

INFORMATION ON GRAPHIC AND INTERACTIVE COMMUNICATIONS STUDY PROGRAMME

Basic information

Name of programme	GRAPHIC AND INTERACTIVE COMMUNICATIONS
Programme features	
Type of study	University study programme
The degree of study	Undergraduate study programme
KLASIUS-SRV	(16204) Academic higher education (first Bologna cycle)
ISCED	(21) Arts
KLASIUS-P	(2130) Audio-visual techniques and (multi)media production (broad programmes)
KLASIUS-P-16	(0211) Audio-visual techniques and media production
Frascati	Engineering and technology (2)
Level SOK	Level SOK 7
Level EOK	Level EOK 6
Level EOVK	First degree undergraduate study programme
Areas/modules/field of study	No subdivision (study programme)
Member of the University of Ljubljana	Faculty of Natural Sciences and Engineering, Aškerčeva cesta 12, 1000 Ljubljana, Slovenia
Duration (years)	3
ECTS points per year	60
Modes of study	Full-time

Basic goals of the programme

The graphic industry is a typical service industry, as it markets services rather than its products. It uses graphic technology to enable the distribution, exchange and storage of information in the form of graphic products. Almost all the activity is directed at a known customer, a publishing house, a company, an organisation or an individual.

The industrial production and organisation characteristics are reflected in the division of labour present in this activity since Gutenberg. Today, there are many publishing, graphic and other companies on the market involved in producing graphic products, either in whole or in part. The division of labour is thus present in print shops and more widely.

The use of computer technology has led to intensive integration with other media, the distribution of the production of graphic products, changes in organisational structures, the need for new skills and significant changes in the existing skills and the emergence of new graphic professions.

The outlook for the graphic arts sector is very mixed. In the past, new media was generally not considered a replacement for old media but rather a complement, filling new niche markets. The same is true of the Internet, which many predict it will take over the role of all existing media and print media. We can expect print media to continue embracing new technologies and successfully exploiting them. These trends are already visible and are confirmed by the growth figures for paper production and the excellent performance of suppliers of graphic arts equipment. The graphic arts industry has reached a period of maturity that guarantees it a growth rate comparable to other “mature” industries over the next few decades. The turning point will be introducing entirely new communication technologies based on, e.g. natural language recognition, artificial intelligence and natural human-machine interactivity.

Another characteristic of the graphic activity is its link to a specific linguistic area since the information conveyed by a graphic product also includes texts in native language. This provides a perspective for the graphic activity within national contexts but simultaneously constitutes a barrier to extending the activity beyond the national, linguistic area.

The main goal of the bachelor’s degree study programme Graphic and Interactive Communications is to qualify experts who will be able to manage the most demanding technological processes in graphic arts and media as well as the field of interactive communications. At the same time, the purpose of the study is also to

offer graduates relevant fundamental natural science knowledge and expertise to continue their education at the second level.

In addition to the knowledge in the field of graphic arts, media and interactive communications, graduates develop scientific approach abilities through selected skills in mathematics, physics and chemistry. The default learning philosophy is such that, in addition to the knowledge acquired, graduates' other competences, skills and abilities are also necessary, emphasising the acquisition of the theoretical foundations of the rapidly evolving technologies in graphic activities and interactive communications. Graduates understand the technological realisation of graphically designed ideas, know how to solve ecological problems in the printing industry, are capable of creating new ideas and develop the abilities of interpersonal communication, negotiation, teamwork, leadership and creative thinking.

Goals and general competences of the programme

- In-depth understanding of theoretical and methodological concepts.
- Ability to transfer and apply theoretical knowledge to practice and problem-solving, in particular by seeking new sources of knowledge and applying scientific methods.
- Ability to experiment and visually communicate different concepts.
- Developed capacity for self-learning in professional field.
- Ability to understand the interrelationship between technology and design.
- Ability to understand visual notation and its technological translation into graphic products.
- Initiative and independence in decision-making and managing the most complex work.
- Social and communication capabilities to lead teamwork even in the case of projects of various sectors.
- Developed professional ethical and environmental responsibility.
- Ability to use modern tools, skills and competences especially in the area of ICT in everyday professional work.

Subject-specific competences

- In-depth knowledge of mathematics, physics and chemistry with a developed capacity for thinking in terms of natural sciences.
- Knowledge and understanding of technological parameters of digital media in visual and interactive applications and services, understanding of visualisation in digital media, the technological basis of the Internet and accompanying information services and of multimedia and interactivity in visual and interactive communications and services.
- Knowledge and understanding of physicochemical basis of conventional and digital printing techniques, measurement of processing variables, guiding, regulation and management of the printing process, advantages and shortcomings of various printing techniques.
- Knowledge of properties of graphic materials, relation between the properties of printed products and the properties of materials used in printing and other materials used in the manufacture of graphic products.
- Understanding and use of the method of critical analysis in the use of typographic design, use of graphic programs for design and composition of a text, ability to generate new ideas (creativity) in the use and setting of typographic elements.
- Knowledge about the connection and interdependence of basic artistic elements and procedures, knowledge of the basics of artistic language, artistic expression techniques and approaches to reading and designing an artistic idea.
- Capacity to use theoretical knowledge and discoveries in solving concrete environmental issues in the graphic industry.
- Developed capacity to functionally use the techniques of mutual communication, negotiation, teamwork, management and creative thinking.

Enrolment conditions

Enrolment in the undergraduate study programme Graphic and Interactive Communications is possible for:

- a) any person who has graduated (general matura) from secondary school;
- b) any person who has passed the vocational matura in any secondary school programme and an

- examination in one of the general matura courses; the chosen course cannot be the course that the candidate already passed at their vocational matura;
- c) any person who has completed any four-year secondary school programme prior to 1 June 1995.

Criteria in the event of enrolment limitation

If the number of candidates applying for the programme exceeds the number of enrolment places, the candidates from items a) and c) shall be selected according to their:

- overall performance at the general matura or final examination (60%);
- overall performance in the 3rd and 4th years of secondary school (40%).

Candidates from item b) will be selected according to their:

- overall performance at their vocational matura (40%);
- overall performance in the 3rd and 4th years of secondary school (40%);
- performance in the chosen general matura course (20%).

Criteria for crediting knowledge and skills obtained before enrolment

The faculty may choose to credit student's knowledge (obtained in the framework of different kinds of education) if it corresponds to the course content of the Graphic and Interactive Communications programme. The Study Committee of the Department of Textiles, Graphic Arts and Design is charged with crediting knowledge and skills obtained before enrolment; it does this on the basis of the student's written application and provided certificates or other documents proving the type of knowledge successfully acquired.

When crediting knowledge obtained before enrolment, the department Study Committee will take into account the following criteria:

- whether conditions for enrolling into a specific educational course are adequate (required prior education for starting the study programme);
- whether the scope of the completed educational course (the number of hours of prior education as compared to the scope of the course in question) adequately compares with the credited requirements;
- whether the areas covered by the prior education programme, which the applicant would like to have credited, adequately compare with the courses dealt with in the faculty study programme.

Acquired knowledge and skills may be credited as a completed study activity if the conditions for taking part in the educational programme were the same as for enrolling into the Graphic and Interactive Communications programme, if the prior educational programme encompassed at least 75% of the scope of the course and if at least 75% of its contents cover the same areas as the course which the applicant would like to have credited. If the department Study Committee finds that the acquired knowledge can be credited, it is granted the same number of ECTS credit points as awarded for the course in question.

Assessment methods

Assessment methods are in accordance with the [Statute](#) of the University of Ljubljana and are specified in the curricula.

Requirements for progression through the programme

To enrol in the higher year, a student must complete all practical classes and the following number of ECTS credit points obtained for enrolment in each individual year:

- minimum of 54 ECTS credit points for enrolment in the 2nd year;
- 60 ECTS credit points from the 1st year and minimum of 54 ECTS credit points from the 2nd year for enrolment in the 3rd year.

Exceptionally, the department Study Committee may grant progression to a higher year to a student who has achieved at least 42 ECTS credit points in the previous year if there are justified reasons for exception. Justified reasons are listed in the Statute of the University of Ljubljana.

To re-enrol in the same year of the study (repetition of the same year), students must have:

- minimum of 28 ECTS credit points for the 1st year;
- minimum of 28 ECTS credit points for the 2nd year.

During the course of studies, a student can repeat a year once or change the study programme once for having failed to meet their obligations in the former study programme.

Transfer between programmes

Transfer is possible between two study programmes:

- that upon the completion of studies ensure the acquisition of comparable competences or learning outcomes;
- where, in line with the criteria for recognition of knowledge and skills acquired prior to the enrolment in the university study programme Graphic and Interactive Communications, at least half of the obligations according to the European credit transfer system (ECTS) can be recognised from the first study programme, referring to compulsory courses of the 1st level university study programme Graphic and Interactive Communications.

An individual exam passed in the original study programme is recognised as passed in the 1st level university study programme Graphic and Interactive Communications if the harmonisation of the contents of both courses amounts to at least 75%. The recognised exam is evaluated with credit points in the original study programme; however, not with more credit points as evaluated in the 1st level university study programme Graphic and Interactive Communications.

A candidate can enrol through transfer in the 2nd or 3rd year of the university study programme Graphic and Interactive Communications if:

- they meet the conditions for enrolment in the study programme,
- vacant places are available.

The Study Committee at the Faculty of Natural Sciences and Engineering determines for each candidate to what extent it recognises their already completed study obligations, determines new obligations and which year the candidate can enrol in.

Requirements for completing studies

To complete their studies, students must complete all the requirements for all courses they have enrolled in, and prepare and defend their thesis.

Requirements for completion of individual parts of the programme, if contained in the programme

The study programme does not contain individual parts of the programme.

Professional, scientific or artistic title

- Bachelor of Science

Abbreviation of professional, scientific or artistic title

- B.Sc.

STUDY PROGRAMME CURRICULUM

GRAPHIC AND INTERACTIVE COMMUNICATION

2026/2027

Name of study programme	Graphic and interactive communication
Programme characteristics	
Type	academic
Cycle	bachelor
University of Ljubljana members	Faculty of Natural Sciences and Engineering, Aškerčeva cesta 12, 1000 Ljubljana, Slovenija

Year 1, obvezni

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0642798	Mathematics 1	Janko Bračič	45	0	45	0	0	90	180	6	1st semester	no
2.	0642800	Physics	Borut Paul Kerševan	45	0	45	0	0	90	180	6	1st semester	no
3.	0068727	Chemistry 1	Urška Lavrenčič Štangar	60	0	30	0	0	90	180	6	1st semester	no
4.	0089478	Information technologies	Aleš Hladnik	30	15	30	0	15	90	180	6	1st semester	no
5.	0089482	Printing processes 1	Deja Muck	30	15	30	0	15	90	180	6	1st semester	no
6.	0642799	Mathematics 2	Janko Bračič	45	0	45	0	0	90	180	6	2nd semester	no
7.	0642801	Physics 2	Borut Paul Kerševan	45	0	45	0	0	90	180	6	2nd semester	no
8.	0068728	Chemistry 2	Uroš Grošelj	45	15	30	0	0	90	180	6	2nd semester	no
9.	0089477	Graphic materials	Diana Gregor Svetec, Sabina Bračko	45	15	30	0	0	90	180	6	2nd semester	no
10.	0554327	Graphic prepress	Raša Urbas	30	15	30	0	15	90	180	6	2nd semester	no
Total				420	75	360	0	45	900	1800	60		

Year 2, obvezni

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0089488	Statistics	Stanislav Praček	30	0	30	0	0	60	120	4	1st semester	no
2.	0089491	Typographic design	Klementina Možina	60	0	30	0	0	90	180	6	1st semester	no
3.	0089490	Theory of graphic processes	Maja Klančnik, Sabina Bračko	45	15	30	0	0	90	180	6	1st semester	no
4.	0089487	Interactivity and animation	Helena Gabrijelčič Tomc	30	15	45	0	0	90	180	6	1st semester	no
5.	0089486	Basics of artistic expression	Marica Starešinič	30	30	0	0	0	60	120	4	1st semester	no
6.	0559656	Photography and video	Marica Starešinič	30	0	30	0	0	60	120	4	1st semester	no
7.	0089484	Interactive media 1	Aleš Hladnik	30	15	30	0	15	90	180	6	2nd semester	no
8.	0089485	Colour metrics in graphic arts	Sabina Bračko	30	15	30	0	15	90	180	6	2nd semester	no
9.	0089492	Printing plates	Maja Klančnik	30	15	15	0	0	60	120	4	2nd semester	no
10.	0089489	English for specific purposes	Barbara Luštek Preskar, prof. angl. in nem.	0	60	0	0	0	60	120	4	2nd semester	no
11.	0111830	Optional course 1		30	20	30	10	0	90	180	6	2nd semester	no
12.	0111831	Optional course 2		30	15	15	0	0	60	120	4	2nd semester	no
Total				375	200	285	10	30	900	1800	60		

Year 2, izbirni predmeti letni semester

	Contact hours	
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	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0089457	Information design	Primož Fijavž	30	30	30	0	0	90	180	6	2nd semester	yes
2.	0099560	User interface planning	Jože Guna	30	15	15	0	0	60	120	4	2nd semester	yes
3.	0089469	Basics of 3D modelling	Helena Gabrijelčič Tomc	30	15	45	0	0	90	180	6	2nd semester	yes
4.	0642796	Practical training	Habilitiran učitelj	0	0	0	0	0	120	120	4	2nd semester	yes
5.	0644018	Packaging materials and technology	Diana Gregor Svetec	30	15	45	0	0	90	180	6	2nd semester	yes
Total				120	75	135	0	0	450	780	26		

Year 3, obvezni

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0089497	Typography in various media	Klementina Možina	45	15	30	0	0	90	180	6	1st semester	no
2.	0099372	Interactive systems	Danica Dolničar	30	15	30	0	15	90	180	6	1st semester	no
3.	0089496	Artistic analysis of graphic products	Marica Starešinič	30	15	0	0	15	60	120	4	1st semester	no
4.	0089493	Colour management	Jože Guna, Raša Urbas	30	15	30	0	15	90	180	6	1st semester	no
5.	0559673	Studio photography	Jure Ahtik	15	15	30	0	0	60	120	4	1st semester	no
6.	0089495	Information sources and methodology of thesis work	Danica Dolničar	30	15	15	0	0	60	120	4	1st semester	no
7.	0111832	Optional course 3		35	25	23	0	7	90	180	6	2nd semester	no

8.	0111833	Optional course 4		35	25	23	0	7	90	180	6	2nd semester	no
9.	0111834	Optional course 5		32	15	11	0	2	60	120	4	2nd semester	no
10.	0111835	Optional course 6		32	15	11	0	2	60	120	4	2nd semester	no
11.	0111836	Degree		0	0	0	0	150	150	300	10	2nd semester	no
		Total		314	170	203	0	213	900	1800	60		

Year 3, izbirni predmeti letni semester

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0089461	Environmental protection in graphic arts	Maja Klančnik	45	15	30	0	0	90	180	6	2nd semester	yes
2.	0089466	Design of sustainable packaging	Diana Gregor Svetec, Klementina Možina	30	0	45	0	15	90	180	6	2nd semester	yes
3.	0099373	Business information applications	Raša Urbas, Urška Stanković Elesini	45	45	0	0	0	90	180	6	2nd semester	yes
4.	0089474	Quality management	Klemen Možina	30	60	0	0	0	90	180	6	2nd semester	yes
5.	0089467	Typeface design	Klementina Možina	30	15	45	0	0	90	180	6	2nd semester	yes
6.	0554341	Video	Helena Gabrijelčič Tomc	30	15	30	0	15	90	180	6	2nd semester	yes
7.	0089458	Printing processes 2	Deja Muck	30	15	30	0	15	90	180	6	2nd semester	yes
8.	0089463	Graphic finishing	Urška Vrabič Brodnjak	30	15	0	0	15	60	120	4	2nd semester	yes
9.	0089468	Packaging design	Urška Vrabič Brodnjak	30	15	15	0	0	60	120	4	2nd semester	yes
10.	0089460	3D technologies	Deja Muck	30	0	30	0	0	60	120	4	2nd semester	yes

11.	0089465	Graphic engineering	Urška Stanković Elesini	45	15	0	0	0	60	120	4	2nd semester	yes
12.	0068758	Entrepreneurship	BLAŽ ZUPAN	30	0	30	0	0	60	120	4	2nd semester	yes
13.	0089456	Media visualisation	Jure Ahtik	15	30	15	0	0	60	120	4	2nd semester	yes
14.	0554373	Basics of 3D animation and simulation	Helena Gabrijelčič Tomc	15	15	30	0	0	60	120	4	2nd semester	yes
15.	0554374	User interface developing	Jože Guna	30	30	0	0	0	60	120	4	2nd semester	yes
16.	0642796	Practical training	Habilitiran učitelj	0	0	0	0	0	120	120	4	2nd semester	yes
17.	0644019	Trends in packaging development	Diana Gregor Svetec	30	15	30	0	15	90	180	6	2nd semester	yes
Total				495	300	330	0	75	1320	2520	84		