International Conference on Printing, Design and Graphic Communications, organized annually by the Faculty of Graphic Arts.

Quality assessment of study programmes is carried out annually, in February, July and September. Student Surveys for undergraduate and graduate students are conducted regularly and analysed immediately so as to focus in particular on its most important part: essay-type comments (Student Survey - Question G)

Quality Management Documents and Guidelines ([Documents and Guidelines for Quality Management](#) / Student Surveys - Survey Results

Teachers regularly fill in the Internal SOK Forms (Teacher and Course Assessment and Teacher Self-Assessment Form) and Documents and Guidelines for Quality Management ([Documents and Guidelines for Quality Management](#)) at the end of the winter or summer semester for each academic year. These are also used for teacher self-assessment. The Quality



Management Committee officially notifies the teachers about the necessity to update the information during the 13th week of the semester.

The Curriculum Committee continuously submits annual reports on its work to the Quality Management Committee. In the course of academic years 2017/2018 and 2018/2019 the Faculty will develop a draft of two new undergraduate study programmes: Graphic Engineering and Multimedia and Visual Communication.



2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

The higher education institution has clearly defined the learning outcomes of the study programmes, and they are aligned with the mission and goals of the higher education institution.

The higher education institution has effective mechanisms for assessing and ensuring that the learning outcomes at the level of courses are aligned with the learning outcomes at the programme level, without necessary repetition and overlapping.

Learning outcomes achieved in the study programme are aligned with the CroQF and EYF level descriptors. In defining learning outcomes, the higher education institution acts in line with professional requirements and internationally recognizes professional standards, ensuring that the programme is up to date.

The intended learning programme outcomes clearly reflect the competencies required for employment, continuing education or other individual/society needs..

The Faculty has clearly defined the learning outcomes of all its study programs, in accordance with its development strategy. The description of qualifications ([Webinar on learning outcomes](#)) is directly defined by the list of learning outcomes for university [undergraduate](#) i [graduate](#) study programmes. It is also available in the form of an [information package](#), which contains complete information on the courses provided within the framework of the existing study programs.

For each course there is a list of learning outcomes that directly contribute to the achievement of learning outcomes of a respective study programme (MOZVAG2-Table 2). Learning outcomes are in line with those of related accredited universities in the EU, with the principal requirements of the labour market and general societal needs.

Learning outcomes for the Undergraduate and Graduate programme correspond to the respective levels as defined by the Croatian Qualifications Framework (CROQF) (level 6, 7), i.e. by the European Qualifications Framework (EQF).

The teaching concept of the Faculty of Graphic Arts puts students' interests and needs first, acknowledging students as central to the learning experience. Learning outcomes (competencies) are achieved through a problem-solving process rather than through teaching content.

Teachers apply a variety of different methods:

- ERR framework system based on Bloom's taxonomy to achieve learning outcomes;
- distance teaching by means of Merlin or Clariline system;
- traditional teaching method - Ex-cathedra.

The Quality Management Committee collects annually relevant information on possibilities to improve the quality of teaching and enhance teaching competencies ([Documents and Quality Management Guidelines](#) / Teacher training and Grants for Students.)

The [syllabi](#) for eight years back are adopted by the Faculty Council and are publicly accessible. Study programmes are carried out in such a way as to enable students to fulfill their study requirements according to the rules and regulations ([Documents and Regulations](#)), the syllabus and the information package (course catalogue). Teachers and



associates hold courses in a variety of teaching forms (lectures, seminars, exercises, e-learning), and learning resources are available on e-learning portals: the Merlin E-learning platform, the collaborative eLearning and eWorking platform Claroline, as well as on the [department](#) homepage.



2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

The higher education institution ensures the achievement of intended learning outcomes of the study programmes it delivers.

The higher education institution continually revises and improves the teaching process on the basis of evidence on the achievement of the intended learning outcomes (e.g. test, seminar papers, presentations etc.) Learning outcomes achieved by students are in line with the needs of the profession.

Learning outcomes achieved at the end of study programmes are in line with the labour market requirements and social needs.

The Faculty of Graphic Arts has effective mechanisms for assessing and ensuring the achievement of learning outcomes with respect to Bachelor's and Master's theses. The list of theses is available on the home pages of the [library](#) of the Faculty of Graphic Arts.

The Committee for the evaluation of Bachelor's and Master's Theses, appointed by the members of the Faculty Council, continuously assesses and ensures the achievement of the learning outcomes of each student in collaboration with their mentors. [Regulations](#) on Submission and Defense of Bachelor's Thesis, Forms, Notifications and Thesis Defense Schedule for eight preceding years can be retrieved from the homepages of the Faculty.

Teachers assess learning outcomes by means of different mechanisms (tests, seminar papers, presentations, ERR-based resources). The methods and mechanisms of ensuring the learning outcomes of different study programs are listed on the website of the Faculty, whereas the list of courses displayed on the Merlin platform are available in the [e-Course Catalogue](#).

Teachers are putting in continuous effort to improve the teaching process by:

- participating in different teacher training programmes (e.g. ERR framework for teaching according to Bloom's taxonomy);
- attending seminars and workshops in the field of scientific research;
- attending seminars to improve their skills in Merlin e-learning platforms;
- participating in Teacher Exchange Programs at foreign universities (e.g. within the framework of ERASMUS + mobility for training or teaching or CEEPUS mobility for training or teaching)

Furthermore, the achievement of anticipated learning outcomes is also encouraged through students' engagement in scientific research under the mentorship of experienced teachers, through artistic activities, expert work and sports activities. Students are encouraged to participate actively in public and cultural life and are awarded for their accomplishments ([Rector's Award](#), [Collaboration with the Economy](#), [Student Projects](#), [Conferences](#), [Seminars](#), [Symposia](#)).

The Faculty of Graphic Arts is currently developing a new curriculum at undergraduate and graduate level, which will significantly improve the teaching process.



2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes

Development activities related to study programmes are carried out systematically and regularly, involving various stakeholders.

Planning and proposing new study programmes includes an analysis of justification for delivering a study programme, resources and alignment with the strategic goals at the local and regional level, and other needs of society.

The higher education institution provides evidence on the justification for delivering same or similar study programmes within the same university.

The higher education institution publishes up-to-date versions of study programmes.

The higher education institution records the changes to study programmes and analyses their fitness for purpose.

Based on regular analyses.

The Faculty of Graphic Arts is undergoing significant transformations from conventional graphic printing technologies to new means of visual communication. Innovation potential is focused on advanced, cutting-edge areas - new materials and technologies, packaging, publishing, management, multimedia and web technologies. New knowledge is needed in different fields and areas.

In this regard, the Faculty of Graphic Arts conducts analyses of [study programmes](#) on regular basis and develops and improves them accordingly. The Faculty provides a number of different elective courses that allow the students to study topics that interest them. Elective courses that the students express interest for are regularly offered. Those courses or modules which are not “in demand”, are usually withdrawn. At the end of the academic year, the Faculty undertakes various analyses of the effectiveness of studying. Data is presented in the Dean's annual report, as shown in the [information catalogue](#).

Apart from revising existing curricula of study programmes on annual basis by conducting necessary alterations of the syllabi, the Faculty of Graphic Arts will soon draft a new curriculum. The Faculty has thus applied to participate in a project on the implementation of the Croatian Qualifications Framework in the field of graphic engineering, multimedia and visual communications (Annex - [Project application](#) and [notification about Administrative Approval](#) - University of Zagreb Faculty of Graphic Arts - UP.03.1.1.03.0031.

The project will help create four new study programmes (two at the undergraduate and two at the graduate level) in the field of graphic technology, multimedia and visual communications, in accordance with qualification standards (four new programmes) developed within this operation. The standards for four new professions will be established and the competences of teaching staff will be developed. Upon adoption of new programs, the existing programmes will become obsolete.

When working out new programmes, feedback from the participants of International Council as well as various accompanying round tables, organised by the Faculty of Graphic Arts, present significant sources of information and guidelines.

Round tables, as well as a series of lectures related to the [innovative teaching strategies](#) and the necessary alterations of study programmes have been an integral part of the „[Blaž](#)



[Baromić](#)“ International Conference on Printing, Design and Graphic Communications and the “[Printing & Design](#)” International Conference for the past several years.

The draft of a new study programme will be discussed and subsequently voted on by the Faculty Council, and then submitted for evaluation to the Quality Management Committee of the University of Zagreb. Assessment and evaluation of the proposed study programme is then carried out by the Workgroup for Study Programmes, and the final decision is made by the Senate of the University of Zagreb.



2.5. The higher education institution ensures that ECTS allocation is adequate.

The higher education institution allocates ECTS credits in accordance with the actual student workload, based on the analyses of feedback from stakeholders in the teaching process, or other procedures. Students are provided with feedback on the results of the analysis of gathered information and the implemented changes.

The process of working out new study programmes for the Undergraduate, Graduate and the Postgraduate Studies of Graphic Engineering and Graphic Design was substantially determined by the necessity to rationalize the teaching process and align the ECTS credits with actual workload.

The Faculty encourages communication among students, mentors, the Student Union and the Management, with the aim of providing all necessary information to the students, including the ECTS-workload ratio, and solving problems and dilemmas that might occur during studying. Students can assess course structure, time management and teacher performance in an annual survey.

The Faculty of Graphic Arts is working intensively on new study programmes and curricula at the undergraduate and graduate level, which will put stronger focus on the alignment of ECTS credits with actual student workload.



2.6. Student practice is an integral part of study programmes (where applicable).

The higher education institution allows for learning and obtaining new skills through student practice, where applicable.

Where applicable, student practice is an integral part of study programmes and is organised outside the higher education institution, in cooperation with the labour market..

Student placement is an integral part of the Undergraduate Study Programme and is organised and carried out in the sixth semester within a specialized course entitled „Student placement and final project“ (6 ECTS credits). The procedure underlying student placement is the following: the student is responsible of finding a company that will host them during the placement; the student then fills in a student placement form provided by the Student Services Office and seeks approval from the Student Placement Coordinator. Upon approval, the student receives a certificate from the company concerning the timetable of student placement and finally arranges insurance in accordance with the Instructions on the procedure of applying for student placement. Student placement is carried out for 20 working days, 8 working hours a day, and the student is responsible of keeping a student placement diary. Upon completion of student placement, the student receives a certificate from the company and subsequently informs the Student Placement Coordinator.

All relevant information on student placement are available on the web pages of the Faculty of Graphic Arts under the following links:

[Procedure for applying](#) for Student Placement and Submission of Bachelor's thesis
[Instruction on applying](#) for student placement, Undergraduate Study Programme,
Undergraduate Study Programme – [official forms](#) (Application form - GRF-SP 01, Student Placement Diary - GRF-SP 02)



2.7. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

There is evidence that general goals of the lifelong learning programmes are in line with the mission and strategic goals of the higher education institution.

There is evidence that general goals of the lifelong learning programmes are in line with social needs, needs of the labour market and individual needs.

Revision and development of lifelong learning programmes is carried out systematically and on a regular basis..

Teachers of the Faculty of Graphic Arts are aware of the importance of lifelong learning and work tirelessly, both formally and informally, to raise this awareness with alumni and their own colleagues.

Consequently, the Faculty of Graphic Arts, in collaboration with organizing committees of international scientific conferences - the „Blaž Baromić“ International Conference on Printing, Design and Graphic Communications and the “Printing & Design” International Conference - initiated and participated in the organisation of a series of events at these conferences, notably round tables dedicated to the necessary changes in approach to education.

In addition, a participation in such conferences provides for both, teachers and students, an opportunity to exchange information and experience and discuss the needs and goals of lifelong learning, including the alignment of lifelong learning with the needs of the labour market.

The Faculty of Graphic Arts also organizes workshops contributing to this goal, culminating in 2017, when the Faculty founded the Croatian Association of Alumni and Friends of the Faculty of Graphic Arts - [AMAC GRE](#).

Furthermore, the Faculty of Graphic Arts has a long-standing practice of organizing invited lectures held by visiting or guest professors and various experts from the sphere of economy, so as to mediate between professionals and the higher education system and thus highlight the importance of lifelong learning.

The Faculty of Graphic Arts encourages lifelong learning of its employees by supporting them to participate in a range of activities.

The Faculty of Graphic Arts also cooperates with the Agency for Vocational Education and Training and Adult Education, primarily with regard to the training courses and seminars for high school teachers in the field of graphic arts.

III.

Teaching process and student support



3. Teaching process and student support (ESG 1.3., ESG 1.4., ESG 1.6.)

3.1. Admissions criteria or criteria for the continuation of studies are in line with the requirements of the study programmes, clearly defined, published and consistently applied.

The criteria for admission or continuation of studies are published.

The criteria for admission or continuation of studies are consistently applied.

The criteria for admission or continuation of studies ensure the selection of candidates with appropriate prior knowledge, which is aligned with the requirements of the study programme.

The higher education institution has effective mechanisms for recognising prior learning.

All relevant information related to the application of study programs, admission quotas, study plans and programs, study regulations are available to prospective students on the faculty's web pages <http://www.grf.unizg.hr/>. Admission criteria and admission quotas for the first year of undergraduate program of graphic technology are available to prospective students through [NISpVU](#). The same information is also available in the special section of the competition for admission in the first year of undergraduate and integrated undergraduate and graduate studies, University of Zagreb, which is announced for each academic year and published on the web pages of the University of Zagreb [Homepage University of Zagreb](#)

Information related to the courses of particular levels of study (undergraduate, graduate, postgraduate studies), are available to students in the category web pages as well as all the details about teaching and exam placement. Further information on the study regulations, students' rights and obligations, student standard are also available on the Faculty's web pages.

In addition, the Faculty offers information to its prospective students through numerous brochures, and every year at the University of Zagreb Festival the Faculty offers its prospective students various information on the study programs.

The Faculty also organizes the Open Day, where prospective students can get information about the study programs as well as a tour of Faculty premises.

Prior to the start of each academic year, the constituents are invited by the University of Zagreb to submit their admission quotas proposals as well as the admission requirements for the first year of undergraduate or graduate studies, which is then published in a separate part of the text of the Student Admission Contest for undergraduate, integrated undergraduate and graduate studies of the University of Zagreb, i.e. the Admission Contest for the enrolment of 1st year students of graduate studies of the University of Zagreb. The admission quotas for the 1st year of undergraduate studies are determined based on several criteria: a valid certificate, the current needs and capabilities need for profiles on the labour market, human resources, spatial capacities, positive student assessment, the ratio of the number of regular and part-time students and the positive result of external re-accreditation. The Faculty Council adopts the admission quotas proposal and the admission criteria for both



study programs (undergraduate and graduate) and carries out the final decision, which is then confirmed by the Senate of the University of Zagreb. As mentioned above, the University of Zagreb for each constituent annually announces the Student Admission Contest for undergraduate, integrated undergraduate and graduate studies. The contests are published on the web pages of the University of Zagreb and on the web pages of the particular Faculty. The terms of admission and admission quotas are entered into the NISpVU system (automatic - University of Zagreb - Central Registration Office) in accordance with the text of the Student Admission Contest.

In the text of the Student Admission Contest and in the NISpVU system clearly identified evaluation criteria (success in high school, the state graduation exam - mandatory and optional, additional achievements) for each academic year, as well as the assessments of additional students' knowledge and skill especially for admission to the course design of graphic products. Registration of undergraduate studies is done exclusively through the NISpVU system and candidates registering for the design of graphic products are also required to submit an additional printed application to the Faculty (full application of this study option).

The transfer of students from other study programmes to the undergraduate studies at the Faculty of Graphic Arts is clearly defined by the [Regulations](#) on undergraduate and graduate study at the Faculty of Graphic Arts from 4 February 2009 (CLASS: 135-02/10-01/09, REG: 251-80-10-09). Each year the Faculty publishes on its web page the [notice](#) of the Vice dean for education which clearly defines the transfer procedure from other higher education institutions to the undergraduate studies at the Faculty of Graphic Arts. An [example of this notice](#) for the academic year 2018/2019 is available on Faculty's web page.

The [decision on transfer procedure](#) of students from other higher education institutions from abroad is also clearly defined and requires a special procedure outside the Faculty, i.e. the procedure for recognizing the period of study at a foreign higher education institution for the continuation of studies at the Faculties of the University of Zagreb ([notice](#)).

At the regular September meeting the Faculty Council gives their final decision on the transfer application from other higher education institutions from abroad to the undergraduate studies as well as recognition of exams and ECTS points acquired at the higher education institution from which the student is transferring.

The text of the Student Admission Contest clearly defines admission quotas, method of application (not filed through the NISpVU system, but by submitting the required documentation to the Faculty), evaluation of high school GPA and the state graduation exam, evaluation of student portfolio for students applying to the study program design of graphic products, evaluation of undergraduate level of achievement and length of undergraduate study, appeals procedure, as well as the right of direct admission to the desired study program. University undergraduates graduates of graphics technology and graduates that completed their differential year at the Faculty of Graphic Arts are recognized their prior achievements gained under the undergraduate level of the study and are therefore exempted



from the part of the admission verification process in the field of graphic technology, in which they automatically achieve the highest possible number of points.

Also text of the Student Admission Contest clearly defines the [admission criteria](#) for candidates who previously completed their undergraduate study at other higher education institution, i.e. the polytechnic of the same area of study by the Decision of 30 May 2016, KL.: 602-04 / 16-01 / 46, URBR.: 251-80-16-1

These candidates are evaluated by the members of the Board of Deans who make recommendations on the following:

- admission to the 1st year of study with a list of differential courses
- admission to the differential semester
- admission to the differential year of study.

Students of the Faculty of Graphic Arts are allowed to enrol in and undertake courses at other higher education institution. Such students are required to submit a request for approval of enrolment in a second higher education institution and are required to submit a signed confirmation of that higher education institution, with the indication: course name, course holder, course description, ECTS credits. The application is approved by the Vice dean for education. Upon completing examinations at other higher education institution, the student is required to submit evidence of completing examinations (filled and verified application form, the student verification and completed and certified confirmation form confirming the fulfilment of the student's obligations.) The Decision on admission and examination of courses at other higher education institutions from 19 April 2012 (KL: 003-08 / 12-01 / 03, URBR: 251-80-10-03), along with the confirmation form is available on faculty's website ([Undergraduate study - decisions](#)).

In the past years the prospective students' interest in the design of graphic products program has increased therefore undergraduate students who have failed meet the admission requirements for that program, but have enrolled in the graphic technology study program are enabled to the design of graphic products study program upon successfully completing their 1st year of study. This decision is clearly defined in the [decision](#) from 15 June 2016 KL.: 135-02/16-01/5, URBR: 251-80-16-1) and is published on Faculty's web page.

Academic success of students at foreign institutions through ERASMUS+ student exchange programme is recognized in accordance with the Learning Agreement. Upon recognition of ECTS credits the data is entered in the ISVU system and student identification document. Student's extracurricular activities in Croatia or abroad are recognized as a corresponding course or diploma supplement.

As shown in Table 3.2 Structure of enrolled students and interest in first level study programmes in the current and last two academic years clearly shows an increase in the number of applicants as well as the number of enrolled students in the academic year 2016/2017 in the past two years, indicating a growing interest for undergraduate programs of the Faculty of Graphic Arts. Due to this growing interest a change in admission quota for the academic year 2016/17 was requested and approved in such a way that admission quota for foreign students was decreased and increased for students citizens of the Republic of



Croatia (FC Decision of 29 August 2016, KL.:003-08/16-01/74, URBR.: 251 -80-16-1). Also, it is evident from the table that candidate data related to the percentage high school and state graduation exam general point average of applicants has not changed significantly in the past three years. In a more detailed analysis directly taken from the NISpVU system (see the evidence under point 3.1), it has been noted that in the past three years applicants for the design of graphic products achieved a slightly higher point average than candidates applying for the graphic technology program. Additionally, high school candidates and candidates with a completed vocational school diploma who were enrolled for the design of graphic products achieved a higher average grade in their secondary school than the same candidates applied for the graphic technology program.

Table 3.2 does not include students transferring from other higher education institutions. In the academic year 2016/2017 2 students transferring from other higher education institutions were admitted in the 1st year of undergraduate study, In the academic year 2015/2016 4 students transferring from other higher education institutions were admitted in the 1st year of undergraduate study and In the academic year 2014/2015 4 students transferring from other higher education institutions were admitted in the 1st year of undergraduate study 2014/2015. Also, there is no data on the admission of a foreign student in the academic year 2016/17, in the enrolment quota for foreign students. In the previous two academic years there were no foreign students.

It is important to note that the admission of students in the I. year of undergraduate study depends on the fulfilment of the conditions set by the Faculty as the evaluation criteria for admission, as stated in the text of the Student Admission Contest. There is a particular emphasis on successfully completing the state graduation exam of prospective students as compulsory criteria for admission in the 1st year of study (mathematics A level, physics, chemistry and visual culture). It should also be noted that a large number of prospective students failed to pass the state graduation exams set up as criteria for admission in undergraduate studies. This automatically results in a smaller percentage of enrolled students in the study programs of many Faculty's of the University, not just the Faculty of Graphic Arts.

As shown in Table 3.3 Structure of enrolled students and interest in graduate and postgraduate programs in the current and past two academic years there is a noticeable increase in interest for graduate programs which resulted in change of admission quota for academic years 2015/2016 and 2016/2017 (FC Decision of 28 September 2015, CLASS:003-08/15-01/55, REG.: 251 -80-16-1-1, FC Decision of 22 September 2016, CLASS:003-08/16-01/80, REG.: 251 -80-16-1-1). The table also shows the number of students from other higher education institutions that apply for admissions to the graduate studies at our Faculty. It is clear that the number of such students has increased. The detailed analysis shows an increase of applicants/admissions from candidates who have completed their undergraduate studies at higher education institutions from abroad (academic year 2014/2015 -1 student, academic year 2015/2016 -1 student, academic year 2016/2017 -3 students). Other candidates /students who have completed their undergraduate studies at other higher education institutions come from institutions in the region, namely from the University North, Polytechnic of Zagreb and the College of market communications Agora.



There are also a growing number of candidates applying for the graduate study who have completed their studies at the post-secondary School of Graphic Arts, and whose qualification equal to the undergraduate title. The grade average of students at undergraduate level has not changed significantly in the past three years.

The table 3.3 also clearly shows an increased interest for the postgraduate program, especially from part-time students/candidates. Due to this increased interest admission quotas have also been increased. A smaller percentage of postgraduate students come from other higher education institutions, which shows that the interest of our students with the undergraduate / graduate degree is much higher than the above mentioned student category.



3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of studies.

Procedures for monitoring student progress are clearly defined and available to students. The information on student progress in the study programmes is regularly collected and analysed. The higher education institution ensures adequate mechanisms for analysing student performance and pass rates, and initiates necessary actions accordingly.

Table 3.4. Progress in the study programme from the first to the second year of study - only for undergraduate and integrated study programmes in the last five academic years shows the largest percentage of enrolled students in academic year 2012/2013. A somewhat smaller percentage of enrolled students are noted in the next three years (2013/2014, 2014/2015, 2015/2016) with an equal number of enrolled students (+1,-1). In academic year 2016/2017 the number of enrolled students almost reached that from 2012/2013 (-4). Based on the aforementioned and with regard to the pass rate of the study program from 1st to 2nd year of studies, in the academic years in which there are no major deviations from the number of enrolled students in undergraduate studies, it is evident that there are no major deviations in their progress or passage from 1st to 2nd year of studies. In academic year 2012/2013 out of 150 enrolled students 86 did not qualify for enrolment to 2nd year of studies, 36 who met requirements and 28 did not receive even 18 ECTS. In academic year 2016/2017 with approximately the same number of enrolled students, there were 79 who did not qualify for enrolment for a number of academic years, and 41 students successfully enrolled II. of the studies, while 26 did not win 18 ECTS.

In three academic years with the same number of enrolled students (2013/14, 2014/15, 2015/16), and regarding the pass rate of these generations, it is also evident that there are no major deviations in their progression or transition from 1st to 2nd year of study. In these three years the pass rate grew from 17% to 26% to 36%.

In academic year 2013/2014, 22 students met the requirements for enrolment to the 2nd year of study, and 75 students did not, while 32 students had less than 18 ECTS. In academic year 2014/2015, 34 students enrolled to the 2nd year of their study, 75 did not, and 21 students did not complete 18 ECTS. In academic year 2015/2016, 47 students successfully enrolled in the second year of study, 55 did not, and 27 students did not have 18 ECTS. In all analysed academic years from table 3.4 the number of students who did not achieve 18 ECTS are likely to be students who have terminated their studies at their own request due to lack of interest or for other personal reasons.

Completion data on the undergraduate study program shown in **Table 3.5 The completion of the study program** shows that out of 5 enrolled generations of students there are only a few still studying and that the average length of study has gradually decreased to the extent that in 2013 it reached the lowest level for the observed period. It is apparent from Table 3.5 that in 2 generations of students, in 2011 and 2013, less than 50% of the total number of students enrolled successfully completed their studies, while most of them lost their right to study. The reason for this is probably lack of motivation after acquiring the student status, and not performing their student obligations (attending seminars and / or internships), which led students losing their right to take the exams from unattended



courses. Some of these students continued to study the next academic year by re-enrolling the course. Others terminated their study, transferred to study programs at other faculties or were employed. Certainly, some students lost their student status due to other reasons listed in Art. 14 of Regulations on Undergraduate / Graduate Studies at the Faculty of Graphic Arts (usually due to 2nd failure of the exam before the examination committee / 8th failure of the examination of the same course). In other generations (2009, 2010 and 2012), from **Table 3.5 the percentage of graduate students** from the undergraduate study program is higher than the number of students who have lost their right to study.

Graduate study program students are advancing through their study programs without significant struggle, as can be seen from Table 3.5. In the five generations of enrolled students it is evident that there are no students still studying, and the number of students who lost their student status compared to the number of graduates is insignificant. It is also evident that in the 5 generations, graduate students study a little longer than the prescribed duration of the study program (2 years / 4 semesters), which is an indicator of great success during the study. According to the data presented in Table 3.5, there is a clear decrease in the length of studying at the graduate level.



3.3. The higher education institution ensures student-centred learning.

The higher education institution encourages various modes of programme delivery, in accordance with the intended learning outcomes.

Various teaching methods are used that encourage interactive and research-based learning, problem solving and creative and critical thinking (for example, individual and group projects, cooperative learning, problem-based learning, field work and other interactive methods).

The HEI continually evaluates and adapts teaching methods and different modes of programme delivery.

Teaching methods are adapted to a diverse student population (non-traditional student population, part-time students, senior students, under-represented and vulnerable groups** etc.).*

The higher education institution ensures the use of state-of-the-art technologies to modernise teaching. Available and committed teachers contribute to the motivation of students and their engagement.

The higher education institution encourages autonomy and responsibility in students.

Students are taught to acquire different competencies ([Information package / learning outcomes](#)). Apart from expertise and knowledge gained through classical teaching methods (lectures, laboratory exercises, and seminars), teamwork, development of presentation skills and the use of new technologies through e-learning are also encouraged. For students with disabilities and health problems these kinds of teaching methods have proven to be good and useful. With the active work of the coordinator for this student population, enables them to study without a drop in the quality of education.

Through the described implementation of [the e-Learning Strategy](#) it is evident that the Faculty of Graphic Arts provides student-oriented education.

The implementation of the [the e-Learning Strategy](#) at the University of Zagreb Faculty of Graphic Arts 2012-2017

The e-Learning Strategy at the Faculty of Graphic Arts at the University of Zagreb was carried out based on the e-Learning Strategy of the University of Zagreb, adopted on 13 February 2007, and based on experience of Tempus project Tempus UM_JEP191052004 "EDUCATION QUALITY IMPROVEMENT BY LEARNING TECHNOLOGY (EQBELT)". In the preparation of the Strategy experiences from other Universities were also used. The Strategy is also aligned with Faculty's own research into the choice of e-learning application system. At the Faculty of Graphic Arts 2005 Moodle System – Merlin has been used, along with the development of Faculty's own Claroline EVA-SMS system since 2004.

At the Faculty of Graphic Arts, the "Bologna Process" study is based on a [three-stage concept of higher education](#).

All forms of study support and actively encourage e-learning within the e-Learning Strategy of the University of Zagreb, i.e. the application of information and communication technology in e-learning and teaching at all levels of university education.

This document is based on the e-Learning Strategy of the University of Zagreb 2007-2010. By analysing the objectives set out in this Strategy, new goals have been set up that should improve the quality of teaching.

E-Learning Committee

During the period described, the members of the committees have changed, and the current e-Learning Committee of the Faculty of Graphic Arts of the University of Zagreb comprises:



Doc. Dr. Miroslav Mikota, Head of the committee

Prof. dr. sc. Nikola Mrvac, Member

Assoc. prof. Dr. Dubravko Banić, Member

Support and education for e-learning systems

CARNet system engineer Tomislav Scprach dipl. ing

Clarification of terms and abbreviations often used in the strategy

LMS (Learning Management System) - LMS has brought together all necessary tools to implement the "WWW class": creating and delivering content for learning, quizzes and tests, communication, recording student data

Examples of LMS are Moodle, WebCT, Claroline, Sakai, Dokeos, Chamilo, ATutor, and AHyCo
VLE (Virtual Learning Environment)

Note: The above names are synonyms, the term LMS is more commonly used in North America, the term VLE in Europe

LCMS (Learning Content Management System)

Moodle (Modular Object Oriented Dynamic Learning Environment)

E-learning forms

We classify the forms of learning according to the mode and intensity of use of information and communication technologies (hereafter: ICT), there are four basic forms:

- classroom teaching (classroom, face to face)
 - ICT supported teaching
 - hybrid teaching (combination of classroom teaching and ICT supported teaching)
 - online teaching (learning and teaching are fully implemented using ICT)
- At Faculty of Graphic Arts hybrid teaching methods are mostly used. [Table](#) shows levels 1-3. These are related to courses in which the hybrid form of e-learning is applied.

Strategic goals

By introducing and actively applying e-learning strategy based on the e-Learning Strategy of the University of Zagreb, the Faculty of Graphic Arts implements following strategic goals:

- Improving the quality of university education
- enabling teachers and students to gain new roles in the education process
- increasing the competitiveness of faculties, universities and study programs
- enabling students to use contemporary technologies for lifelong learning

Areas of action

This strategy carries out activities within the following areas of activity:

- A. improvement of the formal, legal and organizational environment
- B. ensuring the sustainability of e-learning systems
- C. teacher support
- D. student support



E. Development of educational content

F. development of basic and specific infrastructure

The purpose of this strategy is to create a positive and stimulating environment for the development and systematic application of e-learning at the University of Zagreb Faculty of Graphic Arts. The strategy does not impose particular teaching models, e-learning systems nor the autonomy of university teachers to decide on the optimal method of teaching.

Analysis of e-Learning objectives at the Faculty of Graphic Arts

The following [table](#) shows an analysis of the goals achieved at the Faculty of Graphic Arts according to the University of Zagreb's e-Learning Strategy, and further action is defined for each target goal:

Monitoring Strategy Implementation

In order to monitor the implementation of the strategy, i.e. the conditions for application and the level of e-learning application, [various quantitative indicators](#) have been continuously monitored and analysed.

Conclusion

E-learning as a mixed form of learning at The Faculty of Graphic Arts uses a hybrid form of learning, i.e. e-learning. This approach is based on the combination of classroom teaching that takes place in a virtual learning and teaching environment. Choosing the form and intensity of e-learning is left to the course holders who need to discern and apply the e-learning format that is appropriate for the subject area, i.e. a specific study and / or course.

Since the application of e-learning method, teachers have been able to upgrade their knowledge and improve their competences in this new way of teaching at different workshops.

System operation and development have led to a large increase of e-learning users ([various quantitative indicators](#)).



3.4. The higher education institution ensures adequate student support.

The higher education institution provides guidance on studying and career opportunities to students (for example, tutors, supervisors and other advisers as a support in student learning and progress).

The higher education institution has established functional procedures for student career guidance, psychological and legal counselling, support to students with disabilities, support in outgoing and incoming mobility, and library and student administration services, at university of faculty level.

Students are informed about the available support services.

Student support is tailored to a diverse student population (part-time students, mature students, students from abroad, students from under-represented and vulnerable groups, students with learning difficulties and disabilities, etc.).

The higher education institution employs an adequate number of qualified and committed professional, administrative and technical staff.

Students are provided with the necessary information, advice and counselling about pursuing their studies through the Student Affairs Office and from the Vice Dean for Education. [Student mentors](#) (teaching assistants and postgraduate students) are assigned to all first year undergraduate students. Students can also seek support from teachers through [counselling](#) or with the Faculty management and the Dean. The list of mentors and counselling schedule are listed on the Faculty website.

The Faculty offers a student support coordinator ([student administration](#)) who is also listed on Faculty website and who provides students with guidance and advice to their inquiries.

Information and advice regarding student mobility is available through [International relations Office](#), ECTS coordinator and Vice dean for international relations. International relations Office is responsible for keeping students and staff informed on mobility programme recruitments for students, teaching and non-teaching staff. It organizes the international exchange of students, teaching and non-teaching staff, cooperates with the University's offices in Zagreb as well as with the agencies and the ministries in charge of the implementation of mobility programmes. International relations Office notifications are available on Faculty website.

At the Faculty, individual teachers are assigned the functions of counsellors for individual student areas. In this way, students can find information related to [student practice](#) from the student practice coordinator, for ISVU-related matters computer classroom etc., students can contact the ISVU Coordinator or the CarNet Coordinator and Program ([Student Administration](#)). Each academic year, before the classes start, the CarNet Coordinator opens the AAI@EduHr user accounts for all new students and it opens and maintains their email user accounts throughout their studies.

Students with disabilities as well as students with learning difficulties exercise their rights through Coordinator for Disabled Students. The Coordinator serves as liaison between disabled students and the Office for Disabled Students at the University of Zagreb ([Student Administration](#)). The Coordinator advises students with disabilities and learning difficulties, collects documentation, analyses it and notifies them about the teachers and the expert service of the Faculty. In line with the guidelines given in the University Code of Practice for Students with Disabilities certificates of reasonable adjustment of teaching and assessment practices are issued for those students to present to their course teachers before attending classes or sitting exams. Currently, eight students with disabilities or learning



difficulties, awarded with these certificates, are involved in the studies at the Faculty.

In addition, on the Faculty website, as well as in the enrolment notices for each academic year the Faculty offers an elective technical course called the [Peer Support for Students with Disabilities](#), which is available to all students at all levels of study. In Peer support disabled students make their own individual study plans together with other students taking the course ("in pair"). The idea behind this course is to equalize opportunities for students with disabilities in the higher education system in the Republic of Croatia, and was created within the framework of the Tempus Project Education for Equal Opportunities at the Croatian Universities - EduQuality, which is headed by the University of Zagreb through the Office for Disabled Students.

Students are introduced to the available support through the Student Administration Office and through contacts available on the Faculty website ([student administration](#), [Library](#), [Computer Centre](#)).

In addition, the [introductory lecture for first year undergraduate students](#) familiarizes first year students with the rules of study (general acts of the Faculty and University, student's rights and obligations, etc.). Students are introduced to the Faculty Administration, administrative employees and teachers, assistants, mentors, etc.

The Faculty library's collections and services provide information and support for the scientific-educational activities of the institution. As a higher education institution open-type library, it is intended primarily for staff and students of the Faculty, but also for external users. In its fund library owns about 8,000 units of material and 100 titles of domestic and foreign professional and scientific journals and a collection of graded papers (doctoral, master's, graduate and final papers). The Library Fund can be searched through an [Repository](#), and the Electronic Resources Portal of the Croatian Academic and Scientific Community offers a large number of online databases and collections of journals and books to users.

Library reading room is equipped with several desktop computers which students are free to use. The Head of the Library is available daily to help students find relevant sources of information. Information about the working hours of the [library](#) and reading room are published on the Faculty website.

The Faculty employs qualified and committed professional, administrative and technical staff as follows:

- Secretary - one employee: Faculty Secretary (university degree, with state and judicial examination)
- Dean's Office - one employee: Dean Office Secretary (secondary education diploma)
- Student Administration Office - three employees: Student Counsellor (university degree), Expert Advisor (university degree, Geography with ECDL Degree) and Professional Reference (secondary education diploma).



- Financial Accounting Service - Three employees: Head of Finance and Accounting (university degree, oec.), Accounting Manager (university degree) and Expert Advisor (university degree, Master of Science with passed ECDL AM 4 advanced levels)
- Office for International relations - one employee: Professional Advisor (university degree, B.Sc.)
- Library - one librarian: Library Manager (university degree, Mag.bibl with a passed exam for drafting and implementation of projects from EU funds)
- Electronic Service Provider - three staff members: Professional Advisor (university degree, B.Sc.), Expert Associate (university degree, B.Sc.) and Administrator / Informatics (secondary education diploma with ECDL Advanced Courses, ECDL Expert) .
- For all employees, the Faculty Administration provides professional training, courses, mobility, etc.



3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

The higher education institution monitors various needs of students from vulnerable and under-represented groups.

The higher education institution encourages interest in the study in students from vulnerable and under-represented groups.

Teaching process is adjusted to the individual needs of students from vulnerable and under-represented groups.

The higher education institution invests resources in the support to students from vulnerable and under-represented groups.

Since the establishment of the Office for Students with Disabilities, the Faculty of Graphic Arts strongly supports students with disabilities and learning difficulties with the aim of providing equal opportunities and improving the quality of their education. For this purpose, the Faculty has appointed a Coordinator for Students with Disabilities, who acts in accordance with the [Regulations for adjusting the teaching process and examination to students with disabilities](#), adopted by the University of Zagreb.

The Faculty protects student personal data and takes all necessary technical and organizational measures in accordance with the best practice and requirements prescribed by Croatian laws and General Data Protection Regulation (e.g. student consent is required before entering data into a system to apply for a STEM scholarship, adjustments for a particular student are only known to teachers and assistants participating in the teaching process of these students).

The Faculty takes into account special circumstances of students with disabilities, e.g. the teachers enable the students deprived of the possibility to attend lectures access to the content by streaming live lectures or allowing the student to attend the lecture with a personal assistant. Students of all study programmes and levels of study can opt for a course entitled “Peer Support”, whereby a student with disabilities benefits from colleague’s support. The Faculty also provides the elevator key to students with walking difficulties.



3.6. The higher education institution allows students to gain international experience.

Students are informed about the opportunities for completing part of their study abroad.

The higher education institution provides support to students in applying for and carrying out exchange programmes.

The higher education institution ensures the recognition of ECTS credits gained at another higher education institution.

The higher education institution collects information on student satisfaction with the quality of HEI's support regarding practical matters of student mobility.

Students gain competencies required for the employment in an international environment.

The Faculty of Graphic Arts informs about student mobility and encourages student exchange, which implies the realization of a part of the study program (semester, academic year) at a foreign university, or the pursuit of professional practice at a foreign institution / enterprise. Student exchange contributes to the academic and personal development of students, contributes to the quality of the education system and the building of knowledge-based Europe. Through web pages, bulletin boards and the Office for International relations, students are informed about the possibilities of attending part of their courses abroad through Erasmus + programs, Bilateral Exchange Based on Inter-University Agreements, CEEPUS, Bilateral Exchange Based on Interfaith Agreements. Students most commonly participate in the Erasmus + program gain international experience. Erasmus + students are provided mobility for a total duration of 12 months for each level of study (undergraduate, postgraduate, postgraduate). Mobility can be achieved more than once in the course of study at a maximum of 12 months for each level of study and includes all forms of international experience such as Student Mobility for Studies (SMS) programme and Student Mobility for Placement (SMP) programme. Erasmus + students are exempt from paying tuition fees at a foreign higher education institution. Students are informed about the possibilities of attending classes and practices abroad through online pages, organized forums, conferences, newsletters, the International relations Office and through contacting ECTS coordinators, teachers, incoming teachers and students with international exchange experience in the same or similar programs. Through the organized workshops, students are further informed of the entire process from application to departure on mobility and return and recognition of international activities. the type of exchange students usually opt for is Student Mobility for Studies SMS (3 to 12 months), which includes final paper; and Student Mobility for Placement SMP (3-12 months), which is a combination of study and student practical work (3-12 months per activity) provided that student practical work is carried out under the supervision of the same higher education institution where the student studies and that the two activities are carried out one after another without interruption. Students are offered the option of short-term international exchange through international summer schools organized by foreign institutions, information on this type of exchange is available on Faculty web pages. Student exchange is realized exclusively on the basis of inter-institutional agreements between the Faculty of Graphic Arts and foreign institutions for the agreed area and level of study. The list of foreign universities with which the Faculty of Graphic Arts has entered into agreements is published each year in the competition, and is available throughout the year on the web pages of International relations Office.



Students apply once a year to a competition announced by the University of Zagreb for the next academic year. Before commencing the exchange program, students have the support of the ECTS coordinator and the Office for International relations. ECTS Coordinators work on co-ordination of information packages, co-ordination of academic co-operation with foreign partners, ensure correct application of the ECTS system, mediate between students and teaching staff related to exchange programmes and counsel students in the selection of study programs at foreign universities and in preparation of documents for foreign students at the University of Zagreb such as Learning agreement / Training agreement, and they also provide student counselling in the selection of student practice. Students interested in exchange programmes, together with the ECTS coordinator, compare and consult on possible study programmes at the Faculty and at foreign universities. The Faculty Committee conducts the candidate selection procedure, and the basic criteria for student selection are a letter of motivation, academic success, knowledge of the English or foreign language foreign exchange institution. The new Regulations on International Mobility were adopted on 20 April 2017. The Regulations on International Mobility regulate the basic principles of mobility of incoming and outgoing students at the University of Zagreb, the rights and obligations of students, the role of the ECTS coordinator at the University and its Faculties as well as other issues related to the implementation of mobility programs. Each student prior to attending the exchange programme is obliged to sign the Learning Agreement as the basic document for the recognition of the ECTS credits acquired at the Faculty of Graphic Arts, signed by the student, the Faculty of Graphic Arts and the foreign institution, for the purpose of recognition of success in completed activity during the student exchange period and in accordance with the Regulations on International Mobility. The Learning Agreement at the foreign higher education institution is a document that determines student's study program and is signed by the student, the faculty / academy and the university host. This contract ensures that the parent institution will recognize the programme that the exchange student attended at the host institution. The contract may be changed with the consent of all signatories, not later than 30 days after the arrival at the foreign university. The recognition of student practice is defined by the Training Agreement and Quality commitment in which clearly defines the student practice program at the host institution. When student practice is not an integral part of the exchange study program, the Faculty of Graphic Arts will enter the completed student practice data into the Supplementary Study Document. Upon completion of the program, the students deliver the Transcript of Records - evidence of the acquired points, to the ECTS coordinator, who based on the evidence delivered recognizes the success achieved at the foreign institution. ECTS co-ordinators and the Office for International relations further inform students on the course selection options and the recognition of the mobility period, this procedure has proven to be positive and transparent procedure for the entire duration of the Erasmus + program in terms of recognizing all courses from the Learning Contracts. According to the data on outgoing mobility (Table 3.6, in attachments), in the last five years there have been 94 students in total under the mobility programme at our Faculty. The Faculty has been gathering data on student satisfaction with the quality of support on matters related to student mobility through the database of International cooperation and through email surveys from the International relations Office. Students acquire competences needed to work in an international environment and several students who have pursued student exchange through study placements and internships found



employment abroad based on the international student experience. During the exchange programmes that last at least three to maximum of twelve months students are given the opportunity to develop their skills and increase employment opportunities. For the duration of the international experience, students remain enrolled at the Faculty of Graphic Arts.

Erasmus + pays special attention to guidance, acceptance, physical accessibility, pedagogical and technical support, and specifically to financing additional costs for students whose physical, mental or health circumstances are such that their participation in the program would not be possible without additional financial support, though since the beginning of the Erasmus + program, such applications have not been received at the Faculty of Graphic Arts. Students can access online information on access to higher education institutions and their services to students with special needs through ExchangeAbility and EIAE Platform Access and Diversity. Students in the exchange programme within the framework of the Erasmus+ may receive financial support as a supplement to the study costs that the student would have at the domicile university and they cover only part of the living costs. If the student's stay abroad will be co-financed from one of the European Community funding programs, the scholarship can not be realized. The financial resources for the implementation of the Erasmus + program are provided by the European Union's Mobility Agency and the European Committee. Students may choose to go to Erasmus + exchange at their own expense, i.e. zero grant, and realize the same rights and obligations as those students who have been granted financial support.

In 2015, the European Commission presented a new regulation on the Erasmus + program. In accordance with the new directive, all students must complete the language assessment when their language of study / working language is: English, French, German, Spanish, Italian, Dutch, Czech, Danish, Greek, Polish, Portuguese, Swedish, Bulgarian, Hungarian, Romanian, Slovak, Finnish, Slovenian, Estonian, Latvian, Lithuanian, Irish and Gaelic, with the exception of native speakers (new languages applicable for academic year 2018/19). The assessment is online and is hosted via the online Erasmus + Online Linguistic Support (OLS) platform. It is possible to have a language assessment and a language course, for which selected exchange students are personally informed through competition or web pages. Language assessment and test results do not affect mobility and are re-established at the end of mobility.

During their study, the students of the Faculty of Graphic Arts can take German or English language courses during two years of study. Students have access from the computer network of the Faculty of Graphics to the world famous databases of scientific and professional journals (Portal of Electronic Resources for the Croatian Academic and Scientific Community). Visiting foreign faculty members and experts at the Faculty of Graphics hold workshops, exhibitions and open class lectures in English.

Students selected for international mobility are familiarized with basic concepts of the international and multicultural environment through workshops and can participate in the work of the *buddy* program. Some students participate in the implementation of international scientific conferences, and some even actively participate in international



scientific conferences by presenting co-authoring works with teacher mentors. Croatian language courses are delivered for foreign students at the level of the university or university constituent, and relevant information is available on the web pages and in the International Co-operation Office.



3.7. The higher education institution ensures adequate study conditions for foreign students.

Information on the opportunities for enrolment and study is available to foreign students in a foreign language.

The higher education institution provides support to foreign students in enrolment and study at the Croatian higher education institution.

The higher education institution collects feedback on satisfaction and needs of foreign students.

Foreign students have the opportunity to attend classes delivered in a foreign language (English).

Croatian language courses are delivered for foreign students at the level of the university or university constituent.

The Faculty of Graphic Arts supports the internationalization of the University of Zagreb through international activities that include the development of international relations with partner institutions in the world, in particular encouraging the mobility of incoming students, participation in international programs and projects in the field of higher education. The International relations Office of the Faculty of Graphic Arts continuously organizes consultations with incoming students upon the arrival of students in the first week in the regarding the introduction to the Faculty, enrolment, schedule of lectures and adaptation and acquaintance with the Faculty Administration and after a month consultations are related to changes in the Learning Agreements, later students are personally consulted as needed and upon completion of the program related to certification and submission of documentation to the foreign partner of the University. The incoming students regularly consult with ECTS coordinators who assist them with the preparation of the Learning Agreement and any changes in the courses that are available during the first month of the mobility as well with the Transcript of Records. The International relations Office informs incoming students through emails and message boards about the traditionally organized Welcome Day where they are introduced to the employees and the Rectorate, the ESN service that provides assistance and practical information on studying and living in Zagreb and organizes excursions, entertainment and helps the buddy program help system for adaptation at the Faculty of Graphics and in Zagreb and its surroundings. Students are also informed about the education system, they are provided with a guided tour around the City, as well as lectures on Croatian culture and history, religious heritage and a trip to Plitvice Lakes.

At the Faculty of Graphic Arts, students participating in the exchange reside in a formal exchange form between their home university and the Faculty of Graphic Arts (i.e. Erasmus +, bilateral agreements, CEEPUS etc.). Students participating in the formal exchange program are exempt from tuition fees. The Partnership University with which the Faculty of Graphic Arts has a bilateral agreement sends a nomination to the International relations Office, after which the student receives information on the required documentation for submission of applications and deadlines for sending documents. The entire documentation, including the Learning Agreement, is certified at the Faculty of Graphic Arts and after that the student can participate in the exchange at the Faculty of Graphic Arts in the next academic year. All information on application, the university level of studies, the rating and assessment system, on available English language courses, information on student support services for exchange students and on Croatian language courses are available on Faculty web pages, at the International relations Office of the



University and Faculty of Graphic Arts and through communication with ECTS coordinators, the student receives them personally via email. Applications are possible twice a year depending on the semester for which the student is applying. Incoming and outgoing exchange students need to fill in surveys of satisfaction and needs of foreign students, which are archived at the University of Zagreb, and the Faculty of Graphic Arts annually, sends an analysis and comment on the results of the survey. According to the data on incoming mobility (Table 3.6, in attachments), in the last five years there have been 36 incoming students in total under the mobility programme at our Faculty. The data on selected and attended courses based on data from the ISVU system are available at the International relations Office and are periodically analysed.

In accordance with the developed procedure for the recognition of ECTS credits of incoming foreign students, the Zagreb schools of University of Zagreb offer students information on available courses of all study programs of the Faculty of Graphic Arts both in Croatian and English, of which twenty-four are held and published on the website Faculty of Graphic Arts and the University of Zagreb web site. According to the interest of the incoming students, the classes are held in groups i.e. consultative in agreement with the teacher. Students who attended the courses expressed satisfaction through e-mails, personally at attended courses and have shared their experiences with their colleagues, thus establishing a continuous exchange of students of particular universities as well as teachers. In accordance with the achieved success and points and the obtained transcript records, the same have been recognized at their home universities.

Active contribution to increasing the number of foreign students and greater international recognition of the University of Zagreb is provided by courses offered in a foreign language. The Faculty of Graphic Arts of the University of Zagreb provided information on the offer of foreign language courses to the Agency for Science, which, in cooperation with the Ministry of Science, Education and Sports, and the Institute for the Development of Education, created a portal Study in Croatia for informing foreign students on the possibilities of studying in the Republic of Croatia.

Promotional materials are shared and distributed at organized scholarship fairs and visits to partner institutions within the Erasmus program and at other forms of international activity. Foreign exchange students participating in the exchange are provided with support during registration, arrival, adaptation and with documentation related to the recognition of their achievements by the International Co-operation Office, ECTS Coordinators and students from the support group for incoming foreign students (buddy program).



3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

*The criteria and methods for evaluation and grading are clear and published before the beginning of a course.
The criteria and methods for evaluation and grading are aligned with the teaching methods used.
The higher education institution provides support to the assessors in the development of skills related to the testing and assessment methods.
If possible, the higher education institution carries out the evaluation of grading.
The evaluation procedures take into account special circumstances of certain groups of students (modifying examination procedures to suit e.g. students with disabilities), while at the same time ensuring the achievement of intended learning outcomes.
The students receive feedback on the evaluation results, and if necessary, guidelines for learning based on these evaluations.*

The teachers familiarise the students with the criteria and methods of grading and evaluating student performance in the introductory lecture. This information can also be found on the homepages of respective departments or on the Merlin or Claroline platform.

The criteria and methods for evaluation and grading are aligned with the [Statute](#) of the Faculty of Graphic Arts, the [Ordinance](#) on Study Programmes and Studying, [the Regulations on Submission and Defense of Bachelor's Thesis](#) and [the Regulations on Submission and Defense of Master's Thesis](#) i.e. all other relevant acts of the University of Zagreb.

Assessment of knowledge, skills and competences i.e. learning outcomes is carried out continuously or during a formal examination consisting of a written and/or oral part. Continuous assessment of student work takes a variety of forms, depending on the learning outcomes of a respective course - tests, seminar papers and presentations, projects and peer-assessment. Some courses utilise the Merlin or Claroline platforms.

The students are entitled to immediate feedback on the exam results.

In accordance with the Statute of the Faculty and the Ordinance on Study Programmes and Studying at both the Faculty and the University level, in case the student is dissatisfied with the result of the examination, they are entitled to submit a written appeal to the Dean and be examined by a three-member commission, appointed by the Dean. In case the exam consists of a written and oral part, the examining teacher is obliged to present the written part to the commission. The Commission makes a decision by majority vote. Students can find the complaint form (Obrazac žalbe) on the homepages of the Faculty.

The Faculty and its teachers take into account special circumstances of certain groups of students, e.g. they modify examination procedures to suit students with disabilities, in accordance with the Regulations for adjusting the teaching process and examination to students with disabilities, adopted by the University of Zagreb. The Faculty analyzes the assessment and grading procedure by means of Student Surveys, and Faculty Management continuously monitors examination results together with the Students Services Office.

Teachers are encouraged to attend workshops dedicated to the achievement of learning outcomes, i.e. assessment and assessment methods.



3.9. The higher education institution guarantees the issuance of Diploma Supplements and adequate qualification information.

Upon the completion of their studies, students are issued appropriate documents (diploma and Diploma Supplement), which describe their qualification, achieved learning outcomes and the level, content and status of the study.

The diploma and Diploma Supplement are issued in accordance with relevant regulations.

Upon the completion of their studies, students are issued appropriate documents, a diploma and Diploma Supplement. All this information can be retrieved from the Information System of Higher Education Institutions (ISVU), from the Application “Studies and Students/Completion of Studies and Graduation/Additional Data for Diploma Supplement”.

At the dawn of the Bologna process (2005 for Undergraduate and 2008 for Graduate studies), the legal status of the higher education institution, the legal status of the study programmes, the course languages, the enrolment criteria, the expected duration of the studies and the level of qualification of the study were defined.

Pursuant to Article 8 of the Regulations on Undergraduate and Graduate Study at the Faculty of Graphic Arts, the Diploma Supplement is a public document published in Croatian and English, accompanying the undergraduate or graduate degree or diploma in order to provide a detailed insight into the level of study, the curriculum and the regulations rules on studying at the Faculty. The content of the Diploma Supplement is defined by the Minister of Science and Education, and its form is regulated by the Senate.

The Diploma Supplement of the Faculty of Graphic Arts is issued in accordance with the Act on Scientific Activity and Higher Education (Official Gazette 123/03, 105/04, 174/04, 02/07 USRH Decision 46/07, 45/09 and 63/11), Article 84, paragraph 5, and is in line with the guidelines developed by the Ministry of Science and Education.

Consequently, the Diploma Supplement of the Faculty of Graphic Arts contains the following information: personal information on the holder of the diploma, data on the qualification acquired (qualification level, content and status of the study), information on employment opportunities, i.e. further training, additional information (awards and prizes), certification of the Diploma Supplement and information about the higher education system in Croatia.



3.10. The higher education institution is responsible for the employability of graduates.

The higher education institution analyses the employability of its graduates.

Admission quotas are aligned with social and labour market needs and available resources.

The higher education institution informs prospective students about the opportunities to continue education or find employment after graduation.

The higher education institution provides students with support regarding future career planning.

The higher education institution maintains contacts with alumni.

The Faculty of Graphic Analysis analyzes the employability of its students and graduates by keeping in constant touch with the teachers and (graduated) students. A round-table discussion organised within the framework of the annual [International Conference](#) on Printing, Design and Graphic Communications analyzes issues such as trends in the field, the need for new curricula in the field of graphic technology and design, the employability of graduated students etc. The above mentioned conference, as well as the “Printing & Design” International Conference, provides the opportunity for get-togethers, formal and informal gathering of information about employment prospects of students of graphic engineering and design and an exchange of opinions between current and former students, teachers and businessmen. In order to strengthen the ties with its alumni, the Faculty of Graphic Arts had founded the Croatian Association of alumni and friends of the Faculty of Graphic Arts (AMAC GRF).

Data in Table 3.7. refer to the number of registered unemployed persons by the end of December in the period 2015-2017. Data are presented according to the study programmes and previous work experience and are grouped according to education programmes as classified by the National Standard Classification of Education (NSKO, Official Gazette, No. 105/01), which is in line with the International Standard Classification of Education (ISCED-97), and which includes study programmes completed within the framework of the Bologna process of higher education.

Data source: Croatian Employment Service, July 5, 2018

Admission quotas for Undergraduate and Graduate Programmes are adopted by the Faculty Council of the Faculty of Graphic Arts in accordance with the procedure for adopting the admission quotas and criteria for proposing admission quotas, carried out by the Senate of the University of Zagreb for each academic year.

The procedure of adopting admission quotas is in line with the following provisions:

1. Act on Quality Assurance in Science and Higher Education,
2. Regulations on the Study Programme Assessment Procedure of University Undergraduate, Graduate and Integrated Studies at the University of Zagreb
3. Regulations on the Content of a Licence and Conditions for Issuing a Licence for Performing Higher Education Activities, Carrying out a Study Programme and Re-Accreditation of Higher Education Institutions (Regulations of the Ministry of Science and Education)



The following factors determine admission quotas:

- a) accredited study programmes
- b) needs of the labour market as presented by the Croatian Employment Service, the Croatian Chamber of Economy, the Government of the Republic of Croatia etc.
- c) teaching staff (student – teacher ratio)
- d) spatial capacity
- e) positive student feedback for a study program and/or the Faculty
- f) full-time students – part-time students ratio
- g) positive re-accreditation of higher education institution
- h) admission quotas for full-time students cannot be raised for more than 5% at University level

IV.

Teaching and institutional
capacities



4. Teaching and institutional capacities (ESG 1.5., ESG 1.6.)

4.1. The higher education institution ensures adequate teaching capacities.

The number and qualifications of teachers are appropriate for the delivery of study programme and achievement of the intended learning outcomes.

The ratio of students and full-time teachers at the higher education institution ensures a high quality of study.

Teacher workload is in line with relevant legislation

Teacher workload ensures appropriate distribution of teaching, scientific/artistic activities, professional and personal development and administrative duties.

The Faculty employs a sufficient number of appropriately qualified teachers to achieve educational goals and deliver a wide range of courses (MOZVAG tables 4.1.a, 4.3, 4.4).

The student/teacher ratio for the academic year 2016/2017 is 19.10, if only the teachers with scientific-teaching title are taken into account or 10.43 if associates (assistants, postdoctoral researchers) are also included.

These ratios meet the requirements under the Regulations on the Content of the Accreditation and the Requirements for Issuing the Accreditation to HEI for Providing Higher Education Activities, Delivering Study Programmes and HEI Re-accreditation.

The provisions of the Collective Agreement govern the teacher workload.

Efforts are made to equalize the teacher workload and thus new teachers and associates have been employed at the heads and departments with a greater teaching workload. New practice is being introduced where newly employed teaching staff is not exclusively bound to teaching in only one department, rather in all departments where their knowledge and expertise are needed, with the purpose to balance the teaching workload of heads and departments.



4.2. The higher education institution has an objective, transparent and excellence-based procedure of teacher recruitment.

Teacher recruitment principles and procedures are aligned with HEI development goals.

In the selection, appointment and evaluation of teachers, HEI takes into account their past activities (teaching, research, student feedback, etc.).

Teacher recruitment procedures are appropriately regulated, transparent and have been consistently applied and implemented.

The higher education institution has appropriate methods for selecting the best candidates for each position.

The Faculty takes particular care of human resources.

The human resources is the responsibility of Faculty management (Dean and Vice deans), Board of Deans (Dean, Vice deans, Heads of Department, Faculty Secretary and one Student Representative at the Faculty Council), the Faculty Council and the Human resources Committee (consisting of three teachers with scientific - teaching and / or artistic titles, with the task of verifying the completeness of the Report of the Expert Committee: all components, date, signatures, etc. without entering into the content of the Report). The Faculty Secretary provides professional and administrative assistance to the bodies.

New vacancies (assistant) depend on the number of retired teachers who released funds through the appropriate coefficient of job complexity. In the reporting period, the Faculty has offered all postgraduate students (associate positions) employment / promotion in the teaching staff.

In the reporting period, the Faculty hired a teacher, who has been an external associate for years, to the teaching title lecturer (Josip Jozić, academic painter-graphic artist, 1 April 2016).

In order for a teacher or an associate to be employed, there must be an expressed need for teaching demonstrated by the department by means of the Workload Tables, which are then passed on to the Faculty Council.

In case of sufficient teacher workload, the Faculty Management consults with the Board of Deans and prepares a proposal for the Faculty Council for making a decision on the tender, which has to be approved by the University of Zagreb prior to announcement. The Faculty Management together with the Board of Deans determines the proposal of the Expert Committee (sometimes there is only one Expert Committee and sometimes there are two, depending on field for which the assistant is elected). At least one member of the Expert Committee is not a Faculty lecturer.

The vacancies are publicly announced (Official Gazette, 24 sata, Faculty website and EURAXESS job portal). The competition is open for 30 days, and the applicant is required to comply with all the conditions prescribed by law as well as the terms of the University Rector.

The Expert Committee compiles a Report on Applicants Applying for a Call for Proposals and a Proposal for Selection of candidates ranked by scientific work, engagement in teaching and other achievements. The Committee for Electing teaching staff verifies whether the Report has all the necessary components (date, signed by authorized persons)



without entering into the content of the Report and submits a short report attached to the Expert Committee's Report. Both Reports are sent to the Faculty Council.

The Faculty Council chooses the candidates, and the final confirmation is given by the Council for the relevant field of the University of Zagreb.

The minutes from the Board of Deans meetings are held in the Faculty Archives (Administration).

The minutes of the Faculty Council meetings are kept in the Faculty Archives (Administration) and are also available on the Faculty [Intranet](#) page.



4.3. Teacher and scientist/artist advancement is based on objective and transparent procedures.

The higher education institution uses objective and transparent academic promotion procedures. Academic promotion procedures are based on assessment and rewarding of excellence. Additional criteria for the promotion of teachers reflect the strategic goals of the higher education institution. Important achievements (such as international contribution to the scientific discipline, high-impact publications, significant scientific discoveries, successful projects, success in securing additional funds, supervision of final and graduation theses, authorship of textbooks / study materials, popular lectures etc.) are taken into account when considering teacher advancement. Indicators of excellence include scientific/artistic, teaching and professional contribution.

For the reporting period, the Faculty has enabled academic promotion to all employees, who meet the proposed requirements, in science - teaching titles to full time scientific - teaching titles.

The faculty has also enabled the promotion of one teacher in the teaching position (dr. sc. Miroslav Mikota, senior lecturer) to scientific - teaching position (doc. dr. sc. Miroslav Mikota) on 2 November

The Faculty Management conducts interviews with each individual teacher who is in the academic promotion process, and verifies whether the particular candidate meets the requirements for the promotion.

In the event that the applicants meet the requirements for promotion, the Faculty Management advises with the Board of Deans and prepares a proposal for the Faculty Council for making a decision on the tender, which has to be approved by the University of Zagreb prior to announcement.

In the event that applicants fail to meet the requirements for promotion or that the Faculty does not currently have the unpaid coefficient of complexity of the job, the Faculty Management Board recommends to the Board of Deans and the Faculty Council a proposal for the (internal) tender for re-election.

The vacancies are publicly announced (Official Gazette, 24 sata, Faculty website and EURAXESS job portal). The competition is open for 30 days, and the applicant is required to comply with all the conditions prescribed by law as well as the terms of the University Rector.

The Expert Committee compiles a Report on Applicants Applying for a Call for Proposals and a Proposal for Selection of candidates ranked by scientific work, engagement in teaching and other achievements. The Committee for Electing teaching staff verifies whether the Report has all the necessary components (date, signed by authorized persons) without entering into the content of the Report and submits a short report attached to the Expert Committee's Report. Both Reports are sent to the Faculty Council.

The Faculty Council chooses the candidates, and the final confirmation is given by the Senate of the University of Zagreb (for professors and full time professors) or by the Council for the relevant field of the University of Zagreb (for associate professors and teachers).



The minutes from the Board of Deans meetings are held in the Faculty Archives (Administration).

The minutes of the Faculty Council meetings are kept in the Faculty Archives (Administration) and are also available on the Faculty Intranet page.



4.4. The higher education institution provides support to teachers in their professional development.

The higher education institution provides opportunities for the improvement of teaching competencies at the level of the university or university constituent.

The higher education institution encourages the assessment and improvement of teaching competencies based on the peer-review recommendations and the results of student satisfaction surveys.

Teachers participate in international programmes, projects, networks etc.

The Faculty provides support to the teachers in the field of teacher training and improvement of teaching competencies by organizing [workshops](#) at the Faculty and by encouraging teachers to participate in workshops held in other institutions or in the [Centre for Teacher Competence Development of the University of Zagreb](#).

On department level, the subject teachers train their associates as well as the newly employed teachers, with the aim of developing and upgrading the required competences for teaching through consultation with teachers and associates in the preparation of teaching units.

When teachers are appointed or re-appointed to a research and teaching position or to a teaching position they need to file a verification report on institutional survey of teaching quality. Prior to the first appointment to the research and teaching position of an assistant professor, the candidate is to deliver a [public lecture](#) for students, peer teachers and the Expert committee comprising three teachers (one teacher comes from another faculty) who assess the teaching competencies of the candidate (knowledge of the subject logical presentation of content, appropriateness of the presented material for the particular year of study, lecturing skills, use of teaching aids and other observations).

The Faculty's e-Learning Committee provides support to the teachers to design and further develop their e-courses.

The Faculty of Graphic Arts encourages teachers and associates to publish scientific articles and create university textbooks with symbolic cash prizes from their own resources, based on the Decision on Awarding Employees for Published Works and Textbooks, issued by the Faculty of Graphic Arts on November 14, 2011.

The Faculty of Graphic Arts encourages the international co-operation of teachers and associates, providing support in the application and implementation of projects, hosting our teachers at foreign universities as well as hosting teachers at the Faculty of Graphic Arts.

The Faculty has a long tradition of encouraging mobility of its teaching and non-teaching staff, which is financed from a variety of sources, e.g. multilateral and bilateral scholarships, projects carried out by the host institution or projects carried out at the Faculty. The international mobility is mostly short-term and related to research activities and professional development. The Faculty has been participating in the Erasmus exchange programme including the mobility of students, teaching and non-teaching staff.

The Faculty of Graphic Arts established the Office for International relations has been



established, with an expert adviser for international affairs, who carries out tasks related to mobility of teaching and non-teaching staff and students, mostly through providing information and giving instructions, announcing and implementing mobility competitions and administering outgoing and incoming mobility.

Teaching and non-teaching staff actively use the possibility of international mobility on different programs, mostly Erasmus + and Ceepus mobility (Tables 4.5 and 4.6).

The Office for International relations regularly informs employees about the announced mobility competitions of teaching and non-teaching staff through Faculty website and cooperates with the offices of the University of Zagreb and carries out other activities related to informing and educating Faculty employees.

Mobility is based on bilateral agreements with partner universities and the Office for International relations keeps records of foreign universities with which the Faculty has entered into agreements, and the data are available on the Faculty web site.

Nina Jelača, mag. bibl., employed in the type I workplace – librarian, has completed the training program for the head of the design and implementation of projects funded from EU funds in 2017 and since 21 September 2017 has been responsible for coordinating project implementation at Faculty of Graphic Arts and for education related to the design and implementation of projects.



4.5. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.

The higher education institution plans and improves the infrastructure development, in line with the strategic goals.

The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes and ensuring the achievement of the intended learning outcomes.

The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the implementation of scientific/artistic and professional activities..

The Faculty performs its activities in the building built in 1955 and shares its space with the school for graphics, design and media production. The total surface area used by the Faculty is 3000 m².

The Faculty facilities meet the size and layout requirements. On the second floor of the building is a newly built hall for Faculty Council meetings as well as for lectures, along with lecture halls A, B and C.

The average number of students per lecture group is 150 students, and the average number of students per laboratory/practicum group is 10.

A larger number of small lecture halls would be desirable in order to organize lectures in smaller groups, which would result in higher quality of teaching.

Physical and Health Education takes place outside the Faculty premises, for which the Faculty rents spaces.

At the Faculty of Graphic Arts, there is no space for student canteen, but the Borongaj campus is in the vicinity of the Faculty, where there is a student canteen and other catering facilities.

There is no space in the building that would be intended for use by students in extracurricular activities, except for the Library.

The required computer equipment is acquired by the Faculty's own resources, and the equipment is renewed periodically.

For computer-based exercises, students are offered individual work on computers with all software support needed to accomplish their tasks. The use of computer equipment outside the classroom, with the aim of producing scientific, final, graduate and other papers or projects, is possible in the Library's premises and in the computer classroom on the 6th floor, in agreement with the teacher.

Computer equipment is purchased in accordance with the procurement plan (based on the application submitted by organizational units / departments) and in accordance with the rules of public procurement.

The Public Procurement Committee participates in the public [procurement procedure](#).



The number of teaching staff is satisfactory and most of the cabinets (more than 90%) are used by only one teacher. Teaching cabinets have the average area of 9.68 m², and are equipped with necessary IT equipment and modern furniture. The cabinets are fitted with air conditioners.

Teaching laboratories / practicums are available to all teachers, PhD students and students and to persons outside the institution participating in scientific or teaching work.

The [equipment](#) at the Faculty of Graphic Arts is listed and published on the Faculty web pages.



4.6. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.

The library and library equipment, including the additional resources, meet the conditions for a high quality of study.

The library and library equipment, including the additional resources, ensure a high quality of scientific-teaching / artistic-teaching activities.

The Faculty Library is an academic library whose primary purpose is to support the Faculty's educational and research activities providing IT and communication support through its collection of various resources and services. Primarily intended for the use of employees and students of the Faculty, an open access is also granted to all external users in search of specific literature or information related to the fields of graphic technology and/or communication. The status, organization, management and operation of the Library are regulated by the [Faculty of Graphic Arts Library Regulations](#).

The Faculty Library is located on the first floor next to the student administration office and is easily accessible to students and other users.

The Library opening hours are Monday to Friday from 8:00 a.m. to 2:00 p.m., and the library reading room is open to students Monday to Friday from 8:00 a.m. to 6 p.m.

The Faculty Library employs one professional staff member: the Head of Library holding the graduate librarians (MA in Library Science). Library staff has access to in-service training through various domestic and international conferences and symposia, as well as through various workshops.

The library occupies a space of about 100 m², consisting of the library reference space (about 50 m²), reading room (about 43 m²) and a lobby where occasional photo exhibitions and other works of students, Faculty staff and external authors are displayed. The library storage area is also in the lobby. The reading room is equipped with 18 workstations, of which 4 are equipped with computers with Internet access. The library and reading room space is air-conditioned, allowing students more enjoyable work.

The library fund has around 8,000 books and about 160 journal titles. Particular archive comprises the collection of old books and magazines in the field of printing. The oldest book the library dates from 1857, and there are a large number of foreign magazines from the early 20th century. Of great value is also the collection of all published editions of the magazine *Grafička revija* for teaching and promotion of graphic work.

Along with standard reference literature, most of the fund is made up of scientific and professional publications in the field of graphic technology, graphic communication and design. Additionally, there are both professional and examination materials in the fields of mathematics, physics, chemistry, art, marketing, ecology and other subjects.

Continuous acquisition of new professional and scientific literature the library fund has been kept up to date as much as possible. The library also keeps collections of final papers: doctoral and master's theses, graduate theses (since 2002) and final works (since 2008) that



can be used in the reading room. Also, the library keeps a digital repository with final works that store undergraduate, graduate, masters and doctoral theses and is thus enabled [online](#).

Literary activities take place in the Aleph integrated library system, through the [online catalogue](#).

Each year, the Library renews subscriptions to Croatian and international professional and scientific journals relevant in the field of graphic technology. Through the *Portal of Electronic Resources for the Croatian Academic and Scientific Community*, scientific institutions have access to a large number of databases, both bibliographic and full texts, such as the Web of Science, Scopus, and Ebsco etc. In this way, Faculty teachers and students have access to journals, articles, books, etc. from the relevant fields of study.

From Table 5.4 (organizing committees) it is evident that the Faculty of Graphic Arts is the co-organiser of three conferences: International Conference on Printing, Design and Graphic Communications, [Blaž Baromić](#) International Conference on Printing, Design and Graphic Communications and the [Printing & Design](#) and International Conference [MATRIB](#).



4.7. The higher education institution rationally manages its financial resources.

Financial sustainability and efficiency is evident in all aspects of the higher education institution's activity. HEI manages its financial resources transparently, efficiently and appropriately.

Additional sources of funding are used for institutional development and improvement.

Additional sources of funding are secured through national and international projects, cooperation with the industry, local community, etc.

The Faculty's revenues are generated from a variety of sources and recorded accordingly. Their trends are monitored across these different sources.

One portion of the Faculty revenues came from the state budget, other sources are secured through cooperation with the industry and rent, as well as through tuition fees, international projects and donations.

In 2016 the total revenues of the Faculty amounted to HRK 17,389,571.00. The largest portion of the Faculty revenues came from the budget (revenues from the state budget increased by the revenues from the budget of other public sources) and amounted to HRK 13,541,711.00 or 77,88%. Salaries took up 94,28%, scientific projects 1,33%, material costs 2,83% and the revenues from international cooperation subsidy 1% of the revenues from the budget.

Operating revenues and income generated under special regulations (tuition fees) amounted to HRK 3,368,233.00, out of which tuition subsidies amounted to HRK 2,744,626.00 and made up 81,49% of the revenues. The revenues from business activity involved in market transactions (trading revenues), pertaining to and generated from operating activities and under special regulations (tuition subsidies), made up 19,37% of the total revenues.

The level of autonomy and flexibility of financial management is determined by the ratio of budget revenues to trading revenues. In order to increase the level of autonomy and flexibility of the Faculty financial operation, it is necessary to make more effort to increase the share of own-source revenue in the total revenues.

Approximately 72,18% of the own-source revenues were generated from tuition fees, including tuition fees for undergraduate, graduate, postgraduate specialist studies and postgraduate doctoral studies, as well as from other revenues related to student enrolment. Approximately 12,68% of own-source revenues referred to scientific projects, 10,33% of revenues were earned from leases

The specified structure of own-source revenues was considered satisfactory, but more effort should be made to increase the revenues, in particular those generated from international projects, revenues from commercial projects and from other forms of collaboration with industry.

In 2017 the total revenues of the Faculty amounted to HRK 18,034,072.00. The largest portion of the Faculty revenues came from the budget (revenues from the state budget increased by the revenues from the budget of other public sources) and amounted to HRK



14,186,015.00 or 78,67%. Salaries took up 92,33%, scientific projects 1,65%, material costs 2,64% and revenues from international projects 3,06%.

Revenues from business activity involved in market transactions (trading revenues), generated from operating activities and under special regulations (tuition subsidies), made up 19,59% of the total revenues.

About 95,79% of own-source revenues was generated from tuition fees, including tuition fees for undergraduate, graduate, postgraduate specialist studies and postgraduate doctoral studies, as well as from other revenues related to student enrolment. Approximately 4% of own-source revenues referred cooperation with industry.

The specified structure of own-source revenues was considered satisfactory, but more effort should be made to increase the revenues, in particular those generated from international projects, revenues from commercial projects and from other forms of collaboration with industry.

In 2016 the total expenditure of the Faculty amounted to HRK 17,389,046.00. Staff costs amounted to HRK 14,680,851.00 (84,43% of total expenditure), material and energy costs totalled HRK 681,684.00 representing 3,92% of total expenditure, cost of services amounted to HRK 1,143,055.00 or 6.58% of total expenditure.

Costs for the procurement of nonfinancial assets amounted to HRK 431,438.00 or 2,49%.

The major portion of expenses accounting for 84% of total expenditure was covered from the budget (source of finance – category 11: General revenues and receipts), whereas 16% was covered from the other (own) sources of finance.

In 2017 the total expenditure of the Faculty amounted to HRK 17,028,830.00. Staff costs amounted to HRK 14,464,451.00 (84,94% of total expenditure), material and energy costs totalled HRK 727,109.00 representing 4,27% of total expenditure, cost of services amounted to HRK 944,784.00 or 5,55% of total expenditure.

Costs for the procurement of nonfinancial assets amounted to HRK 139,394.00 or 0,82%.

The major portion of expenses accounting for 91% of total expenditure was covered from the budget, whereas 9% was covered from the other (own) sources of finance.

Revenues from tuition subsidies are used to improve teaching quality through different activities such as field work, part-time teaching, student assistance, support for the activities of students associations and investing in equipment.

Higher education institution ensures financial sustainability in accordance with its mission. Sources of finance and all matters related to funding are transparent.

V.

Scientific/artistic activity



5. Scientific/artistic activity

5.1. Teachers and associates employed at the higher education institutions are committed to the achievement of high quality and quantity of scientific research.

*Teachers and associates publish an appropriate number of high-quality scientific publications.
The higher education institution has efficient procedures for encouraging high-quality scientific publication.
The higher education institution keeps record of publication (publication index, citations impact, h-index, if applicable).
HEI's scientific/artistic activity is evident in PhD theses.
Teachers and associates of the higher education institution actively promote scientific/artistic achievement at national and international conferences.*

In the period from 2013 to 2017 teachers and associates at the Faculty Graphic Arts have published 72 scientific papers in journals included in WoSCC (Web of Science Core Collection, category A) and 205 other papers (according to the Ordinance on Appointment to Scientific titles). (Table 5.1. Analytical attachment to Self-evaluation)

According to the Web of Science, current total number of citations of publications is 897, i.e. 1132 in SCOPUS database. Total h-index of higher education institution is 14 according to the Web of Science, or 16 in SCOPUS database. (Table 5.1. Analytical attachment to Self-evaluation)

In order to encourage the teaching staff to publish works in high quality journals, on 14 November 2011, the Faculty Council issued a Decision on rewarding employees for the publication of category A papers, as well as for the publication of reviewed university-teaching literature such as textbooks and manuals.

The [Strategy of Scientific Research at the Faculty of Graphic Arts of the University of Zagreb from 2014 to 2020](#) and the [Development Strategy of the Faculty of Graphic Arts of the University of Zagreb from 2011 to 2016](#), i.e. from [2017 to 2022](#), clearly defines the continuous encouragement of teachers by the Faculty management to publish scientific papers.

Teachers and associates enter their scientific and professional papers in the Croatian Scientific Bibliography ([CROSBI](#)) database. This data, along with the data published in the Web of Science Core Collection and SCOPUS databases, represents the basis for monitoring the quality and quantity of scientific and professional research and the dissemination of the achieved results. Final, graduate and doctoral theses are entered In the Repository of the Faculty of Graphic Arts.

Annual reports of the Vice dean for science and international relations and the Committee for postgraduate studies and science and one of the points of the Dean's annual reports are the basis for scientific productivity analysis of the Faculty.

The analysis comprises the number and type of projects, the number of published scientific papers in journals and conference proceedings, participation of scientists at international conferences, scientific and professional development, especially postdoctoral students and teaching assistants. In particular, the report highlights data on conferences and workshops



organized by the Faculty's employees.

In order to achieve a higher quality of data input a workshop was held at the Ruđer Bošković Institute - Centre for Scientific Information, for the administrators of the Croatian Scientific Bibliography - CROSBI and the administrators of project activities database in the Science and Higher Education of the Republic of Croatia, in which one of Faculty's employee took part and was assigned administrative powers for aforementioned databases. Institution administrators are responsible for verifying the accuracy of all bibliographic data and project activities related to the parent institution. Administrators enter all corrections and updates based on the available and objective facts, in accordance with the information contained in the publication (book, magazine, etc.) or available publication information, without going into the quality of content and the scientific nature of the publications themselves. ASHE and Ruđer Bošković Institute organized the workshop.

In accordance with its legal acts and acts of the University of Zagreb, the Faculty periodically monitors the scientific productivity of mentors and PhD students and collects annual reports on the work of mentors and PhD students through DR.SC. 04 and 05 forms and through annual reports of the Committee for Doctoral Studies and Science. The mentor is obliged to report annually about the work of the PhD students through the University form (Form DR.SC. 05) and to present students scientific performance. Also, the mentor is obliged to guide the PhD students with his/her dissertation, monitor the quality of PhD students work, encourage the publication of his/her papers and to enable his/her participation in scientific projects and grants.

The quality of PhD student work and his/her dissertation and is evaluated by the number of papers published with the mentor, by the teachers of the doctoral studies whose courses have been enrolled, by participation in scientific symposiums, by training at international institutions and on scientific / professional projects as outlined in the Committee's report for doctoral studies and science.

During the period considered, ie. between 1. October 2012 and 30. September 2017., 28 PhD degrees were granted by the Faculty. These theses have in the meantime been published partially or entirely in A and B-rated scientific journals.

The Faculty follows and participates in the structural changes in the field of graphics, especially in the development and implementation of new communication media. Within the current curriculum and study programs, through the research work of teachers and PhD students, as well as through approved drafts (theses) of doctoral papers, it is clear that most of the research, scientific papers and drafts (topics) of the doctoral thesis are related to new technologies and visual communication (attached is a list of defended doctoral papers).

The Faculty Management organizes periodic meetings - "round tables" with external stakeholders and members of the industry at the symposium Blaž Baromić, enabling further evaluation of the quality of doctoral studies.

The teachers and associates of the Faculty actively promote their scientific achievements at national and international conferences. In the past five years, they have published 215



reviewed scientific papers in scientific and professional proceedings (1.12 papers per teacher per year) (Table 5.1. Analytical attachment to Self-evaluation). The teachers also participated in the work of the organizing committee of scientific and professional conferences (Table 5.4. Analytical attachment to Self-evaluation).



5.2. The higher education institution provides evidence for the social relevance of its scientific, artistic, professional research and transfer of knowledge

The higher education institution monitors and takes into consideration the needs of society and labour market in planning its research activities.

The higher education institution has an efficient support system for research and transfer of knowledge and technologies.

Teachers and associates participate in activities of scientific, arts and professional organisations.

The Faculty of Graphic Arts takes into consideration the needs of society by participating in projects funded from different sources:

The *ICT Competence Network Based on Information and Communication Technologies for Innovative Services with Complex Communication Needs (ICT-AAC)* project funded by the Fund for Investment in Science and Innovation under IPA Component IIIc (2010-2015) has been completed. The constituents of the University of Zagreb (Faculty of Graphic Arts, Faculty of Educational Rehabilitation and Philosophy) were partners with the Faculty of Electrical Engineering and Computing, which carried out the whole project. Both students and teachers of the Faculty of Graphic Arts participated in the project.

The Project *In Public, In Particular*, which started on 1 October 2015 and will end by the end of 2018, is sponsored by the Executive Agency for Education, Audio-visuals and Culture under the "Creative Europe - Culture Sub-Program (2014-2020) 'Support to European cooperation projects' - Call for proposals EACEA 32/2014 - Budget 2015". Both students and teachers of the Faculty of Graphic Arts participate in the project.

Within the framework of the Operational Program "Effective Human Resources 2014-2020" – Development support of partnerships of civil society organizations and higher education institutions for the implementation of socially useful learning programs (competition from 5 April 2017), the Faculty of Graphic Arts along with the Faculty of Economics and Non-Profit Organization Life potential participates as one of the partners in the project "Respect the Knowledge - Drive the Community". The project leader is a non-profit organization ODRAZ - Sustainable community development. 20 students and three professors from the Faculty of Graphic Arts participate in the project. The project is co-financed by the European Union from the European Social Fund.

As part of the Erasmus + program, the project Assistive Technology Work in Europe is being funded since September 2017. The faculty of Graphic Arts is a partner and is the leading partner of National Star College from the United Kingdom.

In the process of evaluation / applications are the following projects:

As part of the Call for Proposals "Increasing the Development of New Products and Services deriving from research and development Activities" (HAMAG BICRO - Croatian Agency for Small Business, Innovation and Investment), on 16th October 2017, the project proposal was submitted under the title "Software Development solutions management of virtual 3D objects in expanded reality". The project leader is CITUS d.o.o. and the Faculty of Graphic Arts is partner (partnership agreement, submission of project proposal).



As part of the Call for Proposals for the "Implementation of the CROQF on Higher Education level" (European Social Fund - Operational Program "Effective Human Resources" 2014-2020), on June 4, 2018 the Faculty submitted a project proposal with the title "Implementation of CROQF in the field of graphic engineering, multimedia and visual communication".

The Association (AMAC GRF) has been operating since December 8, 2017, and is expected to deliver useful information on the needs of society and the labour market. The activities of the Association include: providing information to the teaching and administrative staff of the Faculty on the basis of individual experience in engineering practice, collecting information about the organization and activities of the Faculty, organizing meetings of members of the Association, publishing activities and other activities established by the Statute of the Croatian Association of the former students and friends of the Faculty of Graphic Arts.

As support to project application of the staff members, the Faculty has enabled one employee to be the coordinator in the design and implementation of projects funded from EU funds, i.e. coordinator of project implementation at Faculty of Graphics (Certificate of Training, Dean Decree).

The Faculty invests additional efforts to secure new projects and funding of PhD students, as defined in point 6 of the Strategy of Scientific Research at the Faculty of Graphic Arts of the University of Zagreb from 2014 to 2020 and in the Development Strategy of the Faculty of Graphic Arts, University of Zagreb, 2017-2022. Points 4 - Strategic objectives and 5 - Tabular presentation of the activities of the applicant and the timeframes for the implementation of the strategic objectives, which among other things states: Developing a system of information on EU projects, Creating EU project bases, Supporting staff in project applications, increase the number of applications for incentive funding, increase the number of scientific projects in areas that are becoming increasingly important in the field of graphic technology, national (MSE, CSF) and international.

The transfer of knowledge and technology to the industry is particularly encouraged within the framework of postgraduate doctoral studies on the topics of doctoral theses and doctoral students who come as experts from the industry.

Of the total number of PhD students enrolled into the Postgraduate Study Programme in the period between 1. October 2012 to 30. September 2017 (35 PhD students), nine candidates are employed in the Private Sector, 16 work at various educational institutions and three in public institutions and local government, whereas seven of them were unemployed at the time of enrollment. In addition to providing profound, highly professional knowledge, the Doctoral study aims at strengthening the ties between the Faculty and Economic Agents, increasing the number of PhD holders working in the Private Sector, and thus developing a knowledge-based economy.



The Faculty is also involved in social events that popularize science:

In cooperation with the library of the Croatian Academy Of Sciences And Arts in 2016 and 2017, teachers and students of the Faculty participated in the manifestation of the [Museum Night 2016](#) and [Museum Night 2017](#) with a series of lectures and workshops.

In the period from 2012 to 2017, two biennial trade fairs were held at INTERGRAFIKA - International fair for Graphic Industry and Paper and MODERNPAK - International Packaging Fair where both teachers and students participated with a series of lectures, roundtables, workshops and exhibitions.

In 2015 "Career Days" in Graphics and Packaging Industry were held under the title "I Love Print".

<http://www.ambalaza.hr/hr/novosti/ne-propustite-intergrafiku-i-modernpak-2015,16556.html>

<http://www.jatrgovac.com/2015/05/otvoreni-sajmovi-intergrafika-i-modernpak/>

<http://www.zgh.hr/aktualnosti-10/novosti-170/intergrafika-i-modernpak-od-27-do-30-svibnja-na-zagrebackom-velesajmu/2088>

<https://www.print-magazin.eu/intergrafika-program-dogadanja/>

The Spring School Symposium of the School for Graphics, Design and Media Production is held in the Faculty of Graphic Arts facilities, participants are faculty members with topics related to the Curricular Reform and the new Education Strategy (<https://www.skola-gdmp.hr/vijesti/peti-proljetni-simpozij-u-grafickoj/>)

Since 2015 the Faculty of Graphic Arts has been participating in the IPA project (International Police Association) by advertising in their brochures focusing on youth issues. The brochures are free and available to interested citizens, and to our children and young people in the community through the International Police Association activities.

Also, the innovation of the Faculty of Graphic Arts **Invisible marking in the visual and infrared spectrum of Ink jet technology** has won the [Grand Prix prize](#) at the prestigious INNOVA 2016 Innovation Exhibition held in Brussels.



5.3. Scientific /artistic achievements of the higher education institutions are recognized in the national and international context.

Teachers, associates and professional staff have received university, national and international awards for their scientific/ artistic achievements.

The higher education institution is a holder of an adequate number of scientific / artistic projects (university, national and international).

Teachers and associates participate as invited lecturers in an adequate number of national and international conferences.

Teachers and associates are members of scientific/artistic boards of conferences, editorial boards of scientific journals.

In the past five years teachers of the Faculty of Graphic Arts have received 8 awards or acknowledgments for their scientific achievements.

Research work at the Faculty of in the past five years is conducted through international and domestic projects and university grants.

In the past five years (1 January 2013 – 31 December 2017), the Faculty of Graphic Arts has been the leader and/or partner on 4 international projects supported from different funds: Framework Programme (FP7), Horizon 2020, Instrument for Pre-Accession Assistance (IPA), ERASMUS+ KA2, European Social Fund. (Table 5.3.a Analytical attachment to Self-evaluation).

In the same period the Faculty participated in [5 multilateral COST projects](#).

The Ministry of Science and Education stopped the funding of 8 scientific projects in 2013. Since then the University of Zagreb financially supports research and one development project through the Agreement on the Multi-annual Institutional Financing of Scientific Activities (so-called Scientific Grants). In the period from 2013 to 2017 researches have been conducted on a total 27 grants (6 scientific grants from 2015-2017, 5 in 2014 and 4 in 2013), and such funding continues in 2018.

It is important to note that two new projects were approved to the Faculty staff members in 2017 within the CSF Competition "Establishing Research Projects", as support for young scientists to establish independent research careers, which will fund two PhD students. The implementation of the project "Printing, quality and usability of substrates with non-wood fibers" began in December 2017, while the implementation of the project "Development of the model for enhancing the efficiency and functionality of graphic packaging" began February 2018.

In January 2018 a bilateral project titled "Designation of packaged food products with fragranced tactile surfaces for blind and visually impaired persons" was started.

As part of the Call for Proposals "Increasing the Development of New Products and Services deriving from research and development Activities" (HAMAG BICRO - Croatian Agency for Small Business, Innovation and Investment), on 16th October 2017, the project proposal was submitted under the title "Software Development solutions management of virtual 3D objects in expanded reality ". The project leader is CITUS d.o.o. and the Faculty of Graphic Arts is partner (partnership agreement, submission of project proposal).



As part of the Call for Proposals for the "Implementation of the CROQF on Higher Education level" (European Social Fund - Operational Program "Effective Human Resources" 2014-2020), on June 4, 2018 the Faculty submitted a project proposal with the title "Implementation of CROQF in the field of graphic engineering, multimedia and visual communication."

Professor of The Faculty of Graphic Arts is a member of IARIGAI, International Association of Research Organizations for the Information, Media and Graphic Arts Industries, serving as Secretary General since 2015. www.iarigai.com.

Professor of The Faculty of Graphic Arts is a member of EFPRO (European Fiber and Paper Research Organization), serving as member of the Board since 2012. www.iarigai.com.

During the last 5 academic years, teachers and associates of the Faculty Graphic Arts have held 14 invited lectures at national and international conferences.

In the past 5 years, teachers and associates of the Faculty Graphic Arts were 4 times members of conference scientific boards, while they worked as members of the editorial boards in 7 international journals (Table 5.4 Analytical attachment to Self-evaluation), of which in 1 they were appointed as editors-in-chief. (Table 5.5 Analytical attachment to Self-evaluation).

In addition, international scientific collaboration with the American corporation Flint Group has been realized, which funds the project "Modelling of the "printing plate - ink - print" response system".



5.4. The scientific/artistic activity of the higher education institution is both sustainable and developmental.

The research arts/developmental strategy is aligned with the vision of the higher education institution. Scientific/artistic activities are established by the strategic programme of the higher education institution. HEI recognizes and rewards scientific/artistic achievements of its employees. HEI continuously improves its scientific/artistic activities by appropriate financing, human resource management, investing in spatial resources, equipment and appropriate literature, supporting dissemination of results and development of doctoral theses.

The strategy of the Faculty of Graphic Arts is primarily based on the previously accepted documents of the Faculty: the Statute, the Faculty Regulations, Dean Decisions, plans and programs of studies, performance plans, activity plan etc. Some of these documents are of a more permanent nature, while others are periodical for a certain period - academic or calendar year. All these documents are available on the Faculty web pages (www.grf.unizg.hr), which ensures full public insight.

The strategy for development of scientific activity is aligned with the vision of the Faculty development through three strategic documents: [Development Strategy for the period from 2017 to 2022](#), [Strategy of Scientific Research of the Faculty of Graphic Arts University of Zagreb from 2014 to 2020](#), which is based on the [Development Strategy of the Faculty of Graphic Arts University of Zagreb from 2011 to 2016](#).

The Faculty of Graphic Arts systematically develops nationally and internationally recognized excellence in education and research within the field of graphic technology - graphic engineering, visual communication, multimedia and design, which is based on the establishment of quality systems, transfer and application of knowledge for the betterment and progress of society as a whole. The Faculty of Graphic Arts is the oldest and leading national institution in its field of activity. Creation and dissemination of knowledge is based on contemporary scientific knowledge, and priority is given to educational programs for students that will make them specialists in cooperation with other higher education institutions in Croatia and other countries.

The Mission and Vision of the Faculty of Graphic Arts (published in the [Development Strategy for the period 2017-2022](#)) are also defined in accordance with the document "[Quality Policy](#) of the University of Zagreb Faculty of Graphic Arts" adopted on 16 May 2016 and in accordance with the already mentioned strategic documents. The vision of the Faculty of Graphic Arts highlights:

- continuous determination of new areas of interest of the Faculty of Graphic Arts,
- the excellence of scientific research,
- quality in higher education through the application of the latest knowledge and standards,
- transfer of acquired knowledge gained through research into the business sector.

In order to achieve the vision of the Faculty of Graphic Arts, nine strategic goals were defined, among which are the following:

- Introduction of new and improved study programs at all levels
- Increase the number of scientific-research projects



- Increase the number of professional projects in cooperation with the business sector
- modernization of scientific-educational equipment
- Expand and improve the space for scientific-teaching work

In accordance with the aforementioned specific objectives of the scientific and research activities of the Faculty of Graphic Arts are as follows:

- expansion and improvement of scientific research activities
- developing an optimal organizational structure to support the expansion and enhancement of research and innovation
- providing high quality doctoral studies

Successful implementation of the specific objectives of the scientific research strategy is realized through the implementation of certain activities for certain scientific research activities the method of implementation, expected results, deadline of execution and the responsible person i.e. the bodies involved in the implementation of the activity are defined.

The realization of the first strategic goal began with the Call for Proposals for the "Implementation of the CROQF on Higher Education level" (European Social Fund - Operational Program "Effective Human Resources" 2014-2020). On June 4, 2018 the Faculty submitted a project proposal with the title "Implementation of CROQF in the field of graphic engineering, multimedia and visual communication"

The development of the optimal organizational structure as support to the expansion and improvement of research and innovation activities was realized by reducing the number of departments from 19 to 6 ([Statute of the University of Zagreb Faculty of Graphic Arts](#)).

One of the special goals of the Faculty of Graphic Arts is to provide high quality doctoral studies. In order to achieve this goal, in 2017, a [revised text of the Doctoral Study Regulations](#) was adopted, which is in accordance with the Faculty's scientific and research strategy, which is part of the Faculty Development Strategy.

To achieve the high quality doctoral study various activities are continually carried out (organizing roundtables during the scientific-professional symposia, Intergrafika, Modernpak, Cooperation with Foreign Universities (Cincinty), financial support for participation of PhD students at conferences organized by the Faculty of Graphic Arts, revised text of the Doctoral Study Regulations) that result in:

- Increasing the number of doctoral candidates from the business sector (report by the Committee for Doctoral Studies and Science)
- involving national and international expert scientists in the field
- increase the number of PhD students who participate at conferences
- increase of the number of published doctoral dissertations and mentors / teachers of doctoral studies:
 - 2014/2015 - 9 PhD students with 7 mentors published 16 scientific papers
 - 2015/2016 - 9 PhD students with 7 mentors published 24 scientific papers, and in collaboration with teachers 36 scientific papers
 - 2016./2017 - 28 PhD students published 92 papers (category: scientific, expert, other)



At the 5th regular session of the Faculty Council in the academic year 2014/2015, held on 9 February 2015, members of the Quality Assurance Committee were accepted.

The implementation of the strategic program is carried out according to the Action Plan drawn up by the Quality Assurance Committee in accordance with the strategic documents, and confirmed by the Faculty Council while the monitoring of this realization is an integral part of the annual reports of the Dean, the Vice dean for science and international relations and the Doctoral Program Committee.

Implementation of the Strategy depends on the involvement of all staff members of the Faculty. Consequently, the implementation of strategic activities was aimed to be distributed as evenly as possible to the largest number of holders in order to adopt the strategy as a guideline for personal development of the individual within the larger system.

At the 1st regular session of the Faculty Council of the University of Zagreb Faculty of Graphic Arts in academic year 2017/2018, held on 16 October 2017, [the Action Plan of the University of Zagreb for the improvement of quality in science and higher education for academic years 2017/2018 and 2018/2019](#) was adopted by the Faculty of Graphic Arts.

The Faculty of Graphic Arts has the appropriate number of resources for scientific activities as evidenced by the number of successfully defended doctoral theses' whose experimental part carried out in the laboratories of the Faculty of Graphic Arts.

The Faculty Library with its rich collection of books and scientific and professional journals, is also available to researchers and students. It is equipped with air conditioning and computers.

A detailed description of Faculty's research resources is presented in Chapter 4.5 of this self-analysis.

The Faculty awards teachers for the publication of textbooks and scientific papers in category A journals (dean's decision, attachment), and finances from their own income teachers' participation at [DRUPA](#) - the largest printing equipment exhibition in the world, held every four years by Messe Düsseldorf, Germany (teacher list).

The Faculty of Graphic Arts continuously improves its scientific activity by increasing the human resources (in the last five years 14 new assistants have been employed by), procurement of appropriate literature by form, by investing in the necessary equipment ([Equipment Catalogue](#), applications [Divider](#)), adaptation of Faculty facilities, support for dissemination of results (finances from their own income participation at international conferences which are organized / co-organized by the Faculty, finances the proofreading of the DR.SC 01 forms).



5.5. Scientific/artistic activities and achievements of the higher education institution improve the teaching process.

Equipment for scientific/artistic research is used in teaching at undergraduate, graduate and postgraduate level. Undergraduate, graduate and postgraduate students are involved in scientific/artistic projects of the HEI. Both teaching at the undergraduate and graduate levels, and doctoral theses reflect scientific/artistic research and achievements of the higher education institutions.

The equipment for scientific research and professional activity is used in undergraduate, graduate and postgraduate studies. According to the existing study programme the greater part of the programme is carried out practically in the laboratories of specific departments. At the Faculty there are 17 laboratories that are thematically related to the study programme and/or the field of scientific / professional interest of teachers. Most of the laboratories are equipped with the equipment needed for practical student work during the semester and also with measuring instruments that are appropriate for scientific research ([Equipment Catalogue](#), applications [Divider](#)). Students interested in a particular course choose their final and graduate papers from that area and the experimental part of their papers is carried out in the relevant laboratory. In this way, students of all levels of study are involved in scientific work.

The equipment for scientific research is also suitable for the postgraduate level, which is shown in the DR.SC 01 from, which monitors the feasibility of doctoral work at the Faculty. It is evident that most of the experimental work for PhD thesis' was carried out at the Faculty. PhD students coming from the industry carry out part of their experimental work at their workplace, thus connecting Faculty work with the industry and supporting the transfer of knowledge and technology to the business sector.

In the process of periodic internal evaluation of the University Postgraduate (PhD) study of Graphic Engineering and Graphic Product Design, conducted by the University of Zagreb in the academic year 2013/2014, in 2014 the Faculty received a positive [Opinion of the Committee for Doctoral Programs](#), which determined that the doctoral program of the Faculty of Graphic Arts meets all requirements for continuation of performance at the University of Zagreb. The opinion of the Committee for Doctoral Programs was adopted by the Senate of the University of Zagreb at the 16th regular session in the academic year 2013/2014.

In order to improve the quality of doctoral studies and doctoral theses, the new Ordinance on Doctoral Study was adopted on 18 November 2015, and in order to align the Ordinance with the new Provisional text of the Ordinance of the University of Zagreb of 23 June 2016, the Faculty Council of the Faculty of Graphic Arts delivered in October 2017 the [purified text of the Ordinance with amendments](#).

In June 2016, the International Expert Committee visited the Faculty for the purpose of re-accreditation of the Postgraduate study program. In the Report of the Expert Committee on the Re-accreditation of Postgraduate study program, as part of the Accreditation Recommendation of 3 February 2017, some improvements were proposed and a one-year deadline was set for the elimination of deficiencies. In less than a year the Faculty has met all requirements and a new [certificate](#) was issued on 7 May 2018.



Postgraduate studies of Graphic Engineering and Graphic Product Design prepare students for scientific research in the field of technical sciences, are of graphic technology. Students acquire competences matched to the level of 8.2 CROQF and through acquisition of knowledge and the development of cognitive and practical skills, develop social skills and ethical and social responsibility ([Postgraduate Study Information Package](#)).

PhD student earns ECTS credits by passing exams, public defence of doctoral dissertation, by announcement or publication of work in category A journals or in the proceedings of international scientific conferences, patent recognition, attending seminars, workshops, lectures for the acquisition of generic skills. Table 1, Art. 9. of The purified text of the Ordinance clearly outline the structure of the program with the specified forms of activity. In addition, it is stipulated that the Faculty Council may, upon the proposal of the Committee for Doctoral Studies and Science, recognize the PhD candidates ECTS credits obtained prior to enrolling in a PhD program for works published in Category A or B journals or presented at international scientific conferences with an international review and for internationally recognized patent, which belong to the area (theme) of the doctoral theses.

At the beginning of his or her studies, each PhD student is provided with a user account to access the LDAP database which he or she uses during studies for connection to the Faculty's wireless network, connection through VIP CARNet Broadband, CARNet modem entries and use of network applications (e.g. distance learning system or scientific bibliographies) etc. The LDAP directory of the grf.hr domain is part of the AAI@EduHr infrastructure. There is a clear signing up procedure for accessing a computer account in PC classrooms published on the Faculty's website. Computer classrooms are well equipped and meet all teaching and research needs of students. On an annual level, As part of the procurement plan, the contracts for the use of software necessary for teaching and scientific work are renewed annually.

The Faculty Library is an academic library whose primary purpose is to support the Faculty's educational and research activities providing IT and communication support through its collection of various resources and services. Primarily intended for the use of employees and students of the Faculty, an open access is also granted to all external users in search of specific literature or information related to the fields of graphic technology and/or communication.

Along with standard reference literature, most of the fund is made up of scientific and professional publications in the field of graphic technology, graphic communication and design. Additionally, there are both professional and examination materials in the fields of mathematics, physics, chemistry, art, marketing, ecology and other subjects. Through continuous acquisition of new professional and scientific literature the library fund has been kept up to date as much as possible. Each year, the Library renews subscriptions to Croatian and international professional and scientific journals relevant in the field of graphic technology. Through the *Portal of Electronic Resources for the Croatian Academic and Scientific Community*, scientific institutions have access to a large number of databases, both bibliographic and full texts, such as the Web of Science, Scopus, and Ebsco



etc. In this way, Faculty teachers and students have access to journals, articles, books, etc. from the relevant fields of study. A detailed description of the Library is provided in Chapter 4.6. of this Self-evaluation.

According to the requirements prescribed by the Croatian Rectors' Conference (Official Gazette 106/2006 and 122/2017) graduate and undergraduate theses advisors are motivated to jointly publish papers on undergraduate or graduate theses with their students: one chapter in a book, 31 original Scientific papers in CC journals, 41 scientific paper in other journals (Wos, Scopus), 27 other papers in other journals, 140 scientific papers in international journals, 7 other papers in reviewed conference proceedings, 27 abstracts conference proceedings and 16 participations of students / PhD students in projects.

Scientific and artistic activities are an integral part of student education. Direct inclusion of students into scientific and artistic activities is an essential and an integral part of the study program, which enables the development of critical thinking and creativity, autonomous learning and gaining additional knowledge and research skills. The scientific work of undergraduate and graduate students is also reflected through the rector's award at the University of Zagreb, which rewards the best student's scientific papers or artistic achievements. In the last 5 years, students of the Faculty of Graphic Arts have been awarded [5 Rector's awards](#) in the category of individual scientific work.

According to Article 9 of the purified text of the Ordinance, the compulsory way of obtaining ECTS credits for PhD students is by announcement or publication of work in category A journals. Each paper, except with special explanation, can only qualify one PhD student.

PhD students, who are also employees of the Faculty of Graphic Arts in the assistant positions, actively participate in scientific research and as part of the scientific support. Out of a total of 40 teachers elected to the scientific-teaching titles, who as members participate in scientific grants, 10 of them are in associate positions (assistants).

Postgraduate studies are carried out by the Faculty employees who are reappointed to scientific-teaching positions, by teachers outside the Faculty and within the University of Zagreb as well as by internationally recognized scientists and experts from abroad. All postgraduate teachers are active scientists who have proved their competences in published scientific papers in the past five years in the field of research that is relevant to the topic of PhD student's work and within the course they teach.

A professor emeritus may participate in the course. Teacher, scientists, field experts, internationally acknowledged scientists and top experts from abroad can be course coordinators as well.

The postgraduate study program ensures independent research for the whole duration of study. In the first two semesters, PhD students choose, individually or in agreement with the mentor / study leader, to enrol in courses in the field of future research. All courses are elective, can be chosen from both programs of the doctoral study (course selection procedure is given in the Ordinance, Article 9). Within the courses enrolled, experimental



work can be arranged in the relevant departmental laboratories and results published in scientific journals or presented at international conferences (Re-accreditation of postgraduate study, Table 2 Mentors and PhDs).

The curriculum is focused on the field of doctoral research. The Ordinance stipulates the method of selecting a course when enrolling the postgraduate study (Ordinance, Article 9).

If there is need for scientific research (due to the interdisciplinary of the topic of the doctoral thesis), the courses of other components of the University of Zagreb can also be enrolled.

Analytic supplement to Self-analysis

Higher education institution: Faculty of Graphic Arts (128)

Generated: 04.10.2018.

TABLE WITHIN THE TOPIC 3 - TEACHING PROCESS AND STUDENT SUPPORT

Table 3.1. Number of students per study programme for the current academic year

Study programme name	Full-time students	Part-time students
Graphical Technology (245)	396	0
Graphical Technology (246)	222	0
Graphic Engineering and Graphic Design (247)	12	39
Total	630	39

Table 3.2. Structure of enrolled students and interest in first level study programmes in the current and last two academic years*

Graphical Technology (245), undergraduate university study programme

Academic year	Full-time students			Part-time students			Secondary School Performance	
	Applied	Enrolled	Enrolment quota	Applied	Enrolled	Enrolment quota	Percentage at state graduation exam	Average grade
2016	391	141	145	-	-	-	55,97	3,76
2015	340	125	145	-	-	-	53,12	3,59
2014	385	126	145	-	-	-	54,97	3,6

*including the integrated graduate study programmes

Table 3.3. Structure of enrolled students and interest in graduate and postgraduate programmes in the current and last two academic years

Graphical Technology (246), graduate university study programme

Academic year	Full-time students			Part-time students			Number of students transferred from other study programme or other HEI	Average grade on the previous level of study
	Applied	Enrolled	Enrolment quota	Applied	Enrolled	Enrolment quota		
2016	106	104	105	-	-	-	25	3,4
2015	131	106	105	-	-	-	15	3,64
2014	101	94	105	-	-	-	14	3,45

Table 3.3. Structure of enrolled students and interest in graduate and postgraduate programmes in the current and last two academic years

Graphic Engineering and Graphic Design (247), postgraduate (doctoral) university study programme

Academic year	Full-time students			Part-time students			Number of students transferred from other study programme or other HEI	Average grade on the previous level of study
	Applied	Enrolled	Enrolment quota	Applied	Enrolled	Enrolment quota		
2016	1	1	5	8	8	10	2	4,26
2015	4	4	8	7	7	7	2	4,34
2014	0	0	5	2	2	8	0	3,91

Table 3.4. Progress in the study programme from the first to the second year of study - only for undergraduate and integrated study programmes in the last five academic years

Graphical Technology (245), undergraduate university study programme

Year of enrolment	Number of students enrolled	Number of students who achieved 18 to 29 ECTS credits	Number of students who achieved 30 to 54 ECTS credits	Number of students who achieved 55 to 59 ECTS credits	Number of students who achieved at least 60 ECTS credits
2016	146	8	48	23	41
2015	129	4	35	16	47
2014	130	4	46	25	34
2013	129	7	51	17	22
2012	150	17	55	14	36

Note: Includes only ECTS credits determined by the study programme.

Table 3.5. Completion of the study programme

Graphical Technology (245), undergraduate university study programme

A cohort of enrolled students in one generation+	Number of enrolled students*	Number of graduates from generation*	Number of students who are still studying from generation*	Number of students who have lost the right to study from generation*	Average duration of studying
2009	156	100	0	56	4,2
2010	125	70	1	54	3,9
2011	153	58	0	96	3,8
2012	148	80	1	67	3,6
2013	124	48	7	69	3,5

*Does not include student transfers from other higher education institutions.

+Data for all academic years from 2009/2010 is entered. For the years for which the completion of education is not yet possible, data on graduates is not entered.

Table 3.5. Completion of the study programme

Graphical Technology (246), graduate university study programme

A cohort of enrolled students in one generation+	Number of enrolled students*	Number of graduates from generation*	Number of students who are still studying from generation*	Number of students who have lost the right to study from generation*	Average duration of studying
2010	94	91	0	3	2,5
2011	101	99	0	2	2,5
2012	101	93	0	8	2,3
2013	86	85	0	1	2,3
2014	94	91	0	3	2,1

*Does not include student transfers from other higher education institutions.

+Data for all academic years from 2009/2010 is entered. For the years for which the completion of education is not yet possible, data on graduates is not entered.

Table 3.6. Mobility of students (total) in the last five academic years

	Number of students in international exchange	
	up to 3 months	more than 3 months
Outgoing mobility	0	94
Incoming mobility	0	36

Table 3.7. Employment of graduates / alumni in the last 3 calendar years

Graphical Technology (245), undergraduate university study programme

Year	Number of students who completed the study	Number of unemployed alumni according to the statistics of the Employment Office, at the national level*
2017	68	26
2016	88	36
2015	120	30

* Refers to the number of unemployed individuals holding qualifications obtained by completing the study programme in question

Table 3.7. Employment of graduates / alumni in the last 3 calendar years

Graphical Technology (246), graduate university study programme

Year	Number of students who completed the study	Number of unemployed alumni according to the statistics of the Employment Office, at the national level*
2017	95	63
2016	111	75
2015	89	83

* Refers to the number of unemployed individuals holding qualifications obtained by completing the study programme in question

TABLE WITHIN THE TOPIC 4 - TEACHING AND INSTITUTIONAL CAPACITIES

Table 4.1.a Staff Structure - FOR UNIVERSITIES in the current academic year

Staff*	Full-time staff		Cumulative employment		External associates	
	Number	Average age	Number	Average age	Number	Average age
Full professors with tenure	1	54	-	-	-	-
Full professors	8	55,13	-	-	3	68
Associate professors	11	52,18	-	-	3	51
Assistant professors	14	44,21	-	-	-	-
Scientific advisor (permanent/ with tenure)	-	-	-	-	-	-
Scientific advisor	-	-	-	-	-	-
Senior Research Associate	-	-	-	-	-	-
Research Associate	-	-	-	-	-	-
Teaching grades	4	44,75	1	46	-	-
Assistants	14	33,38	-	-	6	32
Postdoctoral researcher	11	40,82	-	-	1	32
Employees on projects	1	32	-	-	-	-
Expert assistants	1	50	-	-	-	-
Technical staff	-	-	-	-	-	-
Administrative staff	13	47,46	1	50	-	-
Support staff	4	54	-	-	-	-

* Classification according to the Act on Scientific Activity and Higher Education

Table 4.2. The dynamics of recruiting teachers and associates over the last 5 years

(Data entered by academic years)

Academic year	Number of newly employed teachers	Number of newly employed associates	Number of teachers whose contracts expired
2016	3	4	2
2015	3	7	0
2014	5	2	1
2013	1	0	1
2012	6	1	4

Table 4.3. Teachers and assistants at the HEI in the current academic year

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Ana Agi	https://www.ib.irb.hr/pregljed/znanstvenici/349915	assistant	-	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	300	-
Dubravko Bani	https://www.ib.irb.hr/pregljed/znanstvenici/210885	associate professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	517,5	-
Željka Barbari - Miko evi	https://www.ib.irb.hr/pregljed/znanstvenici/172095	full professor	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	240	-
Irena Bates	https://www.ib.irb.hr/pregljed/znanstvenici/290153	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	180	-
Sanja Bjelovu i - Kopilovi	https://www.ib.irb.hr/pregljed/znanstvenici/174132	associate professor	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Mechanical engineering	-	300	-
Ivana Bolan a - Mirkovi	https://www.ib.irb.hr/pregljed/znanstvenici/255110	associate professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	262,5	-
Željko Bosan i	https://www.ib.irb.hr/pregljed/znanstvenici/364054	assistant	-	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	120	-
Josip Bota	https://www.ib.irb.hr/pregljed/znanstvenici/326366	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	210	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Diana Brati	https://www.ib.irb.hr/pregled/znanstvenici/312440	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	267	-
Maja Brozovi	https://www.ib.irb.hr/pregled/znanstvenici/211142	full professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	300	-
Ivan Budimir	https://www.ib.irb.hr/pregled/znanstvenici/265754	lecturer	doktor znanosti	Faculty of Graphic Arts, 2015	Natural sciences	Mathematics	-	289,5	-
Ivana Car	-	assistant	-	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	135	-
Tomislav Cigula	https://www.ib.irb.hr/pregled/znanstvenici/290142	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	180	-
Vladimir Cviljušac	https://www.ib.irb.hr/pregled/znanstvenici/352650	assistant	-	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	216	-
Jurica Doli	https://www.ib.irb.hr/pregled/znanstvenici/303530	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2014	Technical sciences	Printing technology	-	135	-
Davor Donevski	https://www.ib.irb.hr/pregled/znanstvenici/300185	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2011	Technical sciences	Printing technology	-	186	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Krešimir Drag evi	https://www.ib.irb.hr/pregled/znanstvenici/322691	lecturer	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	30	150	-
Vesna Džimbeg-Mal i	https://www.ib.irb.hr/pregled/znanstvenici/68182	full professor	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	189	-
Katarina Itri	https://www.ib.irb.hr/pregled/znanstvenici/323756	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	240	-
Sonja Jamnicki Hanzer	https://www.ib.irb.hr/pregled/znanstvenici/265743	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	105	-
Trpimir Jeronim Ježi	-	assistant	-	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	480	-
Tigran Joki	https://www.ib.irb.hr/pregled/znanstvenici/218052	expert assistants	-	Faculty of Graphic Arts, 2014	Technical sciences	Printing technology	-	442,5	-
Josip Jozi	-	lecturer	-	Faculty of Graphic Arts, 2016	Arts	Visual arts	-	540	-
Denis Jure i	https://www.ib.irb.hr/pregled/znanstvenici/211366	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	120	-
Vanda Jurkovi	https://www.ib.irb.hr/pregled/znanstvenici/362524	assistant professor	doktor umjetnosti	Academy of Fine Arts, 2013	Arts	Visual arts	-	255	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Nina Knešaurek	https://www.ib.irb.hr/pregled/znanstvenici/105133	associate professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	120	-
Katarina Knjaz	-	lecturer	-	Faculty of Graphic Arts, 2015	Social sciences	Kinesiology	-	480	-
Tajana Koren Ivan evi	https://www.ib.irb.hr/pregled/znanstvenici/277252	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	60	-
Dorotea Kova evi	https://www.ib.irb.hr/pregled/znanstvenici/326456	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	210	-
Rahela Kul ar	https://www.ib.irb.hr/pregled/znanstvenici/265732	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	255	-
Branka Laji	https://www.ib.irb.hr/pregled/znanstvenici/172130	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	354	-
Branka Lozo	https://www.ib.irb.hr/pregled/znanstvenici/172126	full professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	337,5	-
Sanja Mahovi Polja ek	https://www.ib.irb.hr/pregled/znanstvenici/273165	associate professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	270	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Igor Majnari	https://www.b ib.irb.hr/pregl ed/znanstven ici/245651	associate professor	doktor znanosti	Faculty of Graphic Arts, 2012	Technical sciences	Printing technology	-	232,5	-
Lidija Mandi	https://www.b ib.irb.hr/pregl ed/znanstven ici/211640	associate professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	345	-
Marko Mari evi	https://www.b ib.irb.hr/pregl ed/znanstven ici/353805	assistant	-	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	414	-
Mile Matijevi	https://www.b ib.irb.hr/pregl ed/znanstven ici/308535	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	379	-
Miroslav Mikota	https://www.b ib.irb.hr/pregl ed/znanstven ici/197062	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	502	-
Diana Mil i	https://www.b ib.irb.hr/pregl ed/znanstven ici/213596	full professors with tenure	doktor znanosti	Faculty of Graphic Arts, 2014	Technical sciences	Printing technology	-	135	-
Damir Modri	https://www.b ib.irb.hr/pregl ed/znanstven ici/147255	associate professor	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	369	-
Nikola Mrvac	https://www.b ib.irb.hr/pregl ed/znanstven ici/211232	full professor	doktor znanosti	Faculty of Graphic Arts, 2013	Interdisciplinary	Other interdisciplinary sciences	-	390	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Daria Musti	https://www.ib.irb.hr/pregled/znanstvenici/290300	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2012	Social sciences	Information and communication sciences	-	133,5	-
Ana Nemeč	-	lecturer	-	Faculty of Graphic Arts, 2010	Humanities	Philology	-	232,5	-
Klaudio Pap	https://www.ib.irb.hr/pregled/znanstvenici/162136	full professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	225	-
Suzana Pasanec Preproti	https://www.ib.irb.hr/pregled/znanstvenici/303526	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2014	Technical sciences	Printing technology	-	260	-
Ivana Pavlovi	https://www.ib.irb.hr/pregled/znanstvenici/307613	assistant	-	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	158	-
Gorana Petkovi	https://www.ib.irb.hr/pregled/znanstvenici/347680	assistant	-	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	280	-
Katja Petric Mareti	https://www.ib.irb.hr/pregled/znanstvenici/172115	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	351	-
Jesenska Pibernik	https://www.ib.irb.hr/pregled/znanstvenici/226815	full professor	doktor znanosti	Faculty of Graphic Arts, 2016	Technical sciences	Printing technology	-	435	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Ivana Plazoni	https://www.ib.irb.hr/pregled/znanstvenici/293781	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2014	Technical sciences	Printing technology	-	270	-
Ante Polji ak	https://www.ib.irb.hr/pregled/znanstvenici/300196	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2013	Technical sciences	Printing technology	-	292,5	-
Marija Prša	https://www.ib.irb.hr/pregled/znanstvenici/341611	assistant	-	Faculty of Graphic Arts	Natural sciences	Mathematics	-	310,5	-
Ivan Pu i	https://www.ib.irb.hr/pregled/znanstvenici/353625	assistant	magistar znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	239	-
Mirela Roži	https://www.ib.irb.hr/pregled/znanstvenici/210874	full professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	277,5	-
Maja Rudolf	https://www.ib.irb.hr/pregled/znanstvenici/303515	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	390	-
Tibor Skala	https://www.ib.irb.hr/pregled/znanstvenici/265721	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	264	-
Nikolina Stani Loknar	https://www.ib.irb.hr/pregled/znanstvenici/281741	assistant professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	165	-

Teacher	Crosbi link	Grade*	Academic degree	HEI at which the teacher was appointed to grade, year of last appointment to grade	Field	Subject within the field	Cumulative employment percentage	Workload on the employer institution in standardised teaching hours	Workload on other institutions in standardised teaching hours
Maja Strgar Kure i	https://www.ib.irb.hr/pregled/znanstvenici/218041	associate professor	doktor znanosti	Faculty of Graphic Arts, 2107	Technical sciences	Printing technology	-	270	-
Maja Stržiži Jakovljevi	https://www.ib.irb.hr/pregled/znanstvenici/324623	assistant	-	Faculty of Graphic Arts, 2011	Technical sciences	Printing technology	-	150	-
Tamara Tomašegovi	https://www.ib.irb.hr/pregled/znanstvenici/327446	postdoctoral researcher	doktor znanosti	Faculty of Graphic Arts, 2106	Technical sciences	Printing technology	-	195	-
Marina Vukoje	https://www.ib.irb.hr/pregled/znanstvenici/337223	assistant	-	Faculty of Graphic Arts, 2012	Technical sciences	Printing technology	-	105	-
Igor Zjaki	https://www.ib.irb.hr/pregled/znanstvenici/277915	associate professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	345	-
Teo Žeželj	https://www.ib.irb.hr/pregled/znanstvenici/358601	assistant	-	Faculty of Graphic Arts, 2017	Technical sciences	Printing technology	-	245	-
Ivana Žiljak Stanimirovi	https://www.ib.irb.hr/pregled/znanstvenici/259713	associate professor	doktor znanosti	Faculty of Graphic Arts, 2015	Technical sciences	Printing technology	-	465	-

*Scientific-teaching / artistic-teaching / teaching grade/ assistant/ postdoctoral researcher

Table 4.4. Teachers in study programs in the current academic year

Graphical Technology (245), undergraduate university study programme

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Ana Nemeč	-	lecturer	Humanities	Philology	Permanent employment - full-time	-	-	-	-	-	-	4
Ante Poljiak	https://www.bib.irb.hr/pregled/znanstvenici/300196	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	5	32 (Web of Science Core Collection)\n52 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	2	-	-	2
Ante Rončević	https://www.bib.irb.hr/pregled/znanstvenici/283473	associate professor	Social sciences	Economics	Part-time teacher (temporary service contract)	5	2 (Web of Science Core Collection)\n3 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	2	1
Branka Laji	https://www.bib.irb.hr/pregled/znanstvenici/172130	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	2	6 (Web of Science Core Collection)\n5 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2
Branka Lozo	https://www.bib.irb.hr/pregled/znanstvenici/172126	full professor	Technical sciences	Printing technology	Permanent employment - full-time	6	52 (Web of Science Core Collection)\n45 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	2	-	-	2
Damir Modri	https://www.bib.irb.hr/pregled/znanstvenici/147255	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	14	18 (Web of Science Core Collection)\n23 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	2	-	-	1

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Diana Mil i	https://www.bib.irb.hr/pregled/znanstvenici/213596	full professors with tenure	Technical sciences	Printing technology	Permanent employment - full-time	4	5 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	2	-	1	1
Dubravko Bani	https://www.bib.irb.hr/pregled/znanstvenici/210885	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	3	12 (Web of Science Core Collection)\n15 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	3
Igor Majnari	https://www.bib.irb.hr/pregled/znanstvenici/245651	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	17	18 (Web of Science Core Collection)\n19 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	1	1
Igor Zjaki	https://www.bib.irb.hr/pregled/znanstvenici/277915	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	7	31 (Web of Science Core Collection)\n42 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	1	1
Irena Bates	https://www.bib.irb.hr/pregled/znanstvenici/290153	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	6	10 (Web of Science Core Collection)\n13 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1
Ivan Budimir	https://www.bib.irb.hr/pregled/znanstvenici/265754	lecturer	Natural sciences	Mathematics	Permanent employment - full-time	9	2 (Web of Science Core Collection)\n2 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	1	3
Ivana Bolan a-Mirkovi	https://www.bib.irb.hr/pregled/znanstvenici/255110	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	6	11 (Web of Science Core Collection)\n15 (Scopus)\n	3 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Ivana Žiljak Stanimirovi	https://www.bib.irb.hr/pregled/znanstvenici/259713	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	12	40 (Web of Science Core Collection)\n63 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	1
Jesenska Pibernik	https://www.bib.irb.hr/pregled/znanstvenici/226815	full professor	Technical sciences	Printing technology	Permanent employment - full-time	8	2 (Web of Science Core Collection)\n3 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	5	-	-	2
Josip Jozi	-	lecturer	Arts	Visual arts	Permanent employment - full-time	-	-	-	-	-	-	4
Katarina Knjaz	-	lecturer	Social sciences	Kinesiology	Permanent employment - full-time	-	-	-	-	-	-	4
Klaudio Pap	https://www.bib.irb.hr/pregled/znanstvenici/162136	full professor	Technical sciences	Printing technology	Permanent employment - full-time	2	41 (Web of Science Core Collection)\n59 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	4
Krešimir Drag evi	https://www.bib.irb.hr/pregled/znanstvenici/322691	lecturer	Technical sciences	Printing technology	Cumulative employment (employment contract with several institutions)	0	0 (Web of Science Core Collection)\n0 (Scopus)\n	0 (Web of Science Core Collection)\n0 (Scopus)\n	-	-	-	2
Lidija Mandi	https://www.bib.irb.hr/pregled/znanstvenici/211640	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	1	25 (Web of Science Core Collection)\n54 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	8	-	-	2
Maja Brozovi	https://www.bib.irb.hr/pregled/znanstvenici/211142	full professor	Technical sciences	Printing technology	Permanent employment - full-time	8	4 (Web of Science Core Collection)\n6 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	2	-	-	2

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Maja Rudolf	https://www.bib.irb.hr/pregled/znanstvenici/303515	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	4	0 (Web of Science Core Collection)\n2 (Scopus)\n	0 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	3
Maja Strgar Kure i	https://www.bib.irb.hr/pregled/znanstvenici/218041	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	2	4 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	1	1
Mile Matijevi	https://www.bib.irb.hr/pregled/znanstvenici/308535	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	8	6 (Web of Science Core Collection)\n9 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	2
Mirela Roži	https://www.bib.irb.hr/pregled/znanstvenici/210874	full professor	Technical sciences	Printing technology	Permanent employment - full-time	10	524 (Web of Science Core Collection)\n535 (Scopus)\n	10 (Web of Science Core Collection)\n10 (Scopus)\n	-	-	-	2
Miroslav Mikota	https://www.bib.irb.hr/pregled/znanstvenici/197062	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	6	3 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1
Nikola Mrvac	https://www.bib.irb.hr/pregled/znanstvenici/211232	full professor	Interdisciplinary	Other interdisciplinary sciences	Permanent employment - full-time	8	16 (Web of Science Core Collection)\n23 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	4
Nina Knešaurek	https://www.bib.irb.hr/pregled/znanstvenici/105133	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	0	15 (Web of Science Core Collection)\n21 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Rahela Kul ar	https://www.bib.irb.hr/pregled/znanstvenici/265732	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	3	90 (Web of Science Core Collection)\n100 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	2
Sanja Bjelov i - Kopilovi	https://www.bib.irb.hr/pregled/znanstvenici/174132	associate professor	Technical sciences	Mechanical engineering	Permanent employment - full-time	1	10 (Web of Science Core Collection)\n12 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	3
Sanja Mahovi Polja ek	https://www.bib.irb.hr/pregled/znanstvenici/273165	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	13	124 (Web of Science Core Collection)\n140 (Scopus)\n	5 (Web of Science Core Collection)\n5 (Scopus)\n	5	-	1	2
Sonja Jamnicki Hanzer	https://www.bib.irb.hr/pregled/znanstvenici/265743	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	7	15 (Web of Science Core Collection)\n12 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	1	-	-	1
Suzana Pasanec Prepro ti	https://www.bib.irb.hr/pregled/znanstvenici/303526	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	7	1 (Web of Science Core Collection)\n0 (Scopus)\n	1 (Web of Science Core Collection)\n0 (Scopus)\n	-	-	-	3
Tajana Koren Ivan evi	https://www.bib.irb.hr/pregled/znanstvenici/277252	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	2	2 (Scopus)\n	1 (Scopus)\n	-	-	-	1
Tibor Skala	https://www.bib.irb.hr/pregled/znanstvenici/265721	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	4	17 (Web of Science Core Collection)\n18 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	2

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Tomislav Cigula	https://www.bib.irb.hr/pregled/znanstvenici/290142	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	13	8 (Web of Science Core Collection)\n9 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	4	-	-	1
Vanda Jurkovi	https://www.bib.irb.hr/pregled/znanstvenici/362524	assistant professor	Arts	Visual arts	Permanent employment - full-time	-	-	-	-	-	-	7
Vesna Džimbeg-Mali	https://www.bib.irb.hr/pregled/znanstvenici/68182	full professor	Technical sciences	Printing technology	Permanent employment - full-time	4	43 (Web of Science Core Collection)\n53 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2
Željka Barbari - Miko evi	https://www.bib.irb.hr/pregled/znanstvenici/172095	full professor	Technical sciences	Printing technology	Permanent employment - full-time	5	123 (Web of Science Core Collection)\n145 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	1

*Scientific-teaching / artistic-teaching / teaching grade

Table 4.4. Teachers in study programs in the current academic year

Graphical Technology (246), graduate university study programme

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Ante Poljiak	https://www.bib.irb.hr/pregled/znanstvenici/300196	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	5	32 (Web of Science Core Collection)\n52 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	2	-	-	1
Antun Koren	https://www.bib.irb.hr/pregled/znanstvenici/141912	full professor	Social sciences	Information and communication sciences	Part-time teacher (temporary service contract)	0	2 (Scopus)\n	1 (Scopus)\n	-	-	-	1
Branka Laji	https://www.bib.irb.hr/pregled/znanstvenici/172130	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	2	6 (Web of Science Core Collection)\n5 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	3
Branka Lozo	https://www.bib.irb.hr/pregled/znanstvenici/172126	full professor	Technical sciences	Printing technology	Permanent employment - full-time	6	52 (Web of Science Core Collection)\n45 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	2	-	-	2
Damir Modri	https://www.bib.irb.hr/pregled/znanstvenici/147255	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	14	18 (Web of Science Core Collection)\n23 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	2	-	-	2
Dubravko Bani	https://www.bib.irb.hr/pregled/znanstvenici/210885	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	3	12 (Web of Science Core Collection)\n15 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Igor Majnari	https://www.bib.irb.hr/pregled/znanstvenici/245651	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	17	18 (Web of Science Core Collection)\n19 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	1	2
Igor Zjaki	https://www.bib.irb.hr/pregled/znanstvenici/277915	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	7	31 (Web of Science Core Collection)\n42 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	1	2
Ivana Bolan a-Mirkovi	https://www.bib.irb.hr/pregled/znanstvenici/255110	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	6	11 (Web of Science Core Collection)\n15 (Scopus)\n	3 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2
Ivana Žiljak Stanimirovi	https://www.bib.irb.hr/pregled/znanstvenici/259713	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	12	40 (Web of Science Core Collection)\n63 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	4
Jesenska Pibernik	https://www.bib.irb.hr/pregled/znanstvenici/226815	full professor	Technical sciences	Printing technology	Permanent employment - full-time	8	2 (Web of Science Core Collection)\n3 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	5	-	-	4
Lidija Mandi	https://www.bib.irb.hr/pregled/znanstvenici/211640	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	1	25 (Web of Science Core Collection)\n54 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	8	-	-	2
Maja Brozovi	https://www.bib.irb.hr/pregled/znanstvenici/211142	full professor	Technical sciences	Printing technology	Permanent employment - full-time	8	4 (Web of Science Core Collection)\n6 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	2	-	-	4

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Maja Strgar Kure i	https://www.bib.irb.hr/pregled/znanstvenici/218041	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	2	4 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	1	1
Mile Matijevi	https://www.bib.irb.hr/pregled/znanstvenici/308535	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	8	6 (Web of Science Core Collection)\n9 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	2
Miroslav Mikota	https://www.bib.irb.hr/pregled/znanstvenici/197062	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	6	3 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	5
Nikola Mrvac	https://www.bib.irb.hr/pregled/znanstvenici/211232	full professor	Interdisciplinary	Other interdisciplinary sciences	Permanent employment - full-time	8	16 (Web of Science Core Collection)\n23 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	2
Nikolina Stani Loknar	https://www.bib.irb.hr/pregled/znanstvenici/281741	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	9	1 (Web of Science Core Collection)\n3 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	2
Sanja Bjelovu i - Kopilovi	https://www.bib.irb.hr/pregled/znanstvenici/174132	associate professor	Technical sciences	Mechanical engineering	Permanent employment - full-time	1	10 (Web of Science Core Collection)\n12 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	1
Suzana Pasanec Preproti	https://www.bib.irb.hr/pregled/znanstvenici/303526	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	7	1 (Web of Science Core Collection)\n0 (Scopus)\n	1 (Web of Science Core Collection)\n0 (Scopus)\n	-	-	-	1

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Tibor Skala	https://www.bib.irb.hr/pregled/znanstvenici/265721	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	4	17 (Web of Science Core Collection)\n18 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	2

*Scientific-teaching / artistic-teaching / teaching grade

Table 4.4. Teachers in study programs in the current academic year

Graphic Engineering and Graphic Design (247), postgraduate (doctoral) university study programme

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Aleš Hladnik	-	associate professor	-	-	Part-time teacher (temporary service contract)	-	-	-	-	-	-	1
Branka Laji	https://www.bib.irb.hr/pregled/znanstvenici/172130	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	2	6 (Web of Science Core Collection)\n5 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1
Branka Lozo	https://www.bib.irb.hr/pregled/znanstvenici/172126	full professor	Technical sciences	Printing technology	Permanent employment - full-time	6	52 (Web of Science Core Collection)\n45 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	2	-	-	1
Damir Modri	https://www.bib.irb.hr/pregled/znanstvenici/147255	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	14	18 (Web of Science Core Collection)\n23 (Scopus)\n	3 (Web of Science Core Collection)\n3 (Scopus)\n	2	-	-	1
Dubravko Bani	https://www.bib.irb.hr/pregled/znanstvenici/210885	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	3	12 (Web of Science Core Collection)\n15 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	2
Igor Zjaki	https://www.bib.irb.hr/pregled/znanstvenici/277915	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	7	31 (Web of Science Core Collection)\n42 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	1	1

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Irena Bates	https://www.bib.irb.hr/pregled/znanstvenici/290153	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	6	10 (Web of Science Core Collection)\n13 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1
Ivana Žiljak Stanimirovi	https://www.bib.irb.hr/pregled/znanstvenici/259713	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	12	40 (Web of Science Core Collection)\n63 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	2
Jana Žiljak Grši	https://www.bib.irb.hr/pregled/znanstvenici/264064	associate professor	Technical sciences	Printing technology	Part-time teacher (temporary service contract)	-	-	-	-	-	-	1
Jesenska Pibernik	https://www.bib.irb.hr/pregled/znanstvenici/226815	full professor	Technical sciences	Printing technology	Permanent employment - full-time	8	2 (Web of Science Core Collection)\n3 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	5	-	-	2
Lidija Mandi	https://www.bib.irb.hr/pregled/znanstvenici/211640	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	1	25 (Web of Science Core Collection)\n54 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	8	-	-	1
Marin Milkovi	https://www.bib.irb.hr/pregled/znanstvenici/306814	full professor	Technical sciences	Printing technology	Part-time teacher (temporary service contract)	-	-	-	-	-	-	1
Mile Matijevi	https://www.bib.irb.hr/pregled/znanstvenici/308535	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	8	6 (Web of Science Core Collection)\n9 (Scopus)\n	1 (Web of Science Core Collection)\n1 (Scopus)\n	-	-	-	1

Teacher	Crosbi link	Grade*	Field	Subject within the field	Type of employment	Number of papers in the last 5 years that are considered for the appointment to grade	Total number of citations - indicate the source	Total h-index - indicate the source	Number of scientific projects as a leader and / or associate	Number of professional projects as leader and / or associate	Textbook Author - Number	Number of courses in the programme
Mirela Roži	https://www.bib.irb.hr/pregled/znanstvenici/210874	full professor	Technical sciences	Printing technology	Permanent employment - full-time	10	524 (Web of Science Core Collection)\n535 (Scopus)\n	10 (Web of Science Core Collection)\n10 (Scopus)\n	-	-	-	1
Miroslav Mikota	https://www.bib.irb.hr/pregled/znanstvenici/197062	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	6	3 (Web of Science Core Collection)\n7 (Scopus)\n	1 (Web of Science Core Collection)\n2 (Scopus)\n	-	-	-	1
Nikola Mrvac	https://www.bib.irb.hr/pregled/znanstvenici/211232	full professor	Interdisciplinary	Other interdisciplinary sciences	Permanent employment - full-time	8	16 (Web of Science Core Collection)\n23 (Scopus)\n	2 (Web of Science Core Collection)\n3 (Scopus)\n	-	-	-	1
Sanja Mahovi Polja ek	https://www.bib.irb.hr/pregled/znanstvenici/273165	associate professor	Technical sciences	Printing technology	Permanent employment - full-time	13	124 (Web of Science Core Collection)\n140 (Scopus)\n	5 (Web of Science Core Collection)\n5 (Scopus)\n	5	-	1	1
Sonja Jamnicki Hanzer	https://www.bib.irb.hr/pregled/znanstvenici/265743	assistant professor	Technical sciences	Printing technology	Permanent employment - full-time	7	15 (Web of Science Core Collection)\n12 (Scopus)\n	2 (Web of Science Core Collection)\n2 (Scopus)\n	1	-	-	1
Željka Barbari - Miko evi	https://www.bib.irb.hr/pregled/znanstvenici/172095	full professor	Technical sciences	Printing technology	Permanent employment - full-time	5	123 (Web of Science Core Collection)\n145 (Scopus)\n	4 (Web of Science Core Collection)\n4 (Scopus)\n	-	-	-	1

*Scientific-teaching / artistic-teaching / teaching grade

Table 4.5. Total mobility of teachers and associates in the last five academic years

Type of mobility	Outgoing mobility		Incoming mobility	
	up to 3 months	3 and more months	up to 3 months	3 and more months
Research	252	-	50	-

Table 4.6. Total mobility of non-teaching staff in the last five academic years

Number of professional visits of non-teaching staff to HEIs abroad		
1 - 3 months	3 - 6 months	6 and more months
25	-	-

Table 4.7. Projects related to mobility and higher education in the last five academic years

Project (name)	Interval duration of the project	Source of financing	The role of HEI in the project (eg. the holder, coordinator, partner)	The total amount allocated to the HEI	Total project amount
Assistive Technology at Work	11.09.2017 - 10.09.2019	ERASMUS+ (2014-2020)	partner	84.029,4 kn	383.022,9 kn

Table 4.8. Space

		number/number of computers	square meters
A	Classrooms	4 / 4	383
B	Teaching laboratories/practicums	17 / 32	589
C	Worksites	- / -	-
C	Computer classrooms	5 / 69	221
C	Scientific laboratories	0 / 0	0
C	Rooms for student activities	2 / 5	100
D	Teaching offices	47 / 47	455
	TOTAL	75 / 157	1.748

Table 4.9. Capital equipment

(Provide information on the available capital equipment of a HEI whose purchase value exceeds 200,000 HRK)

Name of the instrument (equipment)	Purchase value (kn)	Year of purchase
HEIDELBERG AG QUICKMASTER 46	310.400	2000
CRUCH TESTER	276.904,62	2005
TECHNIDYNE COLOR TOUCH 2	310.647,37	2006
URE AJ ZA MJERENJE KONTAKTNIH KUTOVA	259.545,03	2007
BURSTING STRENGTH TESTER	235.622,26	2008
ROLAND VERSA UV-LEC 300 printer/cutter	254.849,85	2009
SHIMADZU AIM – 8800 IR MICROSCOPE	319.431	2010
TOBY X60 EYE TRACKER	307.315,5	2011
ZUND M-800	384.867	2011
PRUFBAU MULTIPURPOSE PRINTABILITY TESTIN	1.147.467	2012
ACQUATI COMPRESSION TESTER	351.550	2013
L&W BENDING TESTER AND L&W SIMPLE PUNCH	230.937,5	2013
L&W COMPRESSIVE STRENGTH TESTER	224.329,23	2015
MLIN ZA PULPU PFI	432.000	2015

Table 4.10. Library equipment

(Provide information for HEI's library, if available)

Total area (in m2)	95
Number of professional library staff employed (HEI)	1
Total number of book volumes	8.000
Reading room within the library (number of seats / square metres)	19 / 43
Total number of compulsory literature textbooks (titles)	177
Total number of compulsory literature textbooks (volumes)	1.157
Total number of printed foreign journals in the library	90
Total number of printed national journals in the library	70
Number of electronic journals with full texts provided by the institution	4
The number of bibliographic databases provided and financed by the university / institution	0

Table 4.11 Financial evaluation - income

		2016 calendar year (kn)	2017 calendar year (kn)
	INCOME		
1.	STATE BUDGET INCOME	13.489.741	14.176.015
1.1.	Staff salaries	12.717.516	13.097.258
1.2.	Operational costs (including fieldwork)	381.120	374.069
1.4.	Adjunct/visiting teaching staff costs	19.033	-
1.4.	National scientific projects	178.529	233.323
1.5.	International scientific projects	-	-
1.6.	International cooperation	173.058	434.207
1.7.	Organization of academic conferences	-	-
1.8.	Journal subscription fees	-	-
1.9.	Maintenance	-	-
1.10.	Capital investments (buildings), investments mai	-	-
1.11.	Equipment	-	-
1.12.	Total income from other sources	20.485	37.158
2.	OTHER PUBLIC BUDGET INCOME	52.000	10.000
2.1.	Income and support by local authorities (town, city, county etc.)	-	-
2.2.	Income and support by other institutions (such as the National Science Foundation)	-	-
2.3.	Total income from other types of sources (specify sources and amounts)	52.000	10.000
3.	INTEREST INCOME	1.242	140
4.	OWN ACTIVITY INCOME	306.354	824.032
4.1.	Tuition fees - postgraduate specialist	-	585.320
4.2.	Tuition fees - postgraduate doctoral	221.100	232.217
4.3.	Scientific projects	-	-
4.4.	Professional projects	38.820	-
4.5.	Rental income	31.620	-
4.6.	Total income from other sources (specify sources and amounts)	14.814	6.495
5.	SPECIAL REGULATION INCOME	3.061.879	2.708.248
5.1.	Tuition fees - undergraduate, graduate, professional	2.744.626	2.352.726
5.2.	Additional knowledge or skills testing (if implemented in addition to State Graduation Exam)	40.410	37.350
5.3.	Enrolment fees	184.962	175.800
5.4.	Publishing	-	-
5.5.	Administrative fees (charging various forms, diplomas, certificates etc.)	46.660	79.725
5.6.	Total income from other sources (specify)	45.221	62.647
6.	OTHER (UNSPECIFIED) INCOME	478.355	315.637
A	TOTAL OPERATING INCOME	17.389.571	18.034.072

Table 4.12 Financial evaluation - expenses

		2016 calendar year (kn)	2017 calendar year (kn)
	EXPENSES		
1.	EMPLOYEE EXPENSES	13.964.976	13.990.161
1.1.	Staff salaries	13.692.108	13.423.805
1.2.	Adjunct/visiting teaching staff costs	190.100	210.584
1.3.	Total remaining expenditure	82.768	355.772
2.	MATERIAL AND ENERGY EXPENSES	681.684	727.109
2.1.	Office supplies and other material costs	265.720	116.243
2.2.	Laboratory supplies	8.629	74.301
2.3.	Energy	278.767	393.470
2.4.	Equipment and material for scheduled and investment maintenance	101.439	104.920
2.5.	Small inventory	22.516	22.759
2.6.	Total remaining expenditure	4.613	15.416
3.	SERVICE EXPENSES	1.143.055	944.784
3.1.	Telephone and postal costs, transport costs	34.562	49.863
3.2.	Scheduled and investment maintenance services	90.261	67.842
3.3.	Information and promotion	98.592	90.956
3.4.	Communal services	182.468	182.513
3.5.	Leasing, rent	48.206	48.170
3.6.	Intellectual and personal services (fees, contracts)	348.416	342.918
3.7.	IT services	14.395	14.600
3.8.	Total remaining expenditure (specify)	326.155	147.922
4.	NON-FINANCIAL ASSETS EXPENSES	431.438	139.394
4.1.	Facilities	-	-
4.2.	IT equipment	229.686	37.817
4.3.	Laboratory equipment	6.202	3.313
4.4.	Office equipment	10.391	7.623
4.5.	Communication equipment	-	9.680
4.6.	Other equipment	3.174	56.448
4.7.	Reading materials (books, journals etc.)	36.863	15.203
4.8.	Investment in machines, production facilities and other equipment	145.122	-
4.9.	Additional investment in buildings	-	-
4.10.	Total remaining expenditure	-	9.310
5.	EMPLOYEE REIMBURSEMENT	988.743	1.040.646
5.1.	Travel costs	457.908	528.586
5.2.	Training costs	146.417	133.084
5.3.	Other staff costs (specify) including transport costs	384.418	378.976
6.	OTHER (UNSPECIFIED) OPERATING EXPENSES	179.150	186.736
6.1.	Insurance premiums	24.560	19.914
6.2.	Representation costs	54.651	56.548
6.3.	Membership fees	63.509	48.214
6.4.	Bank costs	16.258	13.500
6.5.	Interest	1	-
6.6.	Other financial costs	20.171	48.560

		2016 calendar year (kn)	2017 calendar year (kn)
B	TOTAL OPERATING EXPENSES	17.389.046	17.028.830
C	Bottom line carried over from the last year	298.159	524
	UKUPNO STANJE 31.12. (A-B+C)	298.684	1.005.766

TABLE WITHIN THE TOPIC 5 - SCIENTIFIC / ARTISTIC AND PROFESSIONAL ACTIVITIES

Table 5.1 Bibliography (in the last 5 years)

Type of publication*	Total number of publications	Number of publications that were the result of collaboration with other HEIs and scientific organisations	Ratio: Number of publications/number of teachers/5 years
Publications of the highest category according to the Ordinance on Appointment to Scientific Grades	74	21	0,39
Other publications according to the Ordinance on Appointment to Scientific Grades	240	42	1,25
Authorship of books published abroad	1	0	0,01
Authorship of books published in Croatia	2	1	0,01
Chapters in books	5	0	0,03
Editorship of books	6	4	0,03
Professional papers	7	1	0,04
Peer-reviewed publications from scientific and professional events/conferences/in proceedings of scientific and professional events/conferences	222	40	1,16
Number of publications of HEI's teachers in HEI's own journals	35	11	0,18
Number of citations for HEI (specify the source database, not including self-citations)	897 (Web of Science Core Collection) 1.132 (Scopus)		
Total h-index citations for HEI (specify the source database, not including self-citations)	14 (Web of Science Core Collection) 16 (Scopus)		
Link to Crosbi	https://www.bib.irb.hr/pregled/ustanove/128		
Link to citation database with a comprehensive overview for a HEI (works in WoS, Scopus)	-		

*national and international

- The data on the HEI 's papers are entered in the table.
- Only data on peer-reviewed papers are entered in the table.
- Papers authored by several teachers of a HEI are indicated only once.
- For citations, state the total number and the citation database.
- For h-index, state the total number and the citation database.

Table 5.2. Bibliography of artists (in the last 5 years)

ARTISTIC PRODUCTIVITY	Total
Number of complex artworks defined as extraordinary achievements with international merit	-
Number of complex artworks defined as extraordinary achievements with national merit	-
Number of artworks premi "red at artistic events with international merit	12
Number of artworks premi "red at artistic events with national merit	12
Number of artworks premi "red with reviews published	17
Number of artworks premi "red	56
Authorship of books published abroad	-
Authorship of books published in Croatia	-

Table 5.3.a Scientific projects in the last 5 years*

Project (name)	Project interval duration**	Source of financing	The role of HEI in the project (eg. holder, coordinator, partner)	Total amount allocated to HEI	Total project amount
Otiskivanje, kvaliteta i uporabljivost podloge s nedravnim vlakancima	14.12.2017 - 07.01.2023	HRZZ	holder	922.194,35 kn	922.194,35 kn
Modelling of the "printing plate-ink-print" response system	25.05.2017 - 25.05.2018	Flint Group North America Corporation	holder	188.827,2 kn	188.827,2 kn
Pove anje efikasnosti izrade i eksploatacije tiskovnih formi za ofsetni tisak	30.03.2016 - 31.12.2017	MZO (Ministarstvo znanosti i obrazovanja RH)	partner	15.029 kn	30.058 kn
In Public In Particular	01.10.2015 - 31.12.2018	Creative Europe – Culture Sub - programme	partner	447.500 kn	2.778.750 kn
Osiguranje kvalitete besprocesnih tiskovnih formi	22.01.2014 - 31.12.2015	MZO (Ministarstvo znanosti i obrazovanja RH)	partner	37.060 kn	74.120 kn
ICT-AAC	30.03.2013 - 29.03.2015	EU - fond za ulaganje u znanost i inovacije IPA3C	partner	366.906,44 kn	5.685.508,34 kn
Centar izvrsnosti za ra unalni vid	01.09.2012 - 31.12.2013	Sveu ilište u Zagrebu	partner	21.964,9 kn	193.800 kn
ICT sustavi za osobe sa složenim komunikacijskim potrebama	01.09.2012 - 31.12.2013	Sveu ilište u Zagrebu	partner	54.042,78 kn	198.600 kn
Obrada vlaknatih materijala za poboljšanu prehrambenu ambalažu	15.01.2012 - 31.12.2013	MZO (Ministarstvo znanosti i obrazovanja RH)	partner	22.766 kn	45.532 kn
Hrvatska medijska komunikacija u konvergentnom okruženju	01.03.2008 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	98.500 kn	98.500 kn
Inovativni grafi ki materijali	01.03.2008 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	183.750,3 kn	183.750,3 kn
Nove formulacije materijala, karakteristike otisaka i imbenici	04.01.2008 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	42.083,33 kn	42.083,33 kn
Studij tehnoloških imbenika grafi kog dizajna za sustavno unapre enje kvalitete	04.01.2008 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	310.500 kn	310.500 kn
Razvoj metoda mjerenja površina tiskovnih formi	02.02.2007 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	362.499,7 kn	362.499,7 kn
Digitalizacija muzejske slikarske baštine	02.01.2007 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	487.500 kn	487.500 kn

Project (name)	Project interval duration**	Source of financing	The role of HEI in the project (eg. holder, coordinator, partner)	Total amount allocated to HEI	Total project amount
Evaluacija kvantit. i kvalit. kriterija procesa graf.reprodukcije	02.01.2007 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	337.500 kn	337.500 kn
Standardizacija ekološki prihvatljivih procesa graf.komunikacija	02.01.2007 - 19.12.2014	MZO (Ministarstvo znanosti i obrazovanja RH)	holder	543.750 kn	543.750 kn

*In reverse order, starting from the most recent projects including those which are not yet completed.

**Project start and end date (month and year).

Table 5.3.b Professional/Commercial projects in the last 5 years*

Project (name)	Project interval duration**	Source of financing	The role of HEI in the project (eg. holder, coordinator, partner)	Total amount allocated to HEI (kn)	Total project amount (kn)
-	-	-	-	-	-

*In reverse order, starting from the most recent projects including those which are not yet completed.

**Project start and end date (month and year).

Table 5.4. Work in conference organizational committees in the last 5 years

Conference (name)	Organizer	Year	Number of persons involved in organization	Number of participants
International Conference MATRIB (MATERIALS, TRYBOLOGY, RECYCLING)	Faculty of Graphic Arts(128)	2013	19	100
International Conference on Printing, Design and Graphic Communications Blaž Baromi	Faculty of Graphic Arts(128)	2013	22	120
International scientific conference on Printing & Design	Faculty of Graphic Arts(128)	2013	15	100
NIP/Digital Fabrication	The Society for Imaging Science and Technology (IS&T)(304211)	2013	25	300
International Conference MATRIB (MATERIALS, TRYBOLOGY, RECYCLING)	Faculty of Graphic Arts(128)	2014	19	120
International Conference on Printing, Design and Graphic Communications Blaž Baromi	Faculty of Graphic Arts(128)	2014	22	120
International scientific conference on Printing & Design	Faculty of Graphic Arts(128)	2014	15	120
NIP/Digital Fabrication	The Society for Imaging Science and Technology (IS&T)(304211)	2014	25	300
Conference on Information and Graphic Arts Technology (CIGT)	University of Ljubljana Naravoslovnostehnišk a fakulteta(304215)	2015	20	60
International Conference MATRIB (MATERIALS, TRYBOLOGY, RECYCLING)	Faculty of Graphic Arts(128)	2015	19	120
International Conference on Printing, Design and Graphic Communications Blaž Baromi	Faculty of Graphic Arts(128)	2015	22	100
International scientific conference on Printing & Design	Faculty of Graphic Arts(128)	2015	15	100
NIP/Digital Fabrication	The Society for Imaging Science and Technology (IS&T)(304211)	2015	25	300
International Conference MATRIB (MATERIALS, TRYBOLOGY, RECYCLING)	Faculty of Graphic Arts(128)	2016	19	120

Conference (name)	Organizer	Year	Number of persons involved in organization	Number of participants
International Conference on Printing, Design and Graphic Communications Blaž Baromi	Faculty of Graphic Arts(128)	2016	22	120
International scientific conference on Printing & Design	Faculty of Graphic Arts(128)	2016	15	120
NIP/Digital Fabrication	The Society for Imaging Science and Technology (IS&T)(304211)	2016	25	300
International Conference MATRIB (MATERIALS, TRYBOLOGY, RECYCLING)	Faculty of Graphic Arts(128)	2017	19	120
International Conference on Printing, Design and Graphic Communications Blaž Baromi	Faculty of Graphic Arts(128)	2017	22	120
International Symposium on ADVANCED TECHNOLOGIES IN PULP, PAPER, CORRUGATED BOARD AND ENVIRONMENTAL ENGINEERING	Pulp and Paper Research Institute CEPROHART(304214)	2017	30	120
International scientific conference on Printing & Design	Faculty of Graphic Arts(128)	2017	15	120

Table 5.5. Editorship in journals in the last 5 years

Journal	Publisher, place	Type of participation of the member of HEI's academic staff (chief editor / member of editorial board, etc.)	Citation database or national classification (A1/2, A,B,C)	Q of the journal (link to JCR, SCImago) or Crosbi link
Acta Graphica	Grafi ki fakultet Sveu ilišta u zagrebu, Zagreb	chief editor	Ebsco Art & Architecture Source, B	http://www.actagraphics.hr/index.php/actagraphics
Celuloza si Hartie	Technical Association for Romanian Pulp and Paper Industry and CEPROHART, Braila	editorial board	B	-
Information Science Research	Institute of Information and Library Science in Maria Curie-Skłodowska University in Lublin, digital publisher	editorial board	C	https://wow.umcs.pl/czasopisma/action/about/cid/15
International scientific journal of Technical Science TECHNO	Association for Research, Education and Development "NIA, Travnik, BIH, digital publisher	editorial board	C	http://technoscience.ba/
Journal of Graphic Engineering and Design	University of Novi Sad, Faculty of Technical Sciences, Department of Graphic Engineering and Design, digital publisher	editorial board	Ebsco Art & Architecture Source, B	http://www.grid.uns.ac.rs/jged/?pid=10
Journal of Imaging Science & Technology	Society for Imaging Science and Technology, digital publisher	editorial board	Science Citation Index Expanded, A1/2	-
Polytechnic & Design	Tehni ko veleu ilište u Zagrebu, Zagreb	editorial board	C	http://polytechnicanddesign.tvz.hr/
TTEM – Technics Technologies Education Management	Society for development of teaching and business processes in new net environment in B&H, digital publisher	editorial board	C	http://ttem.ba/
Tehni ki glasnik	Sveu ilište Sjever, Varaždin	editorial board	Emerging Sources Citation Index, B	https://tehnickiglasnik.unin.hr/