COURSE CATALOGUE 2022/2023



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BANJA LUKA COLLEGE

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MISSION

Banja Luka College is an institution determined to develop a scientific approach, lifelong learning, exchange of experience with other higher education institutions in the region, as well as in the European Union. It is open to improving and adapting its educational technologies in accordance with the educational system in Europe and the developed world. It strives to develop teamwork, verbal and text communication and efficiency in order to be part of the educational, economic and social development of the community and region.

VISION

Banja Luka College is organized as a modern and leading institution of higher education in the field of business economics, management, media and communications as well as information technologies, maintaining partnership communication between teaching staff and students, and an optimal combination of modern teaching process, using information and communication technologies, in accordance with needs of every student. It respects the principles of the European Research Area, and aims to strengthen the mobility of teaching staff and students. New ideas are encouraged, and the acquired knowledge is the basis for further individual development.

ECTS METHODOLOGY

European Credit Transfer System (ECTS) represents a unique system of quantitative evaluation of the student's work used in the acquisition of knowledge, abilities and skills provided by the study program and each subject within that program. ECTS are common "currencies" in the European Education System, where it is based on the student's work verified by an exam.

With the introduction of ECTS points, it is possible to measure the total workload of the student, which is necessary for mastering the material and achieving the learning outcomes of individual subjects. The student's workload includes participation in active teaching (lectures, exercises, practical work and consultations) and individual work (individual study, homework, seminar papers, writing essays and project reports). The accepted convention is that 60 ECTS points represent a quantitative measure of the workload of an average student in one academic year, i.e. 30 ECTS points in one semester.

One ECTS credit corresponds to 30 hours of student work, and a student works 40 hours a week on average. This means that the student's workload is 1,800 hours per year, where about 40% of the hours are related to active teaching, while the remaining 60% are related to the student's individual work.

ECTS credits are assigned to each teaching component of the study program (subjects, student practice and thesis). Points for a particular exam are awarded to the student only when he/she passes the specific exam or defends the thesis.

The application of ECTS credits promotes the mobility of students in the European area of higher education with the possibility of transfer and accumulation of credits acquired in different institutions and facilitates the recognition of diplomas among European countries.

GRADES

| POINTS | SCH | OOL GRA | DE | DESCRIPTION | ECTS GRADE |
|------------|-----|---------|----|--------------|---------------|
| 91% - 100% | 10 | 5 | 1 | Excellent | A |
| 81% - 90% | 9 | 5 | 1 | Very good | В |
| 71% - 80% | 8 | 4 | 2 | Good | С |
| 61% - 70% | 7 | 3 | 3 | Satisfactory | D |
| 51% - 60% | 6 | 2 | 4 | Sufficient | Е |
| 0% - 50% | 5 | 1 | 5 | Insufficient | F |

STUDY PROGRAMS

Study programs are:

- Management, business and business economy,
- Informatics.
- Media and communication Journalism,
- Graphic design and visual communication.

Management, business and business economy – 180 ECTS, 240 ECTS

Autumn courses -1^{st} , 3^{rd} , 5^{th} , 7^{th} semester Summer courses -2^{nd} , 4^{th} , 6^{th} , 8^{th} semester

| 1st semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Management | BLC.001 | I | 30+30 | 6 |
| Informatics | BLC.002 | | 30+30 | 6 |
| Microeconomics | BLC.003 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 2nd semester | Code | English* | Teaching hours | ECTS |
|---------------------------------------|---------|----------|----------------|------|
| Statistics | BLC.004 | | 30+30 | 6 |
| Obligatory subject of the study field | | | 30+30 | 6 |
| Obligatory subject of the study field | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| Obligatory Courses – Business Economics | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Macroeconomics | BLC.005 | I | 30+30 | 6 |
| Accounting | BLC.006 | | 30+30 | 6 |
| Obligatory Courses – Logistics and Forwarding | Code | English* | Teaching hours | ECTS |
| Macroeconomics | BLC.005 | I | 30+30 | 6 |
| Accounting | BLC.006 | | 30+30 | 6 |
| Obligatory Courses – Safety at Work | Code | English* | Teaching hours | ECTS |
| Ecology | BLC.007 | | 30+30 | 6 |
| Introduction to information technologies | BLC.008 | | 30+30 | 6 |

| 3rd semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Business informatics | BLC.009 | | 30+30 | 6 |
| Public relations | BLC.010 | | 30+30 | 6 |
| Mathematics | BLC.011 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 4th semester | Code | English* | Teaching hours | ECTS |
|---------------------------------------|---------|----------|----------------|------|
| Marketing | BLC.012 | II | 30+30 | 6 |
| Human potential management | BLC.013 | I | 30+30 | 6 |
| Obligatory subject of the study field | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| Obligatory Courses – Business Economics | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Entrepreneurship | BLC.014 | I | 30+30 | 6 |
| Obligatory Courses – Logistics and Forwarding | Code | English* | Teaching hours | ECTS |
| Basics of freight forwarding | BLC.015 | | 30+30 | 6 |
| Obligatory Courses – Safety at Work | Code | English* | Teaching hours | ECTS |
| Basics of protection system | BLC.016 | | 30+30 | 6 |

| 5th semester | Code | English* | Teaching hours | ECTS |
|---------------------------------------|---------|----------|----------------|------|
| Business law | BLC.017 | | 30+60 | 8 |
| Obligatory subject of the study field | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| Obligatory Courses – Business Economics | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Management of finance | BLC.018 | | 30+60 | 8 |
| Obligatory Courses – Logistics and Forwarding | Code | English* | Teaching hours | ECTS |
| Management of finance | BLC.018 | | 30+60 | 8 |
| Obligatory Courses – Safety at Work | Code | English* | Teaching hours | ECTS |
| Protection of the environment | BLC.019 | | 30+60 | 8 |

| 6th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 7th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 8th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Students' practice | BLC.093 | | 0+160 | 12 |
| Final paper | BLC.094 | | 0+0 | 10 |
| Total | | | 30+220 | 30 |

| Elective course of 6 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|------------------------------------|---------|---------|----------|----------------|------|
| Methodology of scientific research | BLC.020 | Autumn | | 30+30 | 6 |
| Information systems | BLC.021 | Autumn | | 30+30 | 6 |
| Labor law | BLC.022 | Summer | | 30+30 | 6 |
| Digital strategy of business | BLC.023 | Autumn | | 30+30 | 6 |
| Business analyses | BLC.024 | Autumn | | 30+30 | 6 |
| Business intelligence | BLC.025 | Summer | | 30+30 | 6 |
| Logistics | BLC.026 | Summer | | 30+30 | 6 |
| Basics of programming | BLC.027 | Summer | II | 30+30 | 6 |
| Entrepreneurship | BLC.014 | Summer | I | 30+30 | 6 |
| Mathematics 2 | BLC.028 | Autumn | | 30+30 | 6 |
| Basics of law | BLC.029 | Summer | | 30+30 | 6 |
| Media literacy | BLC.030 | Autumn | | 30+30 | 6 |
| Web design | BLC.031 | Summer | II | 30+30 | 6 |
| English language 1 | BLC.032 | Autumn | | 30+45 | 6 |
| English language 2 | BLC.033 | Summer | | 30+45 | 6 |
| English language 3 | BLC.034 | Autumn | | 30+45 | 6 |
| English language 4 | BLC.035 | Summer | | 30+45 | 6 |
| English language 5 | BLC.036 | Autumn | | 30+45 | 6 |

| Elective course of 8 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|---------------------------------------|---------|---------|----------|----------------|------|
| Banking | BLC.037 | Autumn | | 30+60 | 8 |
| Internet marketing | BLC.038 | Autumn | II | 30+60 | 8 |
| Ecology engineering | BLC.039 | Autumn | | 30+60 | 8 |
| Foreign trade business | BLC.040 | Summer | II | 30+60 | 8 |
| Insurance management | BLC.041 | Summer | II | 30+60 | 8 |
| Investments | BLC.042 | Summer | | 30+60 | 8 |
| Auditing | BLC.043 | Summer | | 30+60 | 8 |
| Electrotechnics and electronics | BLC.044 | Summer | II | 30+60 | 8 |
| Trade management | BLC.045 | Autumn | | 30+60 | 8 |
| Business ethics | BLC.046 | Autumn | I | 30+60 | 8 |
| Business economy | BLC.047 | Autumn | I | 30+60 | 8 |
| Transport | BLC.048 | Summer | | 30+60 | 8 |
| Forward freight and agency operations | BLC.049 | Summer | | 30+60 | 8 |

st Explanation of English language levels:

Informatics – 180 ECTS, 240 ECTS

Autumn courses -1^{st} , 3^{rd} , 5^{th} , 7^{th} semester Summer courses -2^{nd} , 4^{th} , 6^{th} , 8^{th} semester

| 1st semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|----------|----------|----------------|------|
| Informatics | BLC.002 | | 30+30 | 6 |
| Mathematics 1 | BLC.011 | | 30+30 | 6 |
| English language 1 | BLC.032 | | 30+45 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | <u>.</u> | | 150+165 | 30 |

| 2nd semester | Code | English* | Teaching hours | ECTS |
|--|---------|----------|----------------|------|
| Architecture of computer | BLC.050 | II | 30+30 | 6 |
| Introduction to information technologies | BLC.008 | | 30+30 | 6 |
| English language 2 | BLC.033 | | 30+45 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+165 | 30 |

| 3rd semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|----------|----------|----------------|------|
| Business informatics | BLC.009 | | 30+30 | 6 |
| Mathematics 2 | BLC.028 | | 30+30 | 6 |
| English language 3 | BLC.034 | | 30+45 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | <u>.</u> | | 150+165 | 30 |

| 4th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Databases 1 | BLC.051 | II | 30+30 | 6 |
| Basics of programing | BLC.027 | II | 30+30 | 6 |
| English language 4 | BLC.035 | | 30+45 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+165 | 30 |

| 5th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Programming | BLC.052 | II | 30+60 | 8 |
| Mathematics 3 | BLC.053 | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 6th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Electrotechnics and electronics | BLC.044 | II | 30+60 | 8 |
| Algorithms and data structures | BLC.054 | II | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 7th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| English language 5 | BLC.036 | | 30+45 | 6 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Total | | | 120+225 | 30 |

| 8th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Students' practice | BLC.093 | | 0+160 | 12 |
| Final paper | BLC.094 | | 0+0 | 10 |
| Total | | | 30+220 | 30 |

| Elective course of 6 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|------------------------------------|---------|---------|----------|----------------|------|
| Methodology of scientific research | BLC.020 | Autumn | | 30+30 | 6 |
| Management | BLC.001 | Autumn | I | 30+30 | 6 |
| Statistics | BLC.004 | Summer | | 30+30 | 6 |
| Introduction to operating systems | BLC.055 | Summer | II | 30+30 | 6 |
| Computer networks | BLC.056 | Autumn | II | 30+30 | 6 |
| Information systems | BLC.021 | Autumn | | 30+30 | 6 |
| Web design | BLC.031 | Summer | II | 30+30 | 6 |
| Protection of information systems | BLC.057 | Summer | | 30+30 | 6 |
| Video games | BLC.058 | Autumn | | 30+30 | 6 |
| Human potential management | BLC.013 | Summer | I | 30+30 | 6 |
| Business intelligence | BLC.025 | Summer | | 30+30 | 6 |

| Elective course of 8 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|------------------------------------|---------|---------|----------|----------------|------|
| Databases 2 | BLC.059 | Autumn | II | 30+60 | 8 |
| Software engineering | BLC.060 | Summer | II | 30+60 | 8 |
| Internet programming | BLC.061 | Autumn | II | 30+60 | 8 |
| Internet marketing | BLC.038 | Autumn | II | 30+60 | 8 |
| Wireless networks | BLC.062 | Autumn | II | 30+60 | 8 |
| Contemporary software architecture | BLC.063 | Summer | II | 30+60 | 8 |
| Multimedia | BLC.064 | Summer | | 30+60 | 8 |

* Explanation of English language levels:

 $\textbf{Level I} - \text{the course is given in Serbian language but the course literature is provided in English language and individual consultations are provided in English language$

Level II – The course is given in English language

Media and communication – Journalism – 240 ECTS

Autumn courses -1^{st} , 3^{rd} , 5^{th} , 7^{th} semester Summer courses -2^{nd} , 4^{th} , 6^{th} , 8^{th} semester

| 1st semester | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Introduction in media and communication | BLC.065 | | 30+30 | 6 |
| Informatics | BLC.002 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 2nd semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Media literacy | BLC.030 | | 30+30 | 6 |
| Macroeconomics | BLC.005 | I | 30+30 | 6 |
| Communication theories | BLC.066 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 3rd semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Journal genres | BLC.067 | | 30+30 | 6 |
| Public relationships | BLC.010 | | 30+30 | 6 |
| Printing media | BLC.068 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 4th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Marketing | BLC.012 | II | 30+30 | 6 |
| Radio | BLC.069 | | 30+30 | 6 |
| Agency journalism | BLC.070 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 150+150 | 30 |

| 5th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Research journalism | BLC.071 | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 6th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Television | BLC.072 | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 7th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 8th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Students' practice | BLC.093 | | 0+160 | 12 |
| Final paper | BLC.094 | | 0+0 | 10 |
| Total | | | 30+220 | 30 |

| Elective course of 6 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|--|---------|---------|----------|----------------|------|
| Methodology of the scientific research | BLC.020 | Autumn | | 30+30 | 6 |
| Basics of law | BLC.029 | Summer | | 30+30 | 6 |
| Digital strategy of business | BLC.023 | Autumn | | 30+30 | 6 |
| Human potential management | BLC.013 | Summer | I | 30+30 | 6 |
| Web design | BLC.031 | Summer | II | 30+30 | 6 |
| Management in art | BLC.073 | Summer | | 30+30 | 6 |
| Organization and production | BLC.074 | Autumn | | 30+30 | 6 |
| English language 1 | BLC.032 | Autumn | | 30+45 | 6 |
| English language 2 | BLC.033 | Summer | | 30+45 | 6 |
| English language 3 | BLC.034 | Autumn | | 30+45 | 6 |
| English language 4 | BLC.035 | Summer | | 30+45 | 6 |
| English language 5 | BLC.036 | Autumn | | 30+45 | 6 |
| Microeconomics | BLC.003 | Autumn | | 30+45 | 6 |

| Elective course of 8 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|---|---------|---------|----------|----------------|------|
| Business ethics | BLC.046 | Autumn | I | 30+60 | 8 |
| Business and author law | BLC.075 | Autumn | | 30+60 | 8 |
| Internet and new media | BLC.076 | Summer | | 30+60 | 8 |
| Technology of printing and printing forms | BLC.077 | Summer | II | 30+60 | 8 |
| Photography 1 | BLC.078 | Autumn | | 30+60 | 8 |
| Internet marketing | BLC.038 | Autumn | II | 30+60 | 8 |
| Digital communication | BLC.079 | Autumn | | 30+30 | 8 |
| Multimedia | BLC.064 | Summer | | 30+30 | 8 |

* Explanation of English language levels:

Level I – the course is given in Serbian language but the course literature is provided in English language and individual consultations are provided in English language

Level II – The course is given in English language

Graphic design and visual communication – 180 ECTS, 240 ECTS

Autumn courses -1^{st} , 3^{rd} , 5^{th} , 7^{th} semester Summer courses -2^{nd} , 4^{th} , 6^{th} , 8^{th} semester

| 1st semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Drawing and art | BLC.080 | | 40+60 | 10 |
| Photography 1 | BLC.078 | | 30+60 | 8 |
| Informatics | BLC.002 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 130+180 | 30 |

| 2nd semester | Code | English* | Teaching hours | ECTS |
|--|---------|----------|----------------|------|
| Graphics 1 | BLC.081 | | 40+60 | 10 |
| Design 1 | BLC.082 | | 30+60 | 8 |
| Introduction to information technologies | BLC.008 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | • | 130+180 | 30 |

| 3rd semester | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Elective course of the choice 10 ECTS | | | 40+60 | 10 |
| Graphic design | BLC.083 | II | 30+60 | 8 |
| Introduction to media and communication | BLC.065 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 130+180 | 30 |

| 4th semester | Code | English* | Teaching hours | ECTS |
|---|---------|----------|----------------|------|
| Elective course of the choice 10 ECTS | | | 40+60 | 10 |
| Technology of printing and printing forms | BLC.077 | II | 30+60 | 8 |
| Web design | BLC.031 | | 30+30 | 6 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 130+180 | 30 |

| 5th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Computer graphics | BLC.084 | II | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 6th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Visual communication | BLC.085 | | 30+60 | 8 |
| Multimedia | BLC.064 | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 7th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Elective course of the choice 6 ECTS | | | 30+30 | 6 |
| Total | | | 120+210 | 30 |

| 8th semester | Code | English* | Teaching hours | ECTS |
|--------------------------------------|---------|----------|----------------|------|
| Elective course of the choice 8 ECTS | | | 30+60 | 8 |
| Students' practice | BLC.093 | | 0+160 | 12 |
| Final paper | BLC.094 | | 0+0 | 10 |
| Total | | | 30+120 | 30 |

| Elective course of 6 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|--|---------|---------|----------|----------------|------|
| Methodology of the scientific research | BLC.020 | Autumn | | 30+30 | 6 |
| Video games | BLC.058 | Autumn | | 30+30 | 6 |
| Animation | BLC.086 | Summer | | 30+30 | 6 |
| Media literacy | BLC.030 | Summer | | 30+30 | 6 |
| Organization and production | BLC.074 | Autumn | | 30+30 | 6 |
| Basics of programming | BLC.027 | Autumn | II | 30+30 | 6 |
| English language 1 | BLC.032 | Autumn | | 30+45 | 6 |
| English language 2 | BLC.033 | Summer | | 30+45 | 6 |
| English language 3 | BLC.034 | Autumn | | 30+45 | 6 |
| English language 4 | BLC.035 | Summer | | 30+45 | 6 |
| English language 5 | BLC.036 | Autumn | | 30+45 | 6 |
| Public relations | BLC.010 | Autumn | | 30+30 | 6 |
| Introduction to information technologies | BLC.008 | Summer | | 30+30 | 6 |

| Elective course of 8 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|------------------------------------|---------|---------|----------|----------------|------|
| Graphics 2 | BLC.087 | Autumn | | 30+60 | 8 |
| Internet marketing | BLC.038 | Autumn | II | 30+60 | 8 |
| Organization of graphic production | BLC.088 | Autumn | II | 30+60 | 8 |
| Illustration | BLC.089 | Autumn | | 30+60 | 8 |
| Graphic materials and technologies | BLC.090 | Autumn | II | 30+60 | 8 |
| Digital communications | BLC.079 | Autumn | | 30+60 | 8 |
| Internet and new media | BLC.076 | Summer | | 30+60 | 8 |
| Programming | BLC.052 | Autumn | II | 30+60 | 8 |
| Internet programming | BLC.061 | Autumn | II | 30+60 | 8 |

| Elective course of 10 ECTS | Code | Courses | English* | Teaching hours | ECTS |
|----------------------------|---------|---------|----------|----------------|------|
| Photography 2 | BLC.091 | Autumn | | 40+60 | 10 |
| Design 2 | BLC.092 | Summer | | 40+60 | 10 |

* Explanation of English language levels:

DESCRIPTION OF INDIVIDUAL COURSES

BLC.001 Management

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Nature of management, Development of management theory, Changes in the management environment; Putting quality first, Social and ethical responsibility of management; Planning - primary managerial function, Strategic management: planning for long-term success; Human resource management; Communication in the computer era; Business motivation skills; Group dynamics and teamwork; Process influence and leadership; International management; Production and service operation management. |
|-----------------------------|--|
| Aim of studying | Acquisition of basic knowledge in the field of management, especially in business organizations. Studying the theory, development of the organization from the aspect of business functions, which will be studied later through other subjects. Basic concepts: leader, manager and entrepreneur. Management method in a way that corresponds to the changes that theory and practice will face. Only the basic and permanent basics of management and entrepreneurship will be presented. |
| Outcomes of the studying | After passing this course, the student will be able to: 1. Apply knowledge in the field of planning, human resources management and control in the creation and management of business. 2. Calculate and interpret indicators of dynamics in business analysis (individual indices, absolute and relative rates) 3. Make a diagnosis of the situation and present it (SWOT, PEST analysis) 4. Design a mission and vision and form a marketing strategy of an entrepreneurial idea 5. Write a business plan or an entrepreneurial project from which you can read relevant answers to questions related to planning, launching, financing, organizing, leading, developing and supervising (team work) 6. To present your own critical reflections on topics and settings from the field of management |
| Skills | Students will correctly interpret and understand concepts and relationships in economics. They will acquire skills that will enable them to apply knowledge gained from organizational management and strategic organizational planning techniques. |

BLC.002 Informatics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Basics of computer science: Operating systems: DOS, Windows; Office: Word, Excel, Access, Photoshop, Visio, Power Point, Outlook; Internet; General informatics: Basics, development and application of informatics and information technologies; Information resources: Data; Information; Knowledge; Information management; General information system of the organization; Fundamentals of systems theory; Basics of information theory; Basics of management theory; Hardware and architecture of computer systems: Macro computers, mini computers, microcomputers, personal computers; Components of the architecture of computer systems: Memories; Processor; Input devices; Output devices; External memories; User interface; Communication of data and information; Computer systems software; Computer networks: Definition and selection of a computer network; Connecting components to a network; Network functioning; Network operation; Administration of computer networks; Large networks; Global network - Internet. |
|-----------------------------|---|
| Aim of studying | Introduction to informatics as scientific and professional support for intellectual work; Professional training for successful acceptance, monitoring and application of existing and new information technologies; Acquisition of practical knowledge and skills in the application of information technologies and techniques. |
| Outcomes of the studying | Knowledge of the basics of informatics theory (system theory, information theory, management theory); Understanding key aspects of information technology; Follow professional literature in Serbian (native) and foreign languages, preparation and independently hold presentations in Serbian (native) and foreign languages to professional and general audiences, and critically evaluation of the presented professional topic; Understanding and application modern technical concepts and practices in information technologies (computer architecture, operating systems, computer networks); Understanding the state and trends in the development of modern information and communication technologies (ICT), understand their impact on the individual, organization and society, and assessing of their applicability in the given context. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of assignments, studying, consultations and seminar work. The lectures deal with theoretical content and provide conceptual explanations of concepts and certain information technologies. Within the exercises, emphasis is placed on the development of abilities and skills in the application of certain information technologies as support for intellectual work. Through seminar work, the ability to apply certain information technologies and software tools is additionally developed with the aim of their integrated use in solving business problems on a given topic. |

BLC.003 Microeconomics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Introduction to economics, Positive and normative economics, Concept and types of markets, Laws of supply and demand, Elasticity and its application, Supply, demand and government regulation, Producers, consumers and market efficiency, Production and organization, production costs, External effects, Public goods and common resources, Firms in competitive markets, Monopoly, Oligopoly, Monopolistic competition, Markets of factors of production, Earnings and discrimination, Theory of consumer choice, Frontier areas of microeconomics, externalities. |
|-----------------------------|--|
| Aim of studying | Analysis of the behavior of individual economic subjects and their interaction in the economic system. At the base of microeconomics is the functionality of the market economy, which should lead to an efficient allocation of resources. The main goal of the course is for students to deepen their knowledge of microeconomics through adequate examples and to practically see the importance of microeconomic analysis for successful navigation in the business processes of modern market economies. The specific goals of this program are: a) the development of students' abilities and skills to successfully navigate other areas of the economy as a science and the impact of macroeconomic policy on the microeconomic analysis of enterprises thanks to the knowledge of instruments and methods of microeconomic analysis, and b) insight into the countless causal links and relationships in which microeconomic business entities enter in the course of doing business on the domestic and global market. |
| Outcomes of the studying | Students are expected to master microeconomic theory and its basic instrumentation in order to be able to apply theoretical knowledge to practical business or economic-political problems. This will enable them to understand complex economic issues that are studied in specialized teaching disciplines. |
| Skills | Students should be trained to work in a team that deals with research and microeconomic analysis of both the internal problems of basic economic entities and the position of companies on the domestic and foreign markets. Also, the student should be able to use the methods and instruments of microeconomic analysis to carry out independent research of internal processes in the company itself and the position of the company in the environment. |

BLC.004 Statistics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Introduction to statistics and statistical research. Statistical data and their presentation. Descriptive statistics. Probability. Random variables and their distribution. Statistical inference. Evaluation theory. Hypothesis testing. Linear statistical model. Statistical research using MS Excel. Statistical research using SPSS. |
|--------------------------|---|
| Aim of studying | Acquaintance of the student with methods of collecting and processing statistical data, and mastering statistical methods. |
| Outcomes of the studying | Understanding of statistical methodology and its application in scientific and research work and in various analyzes that are applied in economic and IT practice. Drawing adequate conclusions and making decisions based on the results of statistical analysis. |
| Skills | Conducting statistical research and applying statistical methods in scientific and research work and in business. Use of MS Excel and SPSS in statistical research. |

BLC.005 Macroeconomics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Basic concepts of macroeconomics, national specificities of the economy, basic macroeconomic phenomena and analytical instruments, the market and the state in the modern economy, gross social product and gross domestic product, consumption and investments, economic growth, privatization, budget and fiscal policy, money, monetary policy, unemployment, financial institutions. |
|-----------------------------|---|
| Aim of studying | The aim of this course is to contribute to the development of basic knowledge in macroeconomics. Acquiring macroeconomic knowledge is necessary for economists of financial and general business orientation, in order to understand and know how to interpret basic macroeconomic categories, trends and forecasts. The aim of studying the course is for students to become familiar with the most important macroeconomic aggregates, their mutual relations in the use and distribution of the social product. Basic macroeconomic models and macroeconomic policies are covered, especially in the conditions of the global world economy. Students will get to know the topics of independence of the central bank, the choice of monetary regime, and the specifics of the macroeconomic model for transactions with a growing market. |
| Outcomes of the studying | Macroeconomics represents a very complex field of theory, science and practice. The main outcome of studying this scientific discipline is that students, after mastering this very demanding and complex subject, can more easily and quickly understand a comprehensive analysis of contemporary macroeconomic issues and problems, the importance of which is greater today than ever before. Students acquire detailed knowledge of basic economic laws, the way the economy functions, basic economic policies and their impact on the achievement of basic macroeconomic goals. Students should explain GDP, the measurement of economic activity and the sources of economic growth, and critically evaluate them. |
| Skills | Students will correctly interpret and understand terms and relationships in the macroeconomic environment, analyze and interpret economic policies aimed at achieving optimal microeconomic and macroeconomic results. They will acquire the skills to apply macroeconomic analysis and develop economic intuition and logic, which are indispensable in understanding the material and applying macroeconomic knowledge. |

BLC.006 Accounting

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | The concept of bookkeeping and accounting, the subject and goal of accounting. Concept, types and rules of posting on accounts. Global procedure in bookkeeping and bookkeeping instruments. Principles of proper bookkeeping and accounting principles. Chart of accounts and chart of accounts. Errors in bookkeeping. Accounting adjustments and the business cycle. Principles of valuation of assets and liabilities. Establishment of a legal entity and acquisition of initial capital, acquisition of fixed and current assets. Investment of funds in financial forms of assets, fixed assets and stocks. Concept, calculation and inclusion of costs and expenses. Concept, valuation and classification of income. Methods of balancing the financial result, pre-closing and closing entries. Basic principles of preparation and presentation of financial statements in accordance with IFRS. Accounting analysis (basic analysis of financial statements). Accounting supervision. Accounting control. |
|--------------------------|---|
| Aim of studying | Mastering accounting with a special emphasis on understanding the global procedure in bookkeeping, bookkeeping instruments, double-entry bookkeeping systems, types of accounts and accounting rules, rules for valuing elements of financial statements and preparation of company financial statements in accordance with IFRS. |
| Outcomes of the studying | Knowledge of principles, methods and tools in financial accounting and student training for independent work and for taking the exam for a certified accountant. |
| Skills | Recording of business changes in the general ledger and diary, as well as preparation and preparation of financial statements of the company in accordance with IFRS. Analysis of the company's financial statements. |

BLC.007 Ecology

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Ecology (term, definition, subject of research). Division and importance of ecology. The position of ecology in the modern system of sciences and its relation to other disciplines. Basic concepts of ecology: range, endemic and relict areas, life forms, actions, reactions, coactions, ecological valence. Human ecology - definition, subject, task - global problems of today. Ecological aspects of the origin and evolution of man. Classification of ecological factors (abiotic, biotic and anthropogenic). Adaptation to different living conditions - life form (term, examples and classification). Ecological valence (term, examples). Concept of biotope and habitat. The concept of population. Biosphere. Changes in the genetic structure of populations of organisms as a result of environmental pollution. Genetic consequences of environmental damage - genotoxic agents. Population perspectives and forecasts. The future and perspectives of the world population according to the projection of the UN World Population Conference. Living areas (seas, oceans, surface waters). Acquiring theoretical knowledge and practical skills in the area of noise and vibrations. Training students to solve specific problems in the work environment created by sources of noise and vibrations through the identification and characterization of sources as well as the control and assessment of noise and vibrations. Basic principles of vibration isolation. |
|-----------------------------|--|
| Aim of studying | Acquaintance with the ecological concept of problems related to the relationship between man and his environment. Attention is focused on the research of the human population, natural resources, pollution problems, as well as the impact of various human activities on the destruction of the environment. The task of the course is to familiarize with the aim of preventing further degradation as well as improving the existing condition and optimal use of space in the future by using the achievements of modern science and technology. Human ecology is considered from the ecosystem aspect, as well as from the aspect of the urban environment, which is one of the goals of studying this subject. |
| Outcomes of the studying | Training students in fundamental and applied mastery of basic ecological principles, phenomena and processes, in observing the functioning of the biosphere, in recognizing natural phenomena and processes in the biosphere, as well as in the detection of anthropogenically conditioned phenomena, processes and their consequences for the living community and the biosphere as a whole. |
| Skills | Independent research fieldwork in the process of determining the basic characteristics of abiotic, biotic and anthropogenic factors, manifestations of their interaction and long-term forecasting of their interrelationship. |

BLC.008 Introduction to information technologies

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Basics of information theory. Basics of information technologies. Information technologies as part of the information system. Historical development of information technologies. Development of digital computer systems. Computer system structure - computer hardware. Computer hardware - devices for storing and saving data (memory). Hardware - input and output devices. Computer software - definition and division. Computer software. Communication technologies. Basics of computer networks. Internet and its services. | |
|-----------------------------|--|--|
| Aim of studying | By studying this subject, students get to know the basics of information technology, the concept of computers, hardware, software, application and impact on people. | |
| Outcomes of the studying | Mastering information and communication technology (knowing the components of computers and peripheral devices and their purpose, using MS OFFICE, knowing and using basic Internet services (E-mail, WWW), acquiring new knowledge based on previously acquired knowledge and experiences, developing logical and abstract thinking and a critical attitude in thinking. | |
| Skills | The student will be able to operate a computer and its peripheral devices, work in the MS Office package and use the Internet. | |

BLC.009 Business informatics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Web Design Basics: Web Design Definitions, Web Site Design Process, Designing for the User; Organization of the location and movement around it: Types and architecture of locations; Navigation in theory and practice; Connectivity: text, buttons, icons and images; Search and design; Maps, indexes and other aids; Web page design elements: Web page types and their organization; Text; Colors, images and background; Provision of interactivity using elements of the graphic environment; Website functioning and creation technologies: Internet protocols - HTTP, static and dynamic sites; Markup languages: SGML (Standard Generalized Markup Language); HTML (Hyper Text Markup Language); XML (eXtensible Markup Language); XHTML (eXtensible Hyper Text Markup Language); WML (Wireless Markup Language); Languages and technologies of dynamic web development: Script languages: JavaScript, VBScript, Perl, Python; Web technologies: CGI (Common Gateway Interface); ISAPI (Internet Server Application Programming Interface); PHP; ASP (Active Server Pages); Java; Java Server Pages (JSP); NET Framework; ASP.NET; XML. Web services: Concepts of XML Web services; Web service standards; SOAP: Simple Object Access Protocol; WSDL (Web Service Description Language), UDDI (Universal Description Discovery and Integration). |
|-----------------------------|--|
| Aim of studying | Acquisition of general information and knowledge about business information technologies; Acquiring general knowledge about the Internet-Intranet; Acquiring information and knowledge about designing business applications; Development of abilities and skills in the application of Internet technologies in solving business and management problems; Professional training for successful acceptance, monitoring and application of existing and new information technologies. |
| Outcomes of the studying | Knowledge of the basic needs of business and management systems for information, application of information technologies and information systems; Knowledge of the key aspects and design of Web applications for business purposes; Follow professional literature in Serbian (native) and foreign languages, preparation and independently hold presentations in Serbian (native) and foreign languages to professional and general audiences, and critically evaluate the presented professional topic; Understanding and application modern technical concepts and practices in Web information technologies; Understanding of the state and trends in the development of modern Web-oriented information and communication technologies (ICT), understanding their impact on the individual, organization and society, and assess their applicability in the given context. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of assignments, studying, consultations and seminar work. The lectures cover theoretical content and give conceptual explanations of concepts and certain Internet technologies. Within the exercises, emphasis is placed on the development of abilities and skills in the application of certain Internet technologies as support for business and management. Through seminar work, the ability to apply certain Internet and Web-oriented technologies and software tools is additionally developed with the aim of their integrated use in solving business problems on a given topic. |

BLC.010 Public relations

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | _ | 6 |

| Course content | The role of public relations for companies, other organizations and individuals. What is publicity? An example of using publicity in public relationship. Public relations, advertising and publicity. Is it better to invest in advertising, publicity or public relations? What is the role of public relations in creating events? What are mass communication media, and which are the most influential today? What does a good relationship with the media mean for those who deal with public relations? Which are traditional and which are new media? How important are new media for public relations? How important are public relations in crisis communication? What is lobbying and examples of lobbying? How important are public relations for people who deal with public affairs? How can NGOs influence the formation of public opinion? Side boards. | |
|--------------------------|---|--|
| Aim of studying | Students acquire theoretical knowledge with case studies, applicable in everyday practice in the field being studied. | |
| Outcomes of the studying | Students apply the acquired knowledge starting from the student internship until they are ready to immediately apply it in their work after completing their studies. | |
| Skills | Students acquire communication skills specific to the digital age and by using new media and digital tools. | |

BLC.011 Mathematics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Field of real numbers. A ring in the field of real numbers. Body-field in the set of real numbers. A system of linear equations with two unknowns. Polynomials (operations with polynomials). Graduation. Rooting. Functions, assignment and type of function. Function flow and zero function. Trigonometric functions. The limit value of the function. Performs a function. Integrals. | | |
|--------------------------|--|--|--|
| Aim of studying | By studying this subject, students become familiar with basic mathematical disciplines. The course covers algebra, functions, derivatives and integrals. | | |
| Outcomes of the studying | Acquiring new knowledge. | | |
| Skills | Recognition of rational and irrational numbers; Solving arithmetic expressions in the set of R numbers; Application of algebraic properties of calculation operations of addition and multiplication in the set R; Calculating the value of the polynomial independently of the variable; Operations with polynomials; Polynomial factorization; Recognition and application of binomial formulas and formulas for polynomials of the third degree; The term root as the inverse of the term power; Drawing graphs of functions and testing properties of functions; Defining the term derivative and integral of a function; Application of table extracts and integrals when solving problems; Calculating the derivative of the composition of functions; Solving the integral using the following methods: variable shifts, partial integration, method of undetermined coefficients (integral of a rational function), solving some simple types of integrals and rational functions. | | |

BLC.012 Marketing

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Concept and importance of marketing. Types of marketing and marketing mix concept. Marketing research and information systems. Research on motives and consumer behavior. Market analysis (concept, plan and procedure, methods). Dimensions and methods of psychological market research. Marketing strategy and market segmentation. Product as an instrument of marketing mix. Price as an instrument of the marketing mix. Distribution as an instrument of the marketing mix. International marketing, concept, role and choice of market. Marketing in trade, transport, agriculture, banking, tourism and sports. | |
|--------------------------|--|--|
| Aim of studying | Learning objectives to acquaint students with the basics of market orientation of business and marketing, the instruments on which marketing is based, as well as the activities of marketing management. | |
| Outcomes of the studying | Acquired basic knowledge, abilities and skills in market analysis as well as development, application and control of the application of marketing strategies, in the domestic and international environment. | |
| Skills | Students will acquire practical skills for the application of marketing techniques (creating a marketing plan, advertising techniques, integrated marketing communications, practical application of marketing market research, etc.). | |

BLC.013 Human potential management

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Evolution of Strategic Human Resource Management (SHRM), SHRM and organizational structure, strategy and culture, The role of the HR function in organizational performance, Talent management and global competitiveness, Organizational strategy and human resource planning, Recruitment strategies and human resource development programs, Human resource performance resources and global competitiveness, Knowledge management and diversity management, Reward strategies and motivation of human resources, Challenges of strategic human resources management. |
|-----------------------------|---|
| Aim of studying | Understanding the meaning, significance and application of strategic management human resources and knowledge management, adoption of characteristics, ways of creative thinking and behavior of managers and employees as key actors of the mentioned processes, a complete overview of human resources management through a wider set of managerial tools and concepts in terms of looking at the philosophy of human resources development and the phenomenon of knowledge management through the prism of how we live today and we work. |
| Outcomes of the studying | Interpret basic theoretical knowledge about the concept, importance, goals, activities and position of the human resources management function in the company. Evaluate the importance of strategic human potential management, and analyze the basic systemic approaches and challenges of human potential management in the global environment. Apply basic theoretical knowledge in the area of analyzing and designing workplaces, planning and attracting human resources, and recruiting and selecting human resources. Interpret basic theoretical knowledge in the field of human resources training, and evaluate methods of monitoring and evaluating employee performance, motivation and rewards. Analyze and evaluate the needs for education and development of human resources, development of professional careers, and improvement of working relationships. Analyzing, synthesizing and evaluating factual knowledge in the field of human resources management in the independent preparation of a seminar paper on a given topic. |
| Skills | Students possess the knowledge and skills necessary for principles and concepts in explaining and solving business problems in the field of human resource management and knowledge management. |

BLC.014 Entrepreneurship

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | The role of entrepreneurs and entrepreneurship in the development of national economies. Entrepreneur and entrepreneurship: varieties of defining approaches. The contribution of economic theorists to the development of entrepreneurship. Contribution of the Austrian school to the development of the theory of entrepreneurship. Approaches to the development of entrepreneurship theory. Entrepreneurs and business managers. Global phenomenon of entrepreneurial culture. Entrepreneurship and economic development. Globalization, digitalization and entrepreneurial society: 4.0 era. Types of entrepreneurship. Corporate entrepreneurship. Social entrepreneurship. Women's entrepreneurship. Family entrepreneurship. Strategies for entering an entrepreneurial venture. Creative entrepreneurial process. Startup process - starting a business from scratch. Innovative business models. Canvas business modeling. Lean startup process. Business forecasting and digital megatrends of the future. Identifying opportunities: from an idea to an entrepreneurial venture - techniques for arriving at business ideas. Models and forms of financial support for entrepreneurial ventures in entrepreneurial startups. Creativity and entrepreneurship. Entrepreneurial orientation and business performance. Soft innovation and creative industry. Digitization and innovation in the 4.0 era. Entrepreneurial ecosystem - concept and genesis of creation. The role of entrepreneurial education in the development of entrepreneurial culture. Entrepreneurial infrastructure institutions |
|-----------------------------|---|
| Aim of studying | The course enables students to understand the importance of entrepreneurship and innovation in all forms of organization and society and to understand entrepreneurship as a way of behavior and action. Students gain the opportunity to learn the basic principles of modern entrepreneurship in economic theory and practice, as well as to acquire the basic skills and competencies of creative thinking, proactivity, risk acceptance, planning and searching for opportunities, teamwork and turning opportunities and ideas into viable entrepreneurial ventures. One of the goals of the course is to create a positive working atmosphere in which all students will be able to fully express their potential and achieve the best possible success. |
| Outcomes of the studying | As one of the eight basic life competencies defined by the EU, needed by each and every individual for success in life, the course is designed in such a way as to encourage entrepreneurial behavior and action in students, from the individual level to the level of complex organizational systems in all sectors. After studying this course, students will acquire basic knowledge about the principles, ideas, strategies and concepts of creating business ventures based on innovations, the realization of which is associated with risks and uncertainty. Students will be able to find innovative solutions in modern business by applying key knowledge from entrepreneurial economics about methods and techniques of making economic decisions using modern information and communication technologies in connection with entrepreneurial ventures. |
| Skills | Students possess the knowledge and skills necessary for self-employment and further education in the field of economics, as well as independent establishment of a company, as well as assistance to the economy in opening new jobs. |

BLC.015 Basic of freight forwarding

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Basic terms and definitions of forwarding. Structure of forwarding functions, jobs and tasks. Commercial and legal position of forwarding companies, forwarding associations, FIATA association. Basic jobs in forwarding. Organization of forwarding companies. Special jobs in forwarding. Agent jobs in transport. Contracting and organization of freight forwarding operations. Documents in international commodity flows. Commercial trade documents. Transport documents. Freight forwarding documents and document inspection. | |
|--------------------------|---|--|
| Aim of studying | The main goal of the course is for students to become familiar with the basic functions and tasks of forwarding and to train them for tasks related to the design, organization and implementation of international import, export and transit goods flows. | |
| Outcomes of the studying | | |
| Skills | Carrying out and managing international import, export and transition operations related to the trade of various types of goods. | |

BLC.016 Basics of protection system

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

Introduction to protection systems. Hazardous materials, definition of hazardous materials, classification. Electric current. Systems effect of electric current on man. Technical standards for the application of electrical energy protection measures. Technical protection measures against the dangerous effects of electricity. Protection of people when working in electrical plants, on installations and when using high and low voltage electrical devices. Equipment and means of personal protection against the dangerous effects of electricity. Measurements and tests in the function of protection against the dangerous effects of electrical energy. Inspection and testing of equipment and means of personal protection against the dangerous effects of electricity. Dangers of fire and explosions when using electricity. Fire and species. The process of extinguishing fires and explosions (effects and means). Types of extinguishing agents (water, foam, powder, CO2,) Classification of extinguishing agents. Firefighting processes. Fire detection and alarm system. Firefighting equipment. Apparatus (portable and transportable) for extinguishing fires. Hydrant network (external and internal). Stable fire extinguishing installations. Basic principles of **Course content** extinguishing tactics (evacuation, localization, liquidation). Shutdown operational plan. Protection of buildings from fire. Organizational fire protection measures. Application and protection from non-ionizing radiation: static fields of industrial frequency, radio and TV, satellite and mobile communications, basics of laser technology; standards, norms and methods of protection. Radiation sources; influence on man; applications and protection methods. Ultraviolet radiation: radiation sources; impact on humans and applications; harmful effects; standardization and protection measures; H -radiation (X-ray); origin and sources of radiation; applications; methods for measuring and standardizing permitted absorbed energies; impact on humans and methods of protection. Ionizing radiation: radioactive radiation; the law of radioactive decay; alpha, beta, gamma radiation, neutron radiation, cosmic radiation; law of absorption; doses and dosimetry of ionizing radiation. Application and protection against ionizing radiation: detectors; standards, norms and protection methods. Aim of By presenting and interpreting elementary principles of chemical processes, build the basis for a systemic approach to engineering process analysis in process units and overall process systems. studying Gaining experience for the application of the basic procedures of the occupational safety system **Outcomes of** in: planning the development and production elements of the production process. Development the studying and preservation of occupational safety systems and procedures for improving conditions in the working environment. **Skills** Implementation of the basic procedures of the occupational health and safety system.

BLC.017 Business law

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | _ | 8 |

| Course content | Concept of business law and legal sources. Legal entity, breach of legal personality. Business entities, status symbols. Establishment, acts, registration. Assets, business name and other attributes. Representation of the company. Companies of persons. Partnership. Limited partnership. Characteristics, establishment, management. Capital companies. Limited liability company. Characteristics, establishment, management. Society capital. Joint-stock company. Features, establishment management. Liquidation and bankruptcy of the company. Termination of an insolvent company. Protection of industrial property, competition and consumers. Inventive right. The right of distinctive signs. Competition law. Consumer right. Contracts in the economy. Basic contractual principles. Negotiations. Conclusion of the contract. Legal effects of the contract. Special contracts. Foreign investments, free zones. Specialized companies. Banks and other financial organizations. Insurance companies. Stock exchanges. Central registry. Investment funds. Broker-dealer companies. Insurance contract. Concept and properties. Types of insurance. Obligations of the insurer. Insurance policy. Reinsurance. Banking operations. Legal and institutional framework. The copper secret and the bank's responsibility. Current account. Credit agreement. Deposit operations. Factoring. Forfeiting. Financial leasing. Stock exchanges and the capital market. Legal and institutional framework. Primary and secondary market. Domestic and foreign stock exchanges. Brokers and dealers. Investment funds. Investment advisors. Protection of small shareholders. Corporate governance standards. Letter of credit and bank guarantee. Letter of credit. Bank guarantee. Securities. General characteristics. Stocks and bonds. Draft and check. Promissory note. | |
|-----------------------------|---|--|
| Aim of studying | The primary goal of the course is to acquire basic and general knowledge in the field of business law, with an emphasis on status and contractual company law. Acquaintance of students with concepts, categories, institutes and institutions related to economic entities (company law), legal affairs of economic entities (contracts in the economy), payment instruments used by economic entities and payment security (banking and securities). | |
| Outcomes of the studying | It is expected that the acquired knowledge in this area will enable students to understand the organizational structure of business entities (status company law), as well as the legal relationships they enter into (contracts in the economy), to understand the legal significance of banking transactions and securities and their application. In practice, the basis of industrial property rights, copyright and other related rights. | |
| Skills | It is expected that by mastering the course program, the student can successfully: properly understands the legal position of different forms of business companies and clearly identifies the corpus of legal regulations that are of indirect or of immediate importance for different legal forms of business companies; master the skills that will enable them to apply the acquired theoretical knowledge in practice; properly identifies the corpus of legal regulations that regulate the areas of contracts for goods traffic, banking operations and securities and identifies them and understands the specifics of goods traffic contracts; they should master the skills that will enable them to draw up certain forms of trade contracts on his own; master the skills that will enable them to independently fill out specific commodity and monetary securities. | |

BLC.018 Management of finance

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Science of finance and division of finance. Management of company finances. Financial function of the company. Financial policy and principles of financial policy. Concept and rules of financing. Financial planning and control. Optimal capital structure of the company. Financial and borrowing of companies. Financial analysis. Analysis of the company's financial and profitability position. Business, financial and overall risk in the company. Management of capital fixed and working assets. Management of company obligations. | |
|--------------------------|---|--|
| Aim of studying | Getting to know and mastering basic terms from financial theory and practice, as well as their content and financial flows in the company. Mastering different methods of managing company finances. | |
| Outcomes of the studying | Understanding of financial issues and the ability to manage the company's finances. | |
| Skills | The ability to conduct financial analysis, the results of which are the basis for making correct operational, strategic and financial decisions in the management of the company. Ability to independently manage funds, liabilities and capital of the company. Making financial decisions. | |

BLC.019 Protection of the environment

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Air protection (Purification of waste gases, Parameters Processes of separation of particles of solid materials, Dry separators, Wet separators, Electro filters, Parameters of the gas purification process, Parameters of the gas purification process: Absorption method, Chemisorption method, Catalytic method). Water protection (The recipient, Wastewater – categorization, Wastewater treatment, Purification from mechanical impurities). Land protection (Land classification, Amount of soil pollution, Rational use and protection of land and vegetation, Application of mineral raw materials, Land quality control, Processing technology of excavated rock masses, Technical and biological reclamation, Analyzes of ash and slag, Classification, design, exploitation, liquidation and re-cultivation of landfills). Protection against noise, vibration and infrasound (Methods of acoustic calculations, Protection against noise, vibrations and infrasound, Control of noise, vibration and infrasound levels, Devices for measuring noise, vibrations and infrasound, Protection measures against noise, vibration and infrasound). |
|--------------------------|---|
| Aim of studying | Objectives of studying the subject: acquisition of basic knowledge in the field of environmental protection, study of basic terms and principles of environmental protection, legal regulations in the field of environmental protection in our country and in the world and acquiring general knowledge about environmental protection policy. |
| Outcomes of the studying | Theoretical, practical and applied knowledge and skills are the outcome of the study program in the function of acquiring theoretical and practical knowledge and skills in basic studies as a prerequisite for the implementation of the study program. |
| Skills | Implementation of professional knowledge. |

BLC.020 Methodology of scientific research

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Science: definitions and understanding, object and language of science. General scientific research methods Special scientific research methods. Individual scientific research methods: techniques and procedures; Interview and survey. Forms of writing in social sciences; Essay writing - descriptive and argumentative essay, topic selection, essay organization. Archimedes' spiral of discovery. Essay writing - developing analysis, arguments and examples, establishing the balance of the essay; Editing students' essays - feedback technique: constructive criticism. Basic knowledge factors; Hypotheses. Research: basic roles and research methods; Methodological starting points in research; Search for documentation - bibliography. Characteristics of written works; Characteristics of acceptable research work. Methodology of preparation of seminar and diploma work. Revision. | |
|--------------------------|---|--|
| Aim of studying | By studying this subject, the student gets to know the principles of scientific and research methodology and the elements of scientific research practice. Students are trained to understand the scientific system, the basics of methodology, the relationship between methodology and scientific strategy, as well as to master the skills of empirical scientific research. The main purpose of studying the course is the acquisition and application of knowledge in the field of research methodology. | |
| Outcomes of the studying | Upon completion of the course, students will be able to use basic knowledge from the fields of philosophy and logic in order to understand scientific research, then effectively evaluate information resources, as well as to independently apply the appropriate methods of producing scientific papers or research reports. Students will be able to independently conduct scientific research, process and present results and solve certain research tasks and problems. | |
| Skills | Understanding and knowledge of scientific research methods. | |

BLC.021 Information systems

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Basic concepts, modeling. Information systems development models: information systems life cycle, Prototype development. System analysis - Structural system analysis. Data modeling: Object models - links, Relational model. RIS, Applied modeling. Standardization in the field of software engineering, CASE tools: Concept, types. Implementation of information systems. Use and maintenance of information systems. Analytical processing: information systems for decision support. Intelligent information systems: Definition, components, types. Basics of electronic business. Information systems security and control. Ethical, social and global aspects of information systems. Information systems development strategy and trends. |
|--------------------------|--|
| Aim of studying | Mastering the basic terms in the field of information systems. Mastering the IS development process. Acquiring knowledge about how to use IT in the company, in order to improve its quality, dynamics and competitiveness. |
| Outcomes of the studying | Mastering the subject material, complementation of exercises, independently completed and defended project work, the student is educated to design IS independently or in a team, and optimally applies the acquired knowledge in practice. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of assignments, study, consultations and seminar work. Teaching is carried out through lectures accompanied by slides and presentations. The most important teaching areas have "CASE STUDY" on a characteristic example. |

BLC.022 Labor law

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Concept, subject and development of labor law. Sources of labor law. The right to work, work relations and forms of work outside the work relationship. Unemployment and the rights of the unemployed. Recruitment and regulation of employment. Deployment of employees. Professional training of employees. Working hours. Vacations and absences. Dormant employment relationship. Attitude towards work and responsibility of employees (material, misdemeanor and criminal). Termination of employment. Realization and protection of employee rights. Collective rights of employees and settlement of collective labor disputes. Collective rights of employers. Special regime of labor relations. |
|-----------------------------|--|
| Aim of studying | The goal of the course is to prepare students for specific business tasks that they will encounter in the regulation, realization and protection of individual and collective labor relations, realization of social rights from pension and disability insurance and health insurance, monitoring of regulations and court practice. The goal is for students to become familiar with certain topics that are significant for their later work in practice, which is why the emphasis is placed on the analysis of specific cases and the practical application of the theory covered in lectures in specific situations. |
| Outcomes of the studying | Learning outcomes indicate the knowledge, skills and competences that the student acquired by fulfilling obligations and passing the exam in the subject Labor law. The student becomes familiar with the basic concepts and logic of labor law. Agreed therefore, students will get to know the basic legal norms governing employment contracts, labor relations, and the rights and obligations of workers and employers. |
| Skills | Recognize and apply legal sources and basic principles of labor law. Connect institutes and concepts of individual labor law, apply regulations. Connect institutes and concepts of collective labor law, apply regulations. Analyze cases from practice, practical application of labor law theory. |

BLC.023 Digital strategy of business

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | What is management? What are the functions of management? Which is the most important function of management? What do managers do? What does it take for someone to be a manager? Types of managers? Why management is important? What is a tactic and what is a strategy? What is communication management? What is leadership? Why does every business need a strategy? What is operational management? What is organizational change? What is organizational innovation? What are the organizational challenges of innovation? What are the domains of digital transformation? How to manage client networks? How to turn data into an advantage? In what way did the Internet influence the digital transformation of business? Which sources helped you the most to master the subject of digital business transformation? |
|--------------------------|---|
| Aim of studying | For students to acquire business knowledge in the digital economy and the application of digital strategies in digital business and digital transformations of the company. |
| Outcomes of the studying | The acquired knowledge is applicable in practice and students can apply it already during the student internship. |
| Skills | Students acquire skills on how to use digital tools and digital platforms in the application of digital business strategies in practice. |

BLC.024 Business analyses

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Methods and techniques of business analysis. Controlling. Financial statements as a subject of analysis. Horizontal and vertical analysis. Analysis using financial indicators: liquidity indicators, business activity indicators, financial structure indicators, profitability indicators, market value indicators. DuPont analysis system. Usability and limitations of analysis using indicators. Compilation of cash flow statements using the direct and indirect method. Cash Flow analysis. Analysis of net working capital. Risk analysis (business, financial and overall). |
|-----------------------------|--|
| Aim of studying | Understanding the importance of financial analysis and mastering financial analysis tools. Mastering the financial indicators that are used when analyzing the company's operations. |
| Outcomes of the studying | Knowledge of financial instruments and indicators that are used to analyze the company's operations and its financial statements. After the analysis, the entire problem of the company's operations can be viewed and the manager's interest in the new logic of financial thinking can be awakened. |
| Skills | Independent analysis of the company's operations, analysis of the company's financial statements using financial indicators. |

BLC.025 Business intelligence

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Introduction to business intelligence. Basics of decision-making using business intelligence systems. Connection of information technology, economic theory and business strategy. Business intelligence systems and software support. The structure of an effective business intelligence system. Connection with data storage, network system and artificial intelligence methods. Technologies for constructing business intelligence systems. On-line analytical processing. Business analysis of warehouse data. ABC analysis, ranking, trend. Data mining and business intelligence. Learning from Past Data - Neural Networks for Prediction, Classification and Pattern. |
|--------------------------|--|
| Aim of studying | Introducing students to the concepts of business intelligence. The course should present the student with a range of tools and techniques for business intelligence. The student should acquire practical knowledge and skills that enable them to effectively use business data with the aim of making quality business decisions. |
| Outcomes of the studying | Enabling students to learn to make timely decisions in conditions when it is necessary to analyze a large amount of data, when decision-making time is limited and when it is necessary to make the right decision. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of assignments, study, consultations and seminar work. |

BLC.026 Logistics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Basic concepts from the field of logistics. Logistic principles. Place and role of logistics in industry, trade and service activities. Logistics subsystems. Order fulfillment system. Packaging system. Storage system. Inventory management. Transportation system. Procurement logistics. Production logistics. Distribution logistics. Logistics of return materials. |
|--------------------------|--|
| Aim of studying | The main goal of the course is for students to become familiar with logistics as a science and business philosophy, to see the place and role of logistics in various economic and social systems and to become familiar with the basic subsystems of logistics, processes and procedures for planning and shaping logistics jobs and tasks. |
| Outcomes of the studying | Students will be able to properly recognize logistical problems in various social and economic areas and to receive the basic principles, approaches and methods of solving those problems. |
| Skills | Application of logistic solutions in various economic and social areas. Using different methods and principles when solving logistical problems. |

BLC.027 Basics of programming

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Introduction to the C programming language - program parts and lexicon. Creating the basic structure of the program. Identification of basic data types and data structures. Variables and literals. Representation of data and operations on it. Standard libraries. Arithmetic and logical operations. Program flow control. If-then-else and switch-case statements. Loops - while, dowhile and for loops. Working with strings. Functions (subplots). Working with pointers. |
|--------------------------|--|
| Aim of studying | The aim of the course is to introduce students to the basics of computer programming through an introduction to basic programming languages and through understanding the functioning of computer programs, as well as the acquisition of practical knowledge in the field of programming in the C programming language. |
| Outcomes of the studying | Upon completion of the course, students will be able to: understand the concepts of variables and data types, scope of variables, to use control structures, loops and subroutines in solving problems and to independently create applications. |
| Skills | Within this course, students will acquire the following skills: writing programs independently using the C programming language in the Visual Studio development environment, writing programs that use different control structures of conditional statements <i>if, else, switch-case</i> , then loops for, while and do-while, writing various functions using the C programming language and using pointers in the C programming language. |

BLC.028 Mathematics 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | The term matrix. Operations with matrices. Determinants. Laplace's rule. Sarus rule. System of linear equations with three unknowns (addition method). System of linear equations with three unknowns (determinant method). Combinatorics. Permutations without repetition. Permutations with repetition. Variations without repetition. Variations with repetition. |
|--------------------------|--|
| Aim of studying | By studying this subject, students become familiar with basic mathematical disciplines. The subject includes matrices, determinants and combinatorics. |
| Outcomes of the studying | Acquiring new knowledge. |
| Skills | Skills are: elementary matrix transformations; regular and singular matrices; application of rules in solving systems of linear equations with three unknowns; recognition and application of formulas in solving combinatorics tasks. |

BLC.029 Basics of law

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | The state as a legal and political organization. The relationship between the state and law. Functions of the state legal order. State official, authority body, authority. Monarchy, republic. Unitary state. Centralization and decentralization. Form of state organization of Bosnia and Herzegovina. Autocracy. Democracy. Unity of power and division of power. Concept of rights. Legal norm (concept and types). Elements of a legal norm. Legal act. Sources of law. Material sources of law. Conceptual sources of law. Formal sources of law. Legal relations. Elements of legal relations. Subjects of law. Objects of law. Interpretation of law. Forms of interpretation of law. |
|-----------------------------|--|
| Aim of studying | Acquaintance of students with the basic elements of the state as an organization and with the specificities of states in relation to other organizations. Students study the internal organization of the state, state bodies and state activities. The forms of the state, that is, how it can be organized, are also studied. The concept of law and its foundations, as well as its connection with the state, are also studied. |
| Outcomes of the studying | Understanding the concept, elements, functions, tasks and organization of the state and distinguishing the state from other types of government and other social organizations and creations and the relationship of the state with them. Knowledge of the basics of theoretical and scientific thinking about the state. Understanding the legal organization of the state, the state as a legal entity, the legal functions of the state, distinguishing the types of state bodies, their functions and mutual relations. Recognition of different forms of the state and the possibility of an independent critical assessment of the value of individual forms of state. |
| Skills | The subject represents basic, introductory and general legal science. By studying this science, students acquire basic, introductory and general knowledge about the state and law in general, which enables them to adequately follow other legal disciplines that are studied as part of their studies. |

BLC.030 Media literacy

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Defining the term and types of media, nature of media, Traditional media versus new media, similarities and differences, and converged media. Harmful media content and its impact on the audience (violence in traditional and new media). Media stereotypes, prejudices and advertisements and their influence on the audience. The digital age and the new communication paradigm. Media and youth, citizen journalism. The concept, origin, and goals of media literacy. Development of the concept of media literacy (surrounding countries, European and American experiences). International conventions and recommendations for the introduction of media literacy in the environment and the world. Development of information, audiovisual and digital literacy (Literacy of the new age). Media ethics and ethics in new media. Structure and indicators of media literacy. Strategies for increasing media literacy. Analysis of printed and audio-visual material. Analysis of online materials from websites to social networks and platforms for uploading and reproducing information. |
|-----------------------------|--|
| Aim of studying | The goal is to introduce students to the term, structure and concept of media literacy, and to develop technical, critical and practical competencies for using, understanding and participating in the media. Also, familiarize them with legal acts and regulations related to this area. One of the goals is to make them aware of their dependence on the media and through familiarization with the basics of the concept of media literacy and mass communication, teach them to navigate safely and successfully in the media environment, as consumers, and not just as consumers of media content. |
| Outcomes of the studying | After taking this course, students should master the basic concepts and objectives related to media literacy. To learn the application of the five main issues of media literacy in the everyday media environment, to critically analyze and evaluate various media content, with special reference to the harmful content that abounds in the media blizzard they live in. Learn the structure of media literacy, and master the legal regulations in this area. |
| Skills | Knowledge to understand the contemporary media and communication environment and develop a critical attitude and attitude towards it. |

BLC.031 Web design

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Web design - concept, history, tools and techniques, multimedia, idea, intention, message, target groups, aesthetics. Elements and principles of web design; examples of different design solutions, analysis. Elements of design: color, volume and space, line and texture, shape and form, letters/typography. Design principles: simplicity and uniformity/harmony. Design: dominance/emphasis, similarity/contrast, proportion and hierarchy, balance, movement and rhythm, repetition, pattern and gradation. Installation of the server package required to run the web service. Introduction and installation of open source platforms, introduction and installation of software packages. Work in FrontEnd programming languages HTML/XHTML, CSS (Cascading Style Sheets), basics of JavaScript language, script language. Cascading style sheets, selector types, HTML element selectors, class selectors, attribute selectors. JavaScript, language syntax, page event processing, access to HTML document elements, HTML HOME. Protocols on the web: HTTP, HTTPS protocols, methods, headers, URIs, requests and responses. CSS Basics. Linking to HTML. CSS selectors. CSS pseudo-class selectors. Basics of the JavaScript scripting language. Linking HTML pages with JavaScript. JavaScript events. HTML form validation using JavaScript. Web server principles, CGI interface. Java web programming, servlets and servlet containers. PHP language, syntax, variables, strings, page generation, regular expressions, sessions. Access to databases from web applications. XML, structure, applications. Basics of the JQuery scripting language. Creating segments through the CMS WordPress platform. |
|-----------------------------|--|
| Aim of studying | The aim of the theoretical part of the course is for students to become familiar with the basic elements and principles of design, through numerous examples from art, design in general and web design. The goal of the course is to prepare students for the creation of complex web applications using popular technologies. Getting to know the basics of web application design and development through mastering the "FrontEnd" programming languages HTML, CSS and PHP as well as scripting languages (JavaScript, JQuery). |
| Outcomes of the studying | A student who successfully completes the course will have the following competencies: - Ability to create an interactive website. Designing a website with various scripting languages. Understanding of server programming concepts and technologies. Web application development with server programming with database support. |
| Skills | Through the lectures, skills and abilities are acquired for website development, respecting the content and purpose of the site, the target group, and the quality aesthetic audio-visual requirements of this area. Through the practical part of the course, the student is introduced to the development and use of HTML, XHTML, CSS, PHP and JavaScript languages, Internet applications, open source platforms as well as certain graphic tools. The purpose of introducing students to the language script and style is to gain practical experience necessary for quality planning, design, creation, evaluation and maintenance of web pages. Through the subject, the student acquires skills for creating and working in Web open source systems, as well as the best design techniques that he immediately and practically applies. |

BLC.032 English language 1

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 15 | 0,5 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | As introduction to learning a foreign language, English language 1 focuses on the basic language and grammar structure. Students are encouraged to use communicative method of learning using examples both from the teaching corpus, as well as additional literature, video-auditory materials, everyday life situations and language. |
|--------------------------|--|
| Aim of studying | Acquiring knowledge of English language and culture. Mastering basics of everyday conversation in English language. Student should be able to present themselves, define key goals in research, and understand everyday conversations. |
| Outcomes of the studying | Basic communication in target language. Overcoming language barriers and fear of using English language. Understanding other people and their culture. |
| Skills | Speaking, writing, listening, conversation and understanding basics of English language as a foreign language. |

BLC.033 English language 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 15 | 0,5 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | English language 2 focuses on developing basics of English language that students acquired mastering English language 1. On this course students should develop their knowledge of vocabulary, grammar, language structures and pieces of language. Besides everyday topics, some business, IT and Graphic design themes are discussed. |
|-----------------------------|---|
| Aim of studying | Acquiring knowledge of English language and culture. Mastering basics and lower intermediate level of everyday conversation in English language. Student should be able to present themselves, define key goals in research, understand everyday conversations, basics business English as well as IT English and graphic design English. |
| Outcomes of the studying | Basic communication in target language. Overcoming language barriers and fear of using English language. Understanding other people and their culture. Development of speaking skills, writing skills, grammar and vocabulary, both in academic English and English for specific purposes. |
| Skills | Speaking, writing, listening, conversation and understanding lover intermediate level of English language as a foreign language. |

BLC.034 English language 3

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 15 | 0,5 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | English language 3 focuses on developing basics of English language that students acquired mastering English language 2. On this course students should develop their knowledge of vocabulary, grammar, language structures and pieces of language. Besides everyday topics, business, IT and Graphic design themes are discussed in more detail developing their understanding of both theme itself, as well as the language used. Grammar is on more advanced level, as well as vocabulary. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge of English language and culture. Development of language structures, grammar structures, vocabulary and all four of language skills incorporating the acquired knowledge into both academic language and language for specific purposes. |
| Outcomes of the studying | Development of speaking skills, writing skills, grammar and vocabulary, both in academic English and English for specific purposes. Upgrading of four language skills as well as development of user experience. |
| Skills | Speaking, writing, listening, conversation and understanding intermediate level of English language as a foreign language. Language usage in both professional and private environment. |

BLC.035 English language 4

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 15 | 0,5 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | English language 4 focuses on developing usage of English language that students acquired mastering previous courses. On this course students should develop their knowledge of grammar, vocabulary, speaking and listening skills in both academic English and English for specific purposes. Students are advices to use not only basic literature but to read and study available materials in professional literature. Special attention is paid to public speaking and professional presentation. |
|--------------------------|--|
| Aim of studying | Upgrading of the previous acquired knowledge on previous courses. Development of four language skills to the level of intermediate level. |
| Outcomes of the studying | Development of speaking skills, writing skills, grammar and vocabulary in both English for specific purposes and academic English. Upgrading of four language skills as well as development of vocabulary for specific purposes. Mastering the skill of public presentation in professional English. |
| Skills | Speaking, writing, listening, conversation and understanding intermediate level of English language as a foreign language. Language usage in both professional and private environment. Public presentation in academic English. |

BLC.036 English language 5

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 15 | 0,5 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | English language 5 focuses on developing usage of English language that students acquired mastering previous courses. Key feature of this course is English for specific purposes. On this course students should develop their knowledge of vocabulary for specific purposes, and Professional Vocabulary, as well as other language structures. Focus of this language course is the language of the professions. Students are advised to use not only basic literature but to read and study available materials in professional literature. Special attention is paid to public speaking and professional presentation. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge of English language for specific purposes. Mastering vocabulary and incorporating it in both professional usage and academic usage. Development of language structures, grammar structures, vocabulary and all four of language skills incorporating the acquired knowledge into both academic language and language for specific purposes. Upgrading of the previously acquired knowledge on previous courses. |
| Outcomes of the studying | Development of speaking skills, writing skills, grammar and vocabulary in English for specific purposes. Upgrading of four language skills as well as development of vocabulary for specific purposes. Mastering the skill of public presentation in professional English. |
| Skills | Speaking, writing, listening, conversation and understanding advanced level of English language as a foreign language. Language usage in both professional and private environment. Public presentation in English for specific purposes. |

BLC.037 Banking

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Banks as financial actors. Banking systems in developed market economies and the domicile banking system. Deposit potential of banks. Credit placements of the bank. Loan price and interest mechanism. Means of security. Bank balance management. Bank's capital and capital management. Principles of banking operations. Analysis of the bank's performance. Payment transactions and payment transaction instruments. Risks and risk management in banks. Electronic banking. Mobile banking. Modern banking operations and products. |
|--------------------------|--|
| Aim of studying | Getting to know the basic concepts of the monetary and banking system, the organization and work of banks, and traditional and modern banking products and services. |
| Outcomes of the studying | Understanding of banking issues and the ability to perform traditional and modern banking tasks. |
| Skills | Processing the loan application, creating an annuity plan and making a decision on loan approval. Calculation of interest on deposits and loans. Businesses and instruments of domestic and international payment transactions. Risk management in banking. |

BLC.038 Internet marketing

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | The concept of the Internet. Development of teams and types of websites. Social media and social networking sites. Blogs (types, benefits, disadvantages). Video on the Internet. Product and site branding. Planning and development of the site. Electronic commerce, CRM. Traffic analysis and measuring the success of the Internet campaign. Loyalty programs. SEO site. Optimization. Security aspects of Internet sites, impact on Internet marketing. |
|--------------------------|---|
| Aim of studying | Student acquires theoretical and practical knowledge needed for the independent implementation of a marketing campaign on the Internet. Get acquainted with the key technologies of the Internet and its most popular services from the aspect of using them for marketing purposes. |
| Outcomes of the studying | By studying this subject, students will acquire a number of general and professional competencies, and they will also acquire the latest knowledge in internet marketing, as a specialized marketing discipline. |
| Skills | Students will acquire practical skills for the application of internet marketing techniques (promotion and advertising of various contents on social networks, basics of web site programming, creation and promotion of private label with marketing and business plan). |

BLC.039 Ecology engineering

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Basics of ecotoxicology. Concept of "healthy" and damaged ecosystem. Assessment of exposure of organisms to harmful and toxic substances. Assessment of the effects of pollutants on ecosystems and human health. Environmental risk assessment and risk management. Work environment. Impact of tractors and mobile equipment on soil, water and air. Impact of other means and activities on soil, water and air. Facilities - the influence of the type of facilities for housing animals. The ergonomic characteristics of tractors and working machines are important for the workload of the tractor driver and the conditions of working correctness. Impact on workers. Legal regulations in the field of environmental and working environment protection in our country. |
|--------------------------|--|
| Aim of studying | The subject should enable the student to acquire knowledge / understanding of the description of ecotoxicology and ecosystem pollution, as well as work organization and legality of safe exploitation of machines and devices, measures of hygienic-technical protection during operation and maintenance of machines and devices. |
| Outcomes of the studying | Acquiring the skills of proper selection and efficient organization and economical exploitation of machines, devices, apparatus, tools and equipment, adequate adjustment of machines, tools, apparatus on the basis of biological, technological and exploitation parameters of production. |
| Skills | Effective organization and system management. |

BLC.040 Foreign trade business

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | The concept of foreign trade and the principles of foreign trade operations. Theories of foreign trade. Subjects of foreign trade business. Foreign trade policy instruments. Political economy of foreign trade policy. International negotiations and foreign trade policy. Specific international markets as an instrument of foreign trade. Foreign trade policy in developing countries. Foreign trade policy of the European Union. Intellectual property in foreign trade operations and its protection. Organizing foreign trade operations; Classic and complex foreign trade deals. Foreign trade network of Bosnia and Herzegovina. Disputed issues in foreign trade policy. |
|-----------------------------|---|
| Aim of studying | Upon completion of the course, students will acquire basic knowledge about the instruments of foreign trade policy, then about the types of foreign trade deals, the ways of their implementation, and get to know the risks that foreign trade deals entail. Students will familiarize themselves with the documents necessary in foreign trade transactions, as well as with the techniques and phases of performing a complete foreign trade business. |
| Outcomes of the studying | Through studying this subject, students will acquire a number of general and professional competencies, will be familiar with the basic principles of foreign trade operations and will understand the role and importance of foreign trade for the national economy. Students will also be thoroughly acquainted with the subjects of foreign trade policy and multilateral institutions of international trade, as well as with the political economy of foreign trade policy, i.e. the importance of international negotiations and other ways of trade liberalization. |
| Skills | Also, students will acquire practical skills for the application of foreign trade policy instruments, as well as the organization of foreign trade operations, such as classic import and export of goods, as well as international exchange of services, capital and intellectual property. |

BLC.041 Insurance management

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Concept of insurance. Significance, principles, subjects of insurance. Elements of insurance. Insurance premium. Insurance funds. The concept of risk. Risk function as an element of insurance. Definition of risk. Risk management. Division of insurance. Life and non-life insurance. Business liability insurance. Types of insurance. Car insurance. Auto liability insurance. Transport insurance. Types of insurance. Credit insurance (Domestic credit insurance. Consumer credit insurance. Housing loan insurance. Insurance of other types of domestic credit insurance). Credit insurance (Agreement on credit insurance. Subject of insurance). Duration of insurance. Participation of the insured in damages. Insurance techniques. Insurance policy. Insurance certificate. Payment of damages. Insurance market. |
|-----------------------------|--|
| Aim of studying | Within this course, students acquire theoretical and institutional knowledge in the field of insurance, while realizing the role and importance of insurance for the individual, society and the economy. In addition, students are introduced to various aspects of insurance and the organization of insurance in Republic of Srpska, Bosnia and Herzegovina and the surrounding area. |
| Outcomes of the studying | After taking the course, students will: acquire fundamental knowledge of the theory, principles and techniques of insurance management; identify the stages of origin, development and future of the insurance industry; be able to evaluate the importance of insurance in economic theory and practice. |
| Skills | Students will acquire theoretical and practical knowledge in the field of insurance management, and will be able to evaluate the functions of insurance management in the modern economy. They will be able to independently research, process and present the acquired knowledge. |

BLC.042 Investments

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Concept, types and basic characteristics of investments. Investment management. Management of investment projects. Investment financing. Investment project cash flows and discount account. Financial assessment of investment projects. Concept, types and management of project risks. Participants in the financial markets. Financial markets and instruments. Securities markets. Investors and investments. Investment objects. Investment policy. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge in the field of managing the investment process and mastering the basic methodologies, methods and techniques used in the field of investment issues. |
| Outcomes of the studying | Knowledge of the preparation and assessment of investment projects in real estate and investing in securities. Knowledge of the investment management process and determining the economic and financial justification of investments. |
| Skills | Preparation and creation of investment studies, determination of economic and financial justification of investments, management of the investment process. Investing in securities. |

BLC.043 Auditing

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Defining the place, role and importance of the term audit: Terms: audit, auditor, company and financial information, the term audit and auditor, audit-related services, audit purpose, audit objectives, International Accounting Standards, International Audit Standards, types of auditors, external (independent), internal auditors, audit firms. Ethics for professional accountants: Defining ethics; The need for ethics; Basic principles and guidelines for professional accountants and parts of the code, (Code of professional ethics), concepts of professional ethics (rules of conduct, standards of conduct, interpretation of rules of conduct, application of the code). Global audit process: Defining the general objective of the audit; Defining audit objectives based on management statements; Risk and significance in the audit procedure; Usual audit procedure. Concept and function of internal audit. Concept, functions and types of external audit. System of internal control and internal audit - terms, similarities, differences. Concepts of auditing, risk, materiality and evidence in auditing. Audit planning and analytical procedures: Audit engagement planning procedure; Analytical procedures; Material planning (significance); Risk assessment of the audit engagement; Audit risk model. Audit reporting: Methods of presentation, giving recommendations, monitoring the execution of recommendations. |
|--------------------------|--|
| Aim of studying | Theoretical-analytical and applied knowledge in the field of contracting, planning and auditing with familiarization with all relevant methods, techniques and procedures for successful auditing in modern conditions. |
| Outcomes of the studying | It is expected that students master the knowledge of the basics of auditing, types of auditing, the auditing process itself, up to audit reporting, as well as the practical auditing process itself. |
| Skills | Students should be trained to work according to audit standards and to be trained to create an audit report themselves. |

BLC.044 Electrotechnics and electronics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Electrostatics. Kuhl's law. Electric field. Gauss's law. Electrostatic induction. Capacitors. Electric current. Direct currents. Electric circuits. Kirchhoff's first and second laws. Electric circuits with capacitors. Magnetic field. Electromagnetism. Ampere's law. Bio-Savard's law. Magnetic circuits. Faredey's law. Inductance. RLC circuits. Basics of electronics. Boosters. Basic electronic components. Microprocessor systems. |
|--------------------------|---|
| Aim of studying | The aim of the course is to present students with the basic concepts of electromagnetism. Getting to know the basic concepts and methods of analysis of electrostatic fields, electric circuits and electromagnetic induction. Introduction to concepts, methods of analysis and design of electrical circuits and microprocessor components. |
| Outcomes of the studying | Students gain knowledge about functionality, construction and maintenance of electrical circuits, design and engineering of basic electronic components and microprocessor systems. |
| Skills | Students will be able to state the basic properties of semiconductor materials, explain the working principles of basic electronic elements, and know how to calculate the basic parameters of semiconductor materials and electronic elements. Know the concepts, methods of analysis and design of electrical circuits and microprocessor components. |

BLC.045 Trade management

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Defining trade and trade management. Defining the customer. Key players in trade - suppliers and sellers. Defining both. Types of trading companies. Is marketing or trade more important? What is the relationship between marketing and sales? Defining brand management. What is trade marketing? What is merchandising? What does procurement management mean? What is the function of the supplier? What do disruptions mean in the procurement world? What is category management? How is the negotiation in the procurement process going? What does the warehousing of goods mean in its management? Types of sales. What is logistics and why is it important in trade? Digital economy. Trade in the digital economy. |
|--------------------------|---|
| Aim of studying | Introduce students to traditional and modern trade, especially the digital economy and trade in it. |
| Outcomes of the studying | Acquisition of theoretical knowledge, familiarization with case studies and training of students for practical work in the store. |
| Skills | Acquisition of skills for application through student practice of learned theoretical knowledge and application in work in the store. |

BLC.046 Business ethics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Ethics and Business, Moral Reasoning in Business, Judicial Economic System, American Capitalism, Corporations and Morality, Safety, Risk and Environmental Protection, Reporting, Marketing, Truth and Advertising, Intellectual Property Protection, Information Technology, Ethics and Business, Discrimination, Ethical investing, International companies, multinational morality, Corrupt environment, cultural diversity and international business, Hunger, natural resources and ethics, New imperative in business. |
|-----------------------------|--|
| Aim of studying | The main goal of the course is to adopt the concept of morality and ethics in modern business, to expand their influence on working relationships and relationships with stakeholders. The goal of applying business ethics is to familiarize students with practical problems and how to solve them. |
| Outcomes of the studying | By mastering this subject, the student will be able to: engage in effective and ethical communication through the analysis and application of the basic principles of communication related to the purpose and context, the use of valid information and sound arguments, as well as an adequate form of listening, in order to achieve the goal of communication and respond to effective manner, understands verbal and non-verbal communication, uses the skills of negotiation and conducting business meetings. |
| Skills | Students acquire basic knowledge and attitudes in the field of interpersonal relations and human rights, respect for professional and business relations, protection of human rights, protection of copyright and intellectual property. |

BLC.047 Business economy

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Economic categories, Application of micro and macroeconomics, Schools of the marginality direction of economic thought, Contemporary post-Marshallian microanalysis; Choice of consumers and producers, Supply, demand and market balance of goods and services, Supply and demand of production factors, Market types and structure; market classification, Macroeconomics, Gross domestic product (GDP), Gross national product (GNP), Keynesian macroeconomic analysis, Multiplier principle, Monetarism, monetary policy, theoretical foundations of monetarism, Regulatory functions of the state in modern economic systems. |
|-----------------------------|--|
| Aim of studying | Mastering the techniques and rules of the market business economy. The goal of studying the subject is to enable students to master basic terms and categories in the field of business forecasting, i.e. examining the effects of internal and external factors that affect the future business of a company, with the use of various forecasting instruments and methods. Business forecasting involves analyzing the risks and probabilities of projected events. The aim of the course is for students to master the basic quantitative and qualitative methods of business forecasting. |
| Outcomes of the studying | After passing the exam, students will be able to explain business predictions and how important they are for the achieved business result of the company. They will master the basic principles of the business forecasting process, theoretically and practically. After completing the course, they will be able to apply quantitative and qualitative methods of business forecasting and determine the probability of realization of projected business scenarios (pessimistic, most likely, optimistic scenario). |
| Skills | Students have the knowledge and skills necessary for employment and further education in the field of economics. |

BLC.048 Transport

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Organization of transport. Cargo handling units. Classical transport technologies. Technologies of intermodal transport. Sunday off. Container transport systems. Organization and technology of land transport. Organization and technology of water and air transport. Goods terminals and transshipment systems in goods and transport flows. Storage systems. Transportation of hazardous materials. Management of transport systems in different types of traffic. |
|--------------------------|---|
| Aim of studying | The main goal of the course is to familiarize students with the basic principles, technologies and procedures of organization and management of transport processes. |
| Outcomes of the studying | Organization and technologies of transport and transport systems. Management of transport processes. |
| Skills | Management of the transport process in the country and abroad. |

BLC.049 Forward freight and agency operations

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | International terms of delivery of goods - Incoterms 2000. Marketing, supply and sales of logistics services. Pricing of logistics services. Intarsia in forwarding. Contracting and organization of work in forwarding. Organization of import and export commodity flows. Organization of transit goods flows and application of TIR carnets. Collective transport of goods and consolidation of goods flows. ATA carnet and temporary importation of goods. Customs mediation and customs procedures. Transport insurance of goods. |
|--------------------------|--|
| Aim of studying | The main goal of the course is for students to become familiar with the basic functions and tasks of forwarding and to train them for tasks related to the design, organization and realization of international import, export and transit goods flows. |
| Outcomes of the studying | The ability to perform basic tasks related to the design, organization and implementation of import, export and transit commodity flows. Ability to perform freight forwarding operations. |
| Skills | Carrying out freight forwarding operations in import, export and transport of various types of goods. |

BLC.050 Architecture of computer

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | History of computers and computer components. Introduction to computer architecture and organization, bus types, Von Neumann's computer model. Representation of data in the computer, number systems, digital arithmetic, standard and double precision real numbers, display of letters and other characters, ASCII code, UNI code. Different views of the computer, levels of programming languages, Division of computers and commands, set of commands and format of commands. Processor and memory. Architecture of the Intel processor 8085. Instruction types, instruction format, instruction execution, addressing methods, interrupts, control of Intel processor program execution. Architecture of the Intel processor 8086. Simplified models of (micro) processors CISC and RISC, Pentium processors, Microprocessor level. Memory system design, memory system components, organization and size of main memory, RAM and ROM, memory system parameters, hierarchical memory organization. Performances of memory circuits, PROM; EPROM, static RAM, SRAM, dynamic RAM, memory modules, fast memory (Cashe), recording in fast memory. I/O subsystems, standardization of I/O circuits, performing I/O operations via interrupt requests, direct memory access (DMA). |
|-----------------------------|--|
| Aim of studying | The main goal of the course is to familiarize students with the essential connection between hardware and software, as well as with the balancing (cost/performance tradeoffs) of computer architecture. Concepts of computer organization are defined. Introducing students to the mathematical foundations of computer technology based on the application of the binary number system, with the hardware organization of a PC through the presentation of its most important components. |
| Outcomes of the studying | Upon completion of the course, students will be able to: understand the structure and way of functioning of the computer system, the way of executing instructions in the processor, explain the way of executing simpler programs written in assembly language and their influence on the events in the processor and the computer, use the literature for further study of these areas. |
| Skills | Upon completion of the course, students acquire the following skills: Work with data provided in various, numerous systems. Data conversion. Assembler Programming Language Basics for the 8085 Microprocessor, Assembler Programming Language Basics for the Microprocessor Family Based on the 8086 Microprocessor. Recognizing the basic machine instructions of microprocessors of different generations. |

BLC.051 Database 1

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Introduction to databases. Development of databases. Basics of database modeling, conceptual and physical design. Getting to know the MS Access environment and creating the first databases. MS Access database objects. Frequently used data types, arithmetic and logical operators. Primary key and composite primary key. An Introduction to Anomalies - Redundancy and Its Impact on Database Design. Masks and lookup fields in MS Access database. Foreign key and relationship. Working with queries, creating simple queries using the wizard and in design mode, creating join queries (JOIN), and creating queries with data grouping. Working with forms, creating simple forms and forms with subforms. Working with reports. Creating macros. |
|--------------------------|--|
| Aim of studying | The aim of the course is to familiarize students with the basic principles of database operation and to acquire practical knowledge in the field of handling databases, their creation and main applications in everyday work. |
| Outcomes of the studying | Upon completion of the course, students will be able to: build and optimize a database using appropriate data organization strategies, and create a relational database and elementary application using <i>Access</i> SUBP. |
| Skills | Database creation using SUBP MS Access. Designing and creating tables and links using SUBP MS Access. Creating queries in an interactive way and the basics of creating queries using SQL. Advanced concepts: creating forms, forms with subforms, and reports. Creation of control panel, command buttons and macros. |

BLC.052 Programming

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Basic elements of computer programming, introduction to the Java programming language. Basic elements of the Java language, syntax of the Java language. Expressions, statement block and branch statements, repetition statements. Methods. Introduction to object-oriented programming, introduction to classes. Java classes, constructors, working with objects, methods. Encapsulation, overlapping method names. Inheritance, polymorphism. Abstract classes. Error removal. Interfaces. Generic types, templates. Collections. |
|-----------------------------|---|
| Aim of studying | The course introduces students to the basic concepts of programming from an object-oriented perspective. Using the Java programming language, students master the principles of object-oriented programming. Students gain basic knowledge about the basics of the object-oriented (OO) approach to programming, such as the use of classes and objects and inheritance. Students also get initial knowledge about the basic concepts and principles of designing OO applications. |
| Outcomes of the studying | Upon completion of the course, the student will be able to: understand the basics of the object-oriented paradigm, apply the concepts of abstraction, data encapsulation, inheritance and polymorphism to program development; uses the object-oriented Java programming language for program development; tests and removes errors using modern development environments. |
| Skills | In this course, students will acquire the following skills: writing programs independently using the Java programming language in the Eclipse development environment, writing programs that use different concepts of object-oriented programming in the framework of the Java programming language. |

BLC.053 Mathematics 3

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Introduction to Queue Theory. Numerical lines. Functional lines. Taylor's Rows. Approximation of functions using rows. Introduction to probability theory. Statistical and logical probability. The law of large numbers. A random variable. Basic attitudes about random variables. Basics of mathematical modeling. Mathematical induction. |
|--------------------------|---|
| Aim of studying | By studying this subject, students become familiar with basic mathematical disciplines. The subject includes numerical sequences and sequences and mathematical algorithms. |
| Outcomes of the studying | Acquiring new knowledge. |
| Skills | Skills are: the application of the Kosi criterion; calculation of the limit value of the convergence of the numerical sequence; distinguishing between convergent and divergent series; calculation of the approximate value of the real function at the given point; distinguish between dependent and independent random variable. |

BLC.054 Algorithms and data structures

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Introduction to data structures. Data structure, algorithm. Data type, abstract type. Implementation. Asymptotic analysis. Abstract data types: List, Stack, queue, set, dictionary, priority queue, ordered and binary tree. Overview and implementation of different data structures: Linked list, hash table, binary search tree, heap, graph. Algorithms for performing basic operations on structures: Inserting and removing data, searching, traversal, printing content, etc. Application of the described structures in more complex algorithms: Sorting and summarizing data strings, calculation of arithmetic expressions, various recursive procedures. Techniques (strategies) for the construction of algorithms: "Divide and rule", dynamic programming, "greedy" approach, "backtracking", local search. |
|--------------------------|---|
| Aim of studying | Acquaintance of students with the concept of data structures, their efficient realization on the computer and algorithms for manipulating them. Understanding the algorithmic way of solving problems and tasks. |
| Outcomes of the studying | Students will be able to solve problems in practice, analyze, choose and successfully apply data structures and algorithms that are most suitable for solving a given problem. |
| Skills | Students will be trained to implement the described data structures (linked list, hash table, binary search tree, heap, and graph) in the Java programming language. Students will be trained to implement the described algorithms in the Java programming language (inserting and removing data, searching, traversing, sorting, calculating arithmetic expressions, recursive procedures). |

BLC.055 Introduction to operating systems

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | The subject covers the following areas: Integrated Circuits, History of Miniaturization, Technological Basics of Chips, Chip Manufacturing Technology, and Mathematical Basics of Computers. Introduction to Operating Systems: Historical Development, Definitions of "Operating Systems", Characteristics of Operating Systems, Functions of Operating Systems, Operating System Core, Interrupt Concept, Memory Management, Processor Allocation, Parallel Processes, Chipsets, Data Processing, Index Sequential Files. Protection of information systems, How to protect information systems. Basics of computer networks, connecting devices, protocols and ports. Data management. Stagnation and its removal. Distributed systems. Entry and exit management. |
|-----------------------------|---|
| Aim of studying | Willingness to identify and eliminate problems of practical importance in the field of operating systems. Knowledge of the specifics of individual operating systems, installation and administration of the operating system. Acquiring the skills needed to manage hardware resources such as: CPU, input/output devices, memory, etc. Ability to manage data. Familiarize yourself with the types and types as well as the way modern operating systems work. |
| Outcomes of the studying | The student is expected to master the following elements: Installing and configuring different operating systems Testing, evaluating and solving technical problems and malfunctions in the operating system. Manage device and network security. System data backup. Analysis of compatibility of operating systems for various computer applications and software. System recovery methods. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of tasks, learning, consultations and practical and theoretical seminar work. The lectures cover theoretical content and provide conceptual explanations of concepts and certain information technologies. Within the exercises, emphasis is placed on the development of abilities and skills in the application of certain information technologies as support for intellectual work. Students acquire basic knowledge about the operation of individual parts of the operating system. Necessary skills needed to understand the state and trends of modern operating systems and assess their applicability to meet the needs of organizations and individuals. Through seminar work, the ability to apply certain information technologies and software tools is additionally developed with the aim of their integrated use in solving problems on a given topic. |

BLC.056 Computer networks

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Introduction. Basic terms. Historical development of computer networks. Types of data transfer. Topologies. Protocols. OSI model. TCP/IP model. Internet. Application and transport layer. Transport and network layer. IP addressing. IPV4, IPV6. Neural networks. Wireless communication. Development of mobile networks. 5G and 6G mobile networks. Local wireless networks. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge related to the basic concepts of modern computer networks and communication protocols. Acquisition of practical knowledge and skills necessary for planning, installation, use and maintenance of computer networks. |
| Outcomes of the studying | Students gain knowledge about the functioning of computer networks from the physical to the application layer. Willingness to identify and eliminate problems in practical situations in the field of computer networks. |
| Skills | After successfully passing the exam, students will be able to: Explain the basic communication protocols and services by layers of the reference OSI model. Apply subnetting techniques to a given network topology. Implement traffic routing mechanisms in the network in accordance with requirements. Know new technologies in computer networks. |

BLC.057 Protection of information systems

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Security and protection of information systems - introduction to the subject. Norms, standards and documentation of protection of information systems. Principles, methodologies, models of protection of information systems. Development of programs, policies and protection plans. Concepts of protection of information systems. Threats and risks for information systems. Services and protection mechanisms of information systems. Protection technologies for computer systems and computer networks. Crypto protection. Information systems protection management. Risk management and the concept of protection controls. Implementation of the information system protection program. Computer crime. |
|--------------------------|--|
| Aim of studying | Students should acquire basic knowledge in the field of security and protection of information systems, especially in the environment of the application of information and communication technologies. |
| Outcomes of the studying | Students will receive theoretical and practical knowledge that will be supplemented and checked through seminar papers and exercises, and through analysis of the application of the protection system they can apply the acquired knowledge. |
| Skills | Students acquire skills through lectures and exercises, independent preparation for assignments, studying, consultations and seminar work. |

BLC.058 Video games

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Games and gaming, concept of video games, history, research and theories, platforms. Classification of video games - purpose, difficulty and complexity. Motives and motivations for playing, differences between players - individual, cultural, age, social, racial, gender. Personality structure as a factor in playing. Elements of traditional media in video games and their specifics – story and scenario, storyboard, design and simulated lighting, sound. Game-specific elements. Genres. Discussion of students' final works - ideas, target groups, aesthetics, levels. Marketing and distribution of video games. |
|--------------------------|--|
| Aim of studying | The goal of the video game course is a detailed introduction to the theory of video games, starting with the theory of games and gameplay, motivation and target groups, relying on the latest psychological and social research in this field. |
| Outcomes of the studying | Students acquired the necessary professional, artistic and technical knowledge and skills. They are trained to independently conceive a game, develop a conceptual solution, and design all visual elements and program interactivity in accordance with current trends in the given genre. |
| Skills | In the practical segment of the course, students have the opportunity to acquire and expand the knowledge and skills of using programs for generating video games, without mandatory knowledge of programming and programming languages, through the creation of a simple video game. |

BLC.059 Database 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Introduction to the relational model. Relations and relational variables. The structure of the relational model. Relation Domains, Relation Keys, Relational Database Schema and Relational Database. Relational algebra. Normal forms – designing relations by normalization. Introduction to SQL. SQL Data Types. Queries to create, list, delete and modify tables. Arithmetic and logical operators used in queries. Queries to join tables: inner and outer joins. Functions: logical and conditional functions, functions for working with strings, functions for date and time, functions for encoding, encryption and sums. The purpose and method of creating a view (View). The purpose and method of creating a trigger (Trigger). The purpose and method of creating nested procedures (stored procedures). |
|--------------------------|---|
| Aim of studying | Acquisition of general information and knowledge about designing relational databases. Development of abilities and skills in the application of databases in solving business and management problems; Professional training for successful acceptance, monitoring and application of existing and new systems for designing database management systems. |
| Outcomes of the studying | Students will be able to review data requirements, design a database, understand the architecture and components of the database, that is, to independently create a database, as well as to manage records in the database using the SQL query language to access database data. |
| Skills | Working with SUBP MySQL, which includes creating and modifying tables using only SQL statements, creating keys (primary and external), writing different types of queries, creating views, stored procedures and functions. |

BLC.060 Software engineering

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Basics of software systems. Software as a product. Computer logic. Code and coding. Software life cycle. Software engineering methodologies. Syntax and semantics. Choice of language and modeling diagrams. Analyzes in software development. Models and modeling. Syntax and semantics of modeling. Software architecture. Software modularity. Software design. Agile methods of software development. Development based on testing. Documenting software development. Looking into the future, quantum computers. |
|--------------------------|---|
| Aim of studying | The goal of the course is to familiarize with the discipline of software engineering through the process of gathering requirements, design, development, management and documentation of software, applying computer science technologies, project management techniques, engineering, design, and other disciplines. Understanding the role and responsibility of the client, user and participant in the software development process. |
| Outcomes of the studying | Students acquire knowledge related to software engineering methodologies, software development, conceptual and logical models of software development. |
| Skills | Students acquire skills related to software engineering methodologies, software development, conceptual and logical models of software development. |

BLC.061 Internet programming

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Basics of the PHP programming language. PHP language syntax, operators. Flow control structures. Loops. More advanced techniques of the PHP programming language. Cookies and sessions. Connecting to the database. An example of a PHP application that communicates with a database. AJAX technology. An example of a mini CMS system that was implemented using learned technologies. Reminder of the HTML language. Basics of the JavaScript programming language. Basics of the CSS language. Connecting back-end and front-end part. |
|-----------------------------|--|
| Aim of studying | The goal of this course is to train students to design and write modern Internet applications using the basic elements of the PHP programming language. Students should master the basics of server (back-end) programming, as well as connecting the PHP programming language with different databases, executing queries in the database and managing errors resulting from queries. In addition to the above, students should gain practice in the realization of complex client websites. |
| Outcomes of the studying | At the end of the course, students will be trained to develop commercial Internet applications with the help of a modern development environment. Students will be able to create applications for updating and displaying database data, as well as creating the front-end part of the application. They will be competent to design a three-tier Internet application and deploy it on the Internet. |
| Skills | In this course, students acquire the following skills: using the PHP programming language within the NetBeans development environment when creating a server-side application, connecting the server-side application to SUBP MySql and other SUBPs, creating a client-side application using HTML, CSS and JavaScript programming languages, connecting the server-side application side and client-side applications, setting up the application on the Apache server within the XAMPP environment. |

BLC.062 Wireless networks

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Introduction to wireless networks. Basic concepts of wireless communication, standards. Evolution of mobile networks: 1G, 2G, 3G, 4G networks. 5G mobile networks. 6G mobile networks. Wireless computer networks. Security of wireless networks. Technologies that develop with the emergence of wireless networks. Electronic business. Blockchain technologies. Sensors. Sensor networks. Internet of Things. |
|--------------------------|--|
| Aim of studying | Acquiring knowledge in the field of wireless networking. Getting to know the principles of wireless communication, the basics of wireless network security. Acquiring knowledge related to new technologies that appear with the development of wireless networks. |
| Outcomes of the studying | Students acquire knowledge about the functionality, construction and maintenance of wireless networks. Willingness to identify and eliminate problems of practical importance in the field of wireless networks. |
| Skills | Students acquire skills in designing and maintaining wireless networks. Knowledge and skills in the field of sensor networks and the Internet of Things, as well as all technologies that arise and develop with the emergence of wireless networking. |

BLC.063 Contemporary software architecture

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | What is software architecture and why is it important. Understanding software quality. Software Attributes. Virtualization. Cloud computing and distributed systems. Mobile systems. Designing architecture. Assessments of designed architectures. Documentation. Software architecture management. Types of architecture – Layered architecture, pipeline architecture. Types of architecture - architecture based on services. The role of the architect in the project. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge in the field of software architecture. Acquaintance with the principles of designing and executing software projects from the point of view of software architects Acquiring knowledge related to new technologies and software architectures. |
| Outcomes of the studying | Students gain knowledge about the basic concepts of software design through practical examples and methods for creating and analyzing software architecture. |
| Skills | Students acquire skills in designing and planning software solutions. Software architecture management and the role of the architect in the project. |

BLC.064 Multimedia

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Concept of media, multimedia, brief history of concepts. Linearity and non-linearity of multimedia. Types of multimedia. The role of digital media and the Internet. Text as multimedia - hypertext – hypermedia. Static image as multimedia – drawing, image, photograph, virtual image. Review of classic concepts related to static image - composition, valer, contrast, color, message, and image communicability. Static image – digital drawing, picture. Comics as multimedia and as a form of communication. A story through a picture. Idea, plan, synopsis, scenario. Video and film as multimedia – analog and digital video and film, similarities and differences. Video (film) segments – idea, synopsis, script, scenography, costume, light, camera, sound, editing. Image quality. Aesthetics. The dominance of the idea and the message in relation to the visual effect. Sound as multimedia – Concept and definitions. Analog and digital sound. Digital sound processing. Samples and instruments. Music. The role of sound and music in multimedia work. Sound – sound processing programs, Cubase, Soundforge MIDI and samples. Animation – classic animation and types, digital animation and types. Principles of animation. Animation - animation programs - Flash, After Effects, Maya 3D, 3D Studio max, Motion builder, Poser Video game engines, sample sheets. Interactivity – non-linear medium. Examples of interactive multimedia – websites, digital television, digital encyclopedias, social networks, simulators, presentations, interactive films. Interactivity – presentations. Purpose, meaning, form. Interactivity – video games. A brief history. Genres. Target groups. Industry. Abuse. Interactivity – video games. Video games as a form of learning. Exam preparation. |
|--------------------------|---|
| Aim of studying | The aim of studying the course is for students to get to know in detail, through theoretical lectures, all forms of multimedia, as well as all segments within them, such as text, image, video, sound, animation and interactivity. |
| Outcomes of the studying | During the exercises, the methods of technical production of works in all the media that are studied in theoretical classes are studied, so that in the end, and through the final paper, the student has a solid theoretical and practical knowledge of multimedia practice. |
| Skills | Students have the opportunity to see the complexity of multimedia displays and acquire basic knowledge and skills for creating a complete multimedia work. Students have the opportunity to see the complexity of multimedia displays and acquire basic knowledge and skills for creating a complete multimedia work. |

BLC.065 Introduction in media and communication

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Students acquire basic knowledge in the field of journalism, primarily by defining the term journalism. The subject of journalism (what journalists do). Contexts; selection of events worthy of media attention; sources of information. Principles of modern journalism. Types of journalism in the context of the type of media (informative, entertainment, commercial, infotainment, infomercial, and investigative journalism). Features of certain types of media (agencies, press, radio, television, and new media). Types of media in the context of financing (state-centric, market-centric, public service, civil sector media). Media types in audience context. Media sector. The internal organization of the media. Power, freedom, and limitations of journalists and journalism. Mapping of the media offer (informational and political press; specialized publications: weeklies; "kiosk for women", "kiosk for men", tabloids). Mapping of media offers: radio/tv stations of national, regional, and local frequencies, Internet media. Mapping the media supply: media of marginalized groups. Creating a media plan for information sources for a simulated event. Comparative analysis of media products of informative journalism, commercial journalism, infotainment journalism, informative journalism, and entertainment journalism. |
|--------------------------|---|
| Aim of studying | Getting to know the basic terms, general characteristics, and types of journalism and the specifics of all types of media, as well as the functioning of the media sector. |
| Outcomes of the studying | Mastering media terminology and acquiring basic knowledge about the profession, the media and the functioning of the media sector. |
| Skills | Fundamental knowledge of the media world, development of professionalism and self-confidence, as well as persistence and discipline, as irreplaceable elements characteristic of a future journalist. |

BLC.066 Communication theories

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Defining the basic concepts of the communication process and the basic elements of the communication process. Early theoretical concepts of communication (Greece, Rome, Middle Ages). Biological-mechanistic SR theory and theory of interaction in primary groups. Socio-cultural model of communication and dramaturgical model of communication Semiotic and hermeneutic approach to communication. The theory of communication as a symbolic interaction and the theory of a covert experiment in communication. Mathematical theory and model of communication as well as theoretical models of mass communication research. The theory of the two-stage flow of communication and the theory of gatekeepers in mass communication. Agenda theory in mass communication and neo-Marxist theories. A postmodernist approach to mass communication and hierarchical model of influence on media content. |
|--------------------------|--|
| Aim of studying | The goal is to acquire theoretical knowledge about the previous theories of communication and everything that has been studied throughout the history of communication. |
| Outcomes of the studying | Students' conclusions and reasoning about the differences between theories, models, theoretical paradigms in the research and reflection of communication as a process that is first of all suitable for the human race and which is the basis of every reasonable process. |
| Skills | Developed skills for analyzing the communication process. And all its elements. |

BLC.067 Journal genres

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Theoretical teaching takes place through lectures and deals with the typological division of journalistic genres. The concept and definition of news. News composition. Writing news according to the inverted pyramid principle. Writing news according to the principle of delayed effect. Rule 5W and H. Lid and Types of Lids. Citation of the source of the information. News background (background). Principles of event monitoring. Writing news in a row. Quotes and types of quotes in the news. Differences when writing news for print and electronic media. The concept and definition of reports and the structure of reports, as well as types. Interview, article, reportage, and cartoon. Practical teaching is carried out through exercises to recognize journalistic genres. Mastering the techniques of gathering material for news writing. Exercises in assessing the importance of facts for writing a summarizing lead of journalistic news. Exercises to evaluate the importance and place of each of the questions contained in the 5W. Exercises in writing special leads. News writing exercises, based on the principle of delayed action. Writing about the background of the news. Exercises of citing sources and writing quotations in the news. Report writing exercises: standard, reporter, and commentary. Exercises in writing news and reports for print and electronic media, and conducting interviews. |
|--------------------------|---|
| Aim of studying | An acquaintance of students with the basic characteristics of journalistic genres. |
| Outcomes of the studying | Understanding and mastering the skills of writing for the media, through learning all journalistic genres encountered. Starting with news as a significant and fundamental journalistic genre, through reports with and without quotes, interviews, articles, and some of the fiction genres. |
| Skills | Mastering the methods and ways of editing journalistic genres, regardless of the medium they work on, as well as respecting ethical standards in the process. |

BLC.068 Printing media

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Print media as representatives of traditional media. Development and history of the press in the world and in our country. Journalistic genres in print media. Analytical genres, news, report, and interview. The inverted pyramid as the most important segment of news writing in newspapers. Writing news in print media, as information from yesterday, lid news. Report without and with quotes, when it is used, and in which situations. Parliamentary reporting, reporting in emergency situations, sports reporting. Interview in print media, ethical and correct attitude towards the interlocutor and the statements he makes. Interview in online magazines, way of working in online newsrooms of print media. Commentary, types and approach, what distinguishes it from a column. Article, types and ways of working on research stories. Organization of work in the desk and editorial office, division of responsibilities and obligations. Headings, preparation and break of text for printing. Ethical rights, the responsibility of journalists and media. |
|-----------------------------|--|
| Aim of studying | Acquiring practical knowledge for working in print media (daily and periodical). Acquiring knowledge on the way from following events to the finished text in the newspaper, through all the processes that this path entails. First of all, work in the field, rules of conduct, relations in the newsroom and outside it; adoption of ethical standards; proper use of sources; taking a critical stance; the importance of the market factor; developing the responsibility of the journalist himself and the media company he works for. Mastering the writing technique for a daily, weekly, or another periodical. Mastering the technique and practice of editing, proofreading, and technical preparation of the journalistic text. |
| Outcomes of the studying | Students master above all the theoretical and practical prerequisites for professional work in print media, from daily to periodicals to specialized magazines. In addition to learning different journalistic genres, the emphasis is on analytical types, primarily news, reports, and interviews in printed media. |
| Skills | The student should be taught to write a journalistic text in the previously mentioned genres, choose an interesting and effective title, be familiar with the process of breaking text and newspapers, and monitor the publication process and possible feedback on the published text. |

BLC.069 Radio

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 30 | 1 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Theoretical teaching takes place through mastering the basic features of radio as a medium, and means of expression of radio. Media genres on the radio: short news; a report without citations and with citations; radio interviews; surveys, and statements; audio chronicle and radio package; a live broadcast of events; documentary reportage and feature radio drama; inclusion of listeners in the program, contact broadcasts. Special attention is paid to the formatting and programming of radio (public service, commercial broadcaster, media of the civil sector), and radio shows, program blocks, and identification on the radio: check-out points, jingles, and interludes. Radio presenter - central man on the radio, one-man show. The future of radio (internet radio; internet radio, podcast; cable, and satellite radio). The practical part is done on College Radio and includes short news, writing, selecting and processing agency news for radio broadcasting, writing reports, editing, directing, and recording in the studio. Survey: shooting, editing, directing. Interview: simulation of an interview in the studio. Radio package: topic selection, field recording, editing, studio recording, And radio identification: analysis of pre-recorded radio identifications. The following practical exercises are also done: Simulation: digital editing, reporting from the field live in the program. Radio interview in the studio, simulation: leading the morning program, simulation: preparation and broadcasting of short news, simulation: contact program. Field recording of the material for the test radio package and assembly of the test radio package. | |
|--------------------------|---|--|
| Aim of studying | Getting to know the basic features and rules of radio and the basic models of radio presentation of media content. | |
| Outcomes of the studying | Understanding and mastering the skills of radio journalism. | |
| Skills | Working on the radio, writing radio journalistic genres, working in guided shows in the studio, navigating the contact program with and without guests. | |

BLC.070 Agency journalism

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Through theoretical part of the class, students learn to define the concept of agency journalism. The emergence of news agencies, their activities and the subject of agency reporting. Form and style of agency reporting and genre forms in agency journalism. Rules for writing agency news and types of agency news. Agency report and types of agency reports. Statements and interviews in agency journalism. Announcement as an agency product. Teamwork in agency journalism and organization of news agency editorial offices. Types of agency services and distribution of agency products. Through practical classes, students learn to master the techniques of collecting material for writing agency articles and the techniques of writing agency articles: news, reports, statements, interviews, articles, and reportages. Critical evaluation and editing of agency articles, as well as furnishing of agency articles, work exercises in the news agency desk, and editing of web pages. |
|--------------------------|---|
| Aim of studying | Acquiring knowledge about the organization and structure of news agencies and the role of agency journalism in public information, mastering genre forms of agency journalism. |
| Outcomes of the studying | Knowledge and understanding of the role of agencies in journalism and the ability to apply that knowledge in practice. |
| Skills | Mastering the genre forms of agency journalism, and initial training for working in an agency. |

BLC.071 Research journalism

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | The theoretical teaching is reflected in defining the term investigative journalism and rec the great journalistic investigative feats in media history. The most common topics that re research and the basic methods and techniques of investigative journalism. Law on freed access to information, and learning about sources of information. Journalist and police and investigations, as well as case studies, surveys, interviews, insider statements. Imperson provocation, secret recording, as well as permissible and illegal journalistic hypothese speculations. Legal protection of the media company (risks). Investigative journalism abuse ethical codes - boundaries of research, protection of sources, and prohibition of harassment, the results of journalistic research are used. Practical teaching is conducted through exercithe recognition of media genres in which research is incorporated. Determining the topic requires research, as well as how to follow the trail of money and persons associated with the direction of political interests. Simulation of surveys and research interviews. Stat business secrets, verification of information and legal protection with expert consult Announcing sensational discoveries. Protection of sources of information and legal protect the media. | |
|--------------------------|---|--|
| Aim of studying | Getting to know the concept, methods, and techniques of investigative journalism and its ethical boundaries and training for journalistic research and gathering hard-to-find information. | |
| Outcomes of the studying | Understanding and mastering the skills of investigative journalism, all methods and techniques of research, gathering facts and working on a serious research text. | |
| Skills | Investigative journalist skills, persistence and discipline during research and ethical norms. | |

BLC.072 Television

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 30 | 1 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

Through theoretical and practical part of the lecture, students are taught the basic characteristics and differences of electronic media. News in electronic media. Relevance, topicality, interestingness, drama, fun, and picturesqueness of the content. Planning and fact selection strategy. Information sources, contacts, and reporter's tracking. How to make a good story and keep the balance? Distance from political, economic, or influence of pressure groups! News and reports from multiple angles. Selection of information. Balance in the news. Keyword placement. Visual illustrations and current events. Creating a good informative program. Searching for true and exclusive stories. Organizing informative programs. Relationship of local, regional, national and global! Selection and order of attachments. Broadcast plan or making a synopsis! Reporting from an extraordinary event. Monitoring the work of competitors and timely response. The importance of pictures! Interview and types in electronic media. The goal of the dialogue and what happens when the interlocutor avoids it? Research and analytical interview! Informative interview! Portrait interview! Talk - show programs. Coping and culture of communication. Press **Course content** conference. Actuality and illustrations. Press release. Management and editing of news programs. The personality of the editor. Good journalistic style and recognition. Using quotations, so-called "clipping"! Controversial statements and their use. Journalistic attitude and suggestiveness. Numbers, abbreviations, and ambiguous words. Live broadcasts and TV shows. Rhythm and tempo. The importance of presenters and editors. The importance of the accuracy of the duration of the show. Completing the program. Contact the audience! Documentary reportage in electronic media. Sound and image synchronization. Authenticity or fabrication? Style and immediacy encourage emotionality. Program formatting and fast response. Educational and scientific program; organization of the newsroom and engagement of all members. Analytical and investigative journalism in electronic media. Question and research for an answer, or attitude and research for a positive conclusion? A combination of work in the field and in the studio. Training in crisis response and reporting while the event is ongoing. Political reporting and objectivity. Electronic media are the main drivers of modern societies, so it is important to train students with skills and knowledge that will enable them to master all the functions of new journalism. Speed is in the foreground, news takes on the character of a commodity, and the ability of individuals to Aim of independently collect, shape, create, distribute and archive information in real-time comes to the studying fore. Through examples of presenting events on television, creative training and workshops, in a qualitatively different way than before, students will be prepared for the digital revolution that has already begun. Understanding the role and importance of television and the responsibility of television **Outcomes of** journalists. The ability to apply knowledge and understanding in solving problems during the studying emergency situations in work in the TV newsroom. Students will master the specific theoretical and practical skills of various forms of expression on television. With multi-genre processing and specific expressiveness of style, they will be prepared for work Skills in modern electronic newsrooms, regardless of editorial orientation. Effective communication skills.

BLC.073 Management in art

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 90 | 3 |
| ECTS | | 6 |

| Course content | Basics of management – history and trends. Management and art. Artistic and cultural organizations. Planning and decision-making. Organizing and organizational design. Human resources and art. Leadership and group dynamics. Operations and budgeting. Economics and financial management. Marketing, management and art. Fundraising. Integration of leadership styles and management theories. |
|-----------------------------|---|
| Aim of studying | The goal of the course is to provide students with basic knowledge in the field of art management as a way to understand the functioning of a cultural organization. It is necessary to acquire the skills and knowledge required for leadership and management in cultural organizations, as well as abilities for organizational development, strategic planning, planning and decision-making, organizing and organizational design. |
| Outcomes of the studying | It is necessary to understand the concept of management and contemporary trends in culture and art. The student acquires key knowledge and abilities to help the artistic organization in realizing its vision and implementing its mission. As a manager of a cultural and artistic organization, it is necessary for the student to successfully use the processes of planning, organizing, leading and controlling in order to optimize the operation of the organization in turbulent circumstances, but also to successfully fulfill the mission of the organization. Also, students develop an awareness of the necessity of strategic thinking, planning and organizing, and thus acquire knowledge about possible strategies that a cultural organization applies in its development. |
| Skills | The skills that the student will have are innovation, strategic thinking, management, decision-making, knowledge transfer, constant improvement, and expertise in the field of activity. |

BLC.074 Organization and production

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 6 |

| Course content | Organization, organizing. Process organization: production/service, service functions, human factors, management functions. Organization and organizational aspects of media companies with special reference to the nature of the media and its effects. Technical and technological factors as important factors in teamwork in media houses. Entrepreneurial media organization. Basics of film and television production: what is a producer, basics of film production, basics of television production, qualitative and quantitative aspects of the project idea, production and media, coordination of artistic financial aspects of the project, project idea and form, project feasibility study; Production and markets: Historical development of our and the world's film and TV production, market planning, market operations in the media; Financial and legal aspects of production: Financial project plan, project budgeting, business risk, international co-productions, patronage and sponsorship arrangements, forms of financial arrangements in production, export strategy and risk policy, project legal regulation, project insurance; Exercises: Planning, realization and distribution of film and TV projects. | |
|-----------------------------|--|--|
| Aim of studying | The aim of the course is to master the knowledge needed for organizing, planning and leading productions in media organizations and film and TV projects. | |
| Outcomes of the studying | Thorough knowledge and understanding of the discipline of organizing media organizations; structuring media companies, getting to know their specifics and differences; connecting knowledge from the organization and their application in the management of media companies. Acquiring competence, knowledge and skills in the field of planning and realization, i.e. managing production in the media sector, as well as artistic projects. | |
| Skills | Skills the student will have are innovation in production, organization of media events and business in the media. | |

BLC.075 Business and author law

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Concept of business law and legal sources. Legal entity, breach of legal personality. Business entities, status symbols. Establishment, acts, registration. Assets, business name and other attributes. Representation of the company. Companies of persons. Partnership. Limited partnership. Characteristics, establishment, management. Capital companies. Limited liability company. Characteristics, establishment, management. Society capital. Joint-stock company. Features, establishment management. Liquidation and bankruptcy of the company. Termination of an insolvent company. Protection of industrial property, competition and consumers. Inventive right. The right of distinctive signs. Competition law. Consumer right. Contracts in the economy. Basic contractual principles. Negotiations. Conclusion of the contract. Legal effects of the contract. Special contracts. Foreign investments, free zones. Specialized companies. Insurance companies. Stock exchanges. Central registry. Investment funds. Broker-dealer companies. Insurance contract. Concept and properties. Types of insurance. Obligations of the insurer. Insurance policy. Reinsurance. Banking operations. Legal and institutional framework. The copper secret and the bank's responsibility. Current account. Credit agreement. Deposit operations. Factoring. Forfeiting. Financial leasing. Stock exchanges and the capital market. Legal and institutional framework. Primary and secondary market. Domestic and foreign stock exchanges. Brokers and dealers. Investment funds. Investment advisors. Protection of small shareholders. Corporate governance standards. Letter of credit and bank guarantee. Letter of credit. Bank guarantee. Securities. General characteristics. Stocks and bonds. Draft and check. Promissory note. Author law. |
|-----------------------------|--|
| Aim of studying | The primary goal of the course is to acquire basic and general knowledge in the field of business law, with an emphasis on status and contractual company law. Acquaintance of students with concepts, categories, institutes and institutions related to economic entities (company law), legal affairs of economic entities (contracts in the economy), payment instruments used by economic entities and payment security (banking and securities). |
| Outcomes of the studying | It is expected that the acquired knowledge in this area will enable students to understand the organizational structure of business entities (status company law), as well as the legal relationships they enter into (contracts in the economy), to understand the legal significance of banking transactions and securities and their application. In practice, the basis of industrial property rights, copyright and other related rights. |
| Skills | It is expected that by mastering the course program, the student can successfully: properly understands the legal position of different forms of business companies and clearly identifies the corpus of legal regulations that are of indirect or of immediate importance for different legal forms of business companies; master the skills that will enable them to apply the acquired theoretical knowledge in practice; properly identifies the corpus of legal regulations that regulate the areas of contracts for goods traffic, banking operations and securities and identifies them and understands the specifics of goods traffic contracts; they should master the skills that will enable them to draw up certain forms of trade contracts on his own; master the skills that will enable them to independently fill out specific commodity and monetary securities. |

BLC.076 Internet and new media

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | _ | 8 |

| Course content | What is the Internet, a platform of all platforms, a medium or? What is the digital revolution? What are new media and whether and which ones are the most represented and why? What are the key differences between new and old media? What are and what do information technologies represent? What are social networks? Which are the most famous. Which social network would you single out from the others, and why? Which ones do you use and why? What distinguishes social networks from microblogging sites, and these from online gaming communities? Or, what is the difference between social networks and other types of intermediaries that use similar content selection algorithms? How our access to content is affected by media companies that claim that they are not and that the content they transmit does not concern them at all, although their algorithms determine whether and in what order we will access them, what and when we will be able to see from what our friends post. And which companies are these? What is the difference between writing for traditional and online media? Are social networks the new critical public? If yes, in what way. Is citizen journalism the future of the media, and if so, why? What awaits us in the future when it comes to online media? |
|--------------------------|---|
| Aim of studying | Students should understand and learn to distinguish between traditional and new media and acquire knowledge for working in new media. |
| Outcomes of the studying | Students' ability to write and work in new media as well as new media management. |
| Skills | Acquiring skills for using digital tools and working in new media |

BLC.077 Technology of printing and printing forms

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | The place and role of printing, printed products and graphic engineers. Classification of printing processes. Printing machine systems, basic division and function. Stages of the printing process. Definition and division of printing forms, classification of production procedures. Copying. Basic characteristics and area of application of the press type. Basic characteristics and field of application of flexo printing. The working principle of the system for color and printing in flexo printing. Printing forms for type and flexo printing. Concept of offset printing and areas of application, construction of offset printing machines. Printing forms for offset printing. CTP systems. Basic characteristics and area of application of gravure printing, construction of gravure printing machines. Printing forms for gravure printing. Basic characteristics and field of application of screen printing. Criteria for selecting the printing process. Certification of the semester and registration of grades. Supplementary classes and remedial exam period. | |
|--------------------------|---|--|
| Aim of studying | Acquisition of basic knowledge in the field of printing technologies and printing forms. Laying the foundations for thinking about the real possibilities of creating an imagined product using the studied printing techniques. | |
| Outcomes of the studying | Students are familiar with the basic concepts of printing technology and printing forms. Students can choose the appropriate printing process for the requested graphic or packaging product. | |
| Skills | Correct choice of printing technique, quality management of graphic reproduction, quality management of production of printing forms. | |

BLC.078 Photography 1

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 30 | 1 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Theoretical teaching: discoveries and history of photography; photography technique; photography technology; application of photography; aesthetics of photography. Exercises: Photographic camera (from analog to digital). Operation of the camera, recording and entering the image into the computer. Training and work in the Adobe Photoshop program. Studio photography. |
|--------------------------|---|
| Aim of studying | To master the theory, technology and technique of photography, and students are trained to independently create and apply photography in traditional and new media. |
| Outcomes of the studying | Students master the skills that develop the ability to understand the technological, thought (aesthetic) and creative processes of the creation and effect of artistic and media contents of photography. |
| Skills | Handling of cameras. Adjusting the camera for proper exposure. Sense of composition and aesthetics of photography. Working with light. |

BLC.079 Digital communication

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Defining digital media and communications - digitization (transition from analog to digital technology), programmability, interactivity, hypertextuality, global networking, virtual reality, and simulation. Practical and theoretical knowledge in the fields of: interactive television, Internet and UX/UI design (design of user interface and user experience), digital marketing, and online sales). |
|-----------------------------|--|
| Aim of studying | Learning goals include the acquisition of theoretical and practical knowledge in the development of communications on new - digital media. Acquisition of special knowledge, skills and competences through theoretical and practical teaching in the development of communication design for various digital platforms. |
| Outcomes of the studying | Students master the skills that develop the ability to understand technological processes within the framework of media convergence and the creation of modern communications. Developing the power of reasoning, theoretical reflection and analysis of interactive communication models. This course provides an overview of digital communication tools and techniques and, through practical exercises, helps students understand the creation of new media designs. |
| Skills | Designing the interface and user experience. Creation of digital marketing strategies. Creating online sales. Design of interactive advertisements on television. |

BLC.080 Drawing and art

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 40 | 1,5 |
| Exercises | 60 | 2 |
| Practical work | 60 | 2 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 10 |

| Course content | Theoretical teaching: Theory of form – Form: amorphous, emancipated and archetypal forms, The earliest forms of visual communication: pictograms, hieroglyphs, calligraphy, Composition – point, line, stain, surface, volume, contrasts, shadow, dynamics, color, dominant, stylization, line quality, Golden section as a determinant of space, a spiral, Balance, symmetry and asymmetry – Figurative and abstract. Practical classes: Study by model, Exploration of classical drawing techniques: charcoal, ink and pen, graphite pencil, washed drawing, Concept of sketches and crocs of drawings, Color and coloring of the drawing, visual analysis of shape – character and proportions, Light and shadow, Principles of drawing from the whole to the detail. |
|-----------------------------|--|
| Aim of studying | Enabling students to build a visual relationship with reality, adopt artistic content and gain artistic experience as a condition for creative thinking in shaping graphic forms. Comprehension of composition plans and illusiveness of space in the medium of drawing and two-dimensional representation. Mastering the fundamental principles of composing through the symbolism of the vertical, horizontal and diagonal. Research on the importance of art in contemporary visual art and design. |
| Outcomes of the studying | Students use different art techniques (pencil, charcoal, chalk, rapidograph) in the realization of art tasks. According to the given art problem, they creatively organize the motif by observing it on the surface. Observing the human body and respecting anatomical proportions, they express themselves through drawing and painting. They actively participate in the cultural life of the community by organizing exhibitions and visiting them. |
| Skills | Observational skills and the ability to creatively explore, experiment and design. Knowledge of different art forms, techniques and media. |

BLC.081 Graphics 1

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 40 | 1,5 |
| Exercises | 60 | 2 |
| Practical work | 30 | 1 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 10 |

Introduction (concept of graphics, historical development). Workshop, dies, paper, paint, tools (workplace, rules behavior; wooden boards of longitudinal section; types of paper and characteristics; types of printing inks; chisels, knives, sharpening stones, rollers). The line in the function of starting the space - rhythm (organization of the surface into a simple composition with several lines - creation of templates). Line value - line of the same value (compositions with motifs of simple shapes, templates and cutting). Line and volume (linear description of a concrete motif - an object of emphasized volume; examples of different line systems/hatches - templates, cutting, printing and analysis of the results). Line value - line in several different values (simple composition with a richer scale of linear values - templates, cutting, and printing). Texture (remnants of cutting marks in the white surface introduce the possibility of materialization in the medium; finding means to achieve different textures – templates, cutting, printing, analysis). Course content Surface - black-white ratio (composing exclusively with surfaces, in full contrast of black and white surfaces without lines - templates, cutting). Line and surface - construction of surfaces with different light values (the density of the hatch determines the light value of the surface templates, cutting, printing, analysis). Camaíeu - two-tone engraving (introduction of linoleum as a material for making a matrix of its characteristics – templates, cutting, printing, analysis). Color (organization of the image using two complementary colors, made with black and white from the base - templates, cutting of two plates). Color (organization of the image using two complementary colors, made with black and white from the base - templates, cutting of two plates). Color and complex graphic organization (use of all three basic colors and their overlapping – templates, cutting of three plates). Through lectures, exercises and practical work, the subject concept, phenomenon and historical development of graphic disciplines are interpreted. Students master the technical - technological requirements of working in graphic materials - matrices for letterpress printing, tools for making matrices, print carriers, tools and inks for printing. Norms of workshop behavior, rules of Aim of collective work, standard marking and signing of prints and editions are adopted. Sensitivity to studying elements of graphic organization of space is systematically developed. Through a series of tasks, students get to know the function, value and meaning of the line in simple organizations of the surface, then in more complex organizations in which resources are multiplied. The surface is included in its black and white relations, as a combination of line and surface. Students use letterpress printing in the linocut (woodcut) technique. Observing the world around **Outcomes of** them, they find different artistic solutions that they realize through sketches, carving and printing the studying on a graphic press. They actively participate in the cultural life of the community by organizing exhibitions and visiting them. Observational skills and the ability to creatively explore, experiment and design. Knowledge of **Skills** different art forms, techniques and media.

BLC.082 Design 1

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 30 | 1 |
| Seminar paper | 0 | 0 |
| Consultation | 0 | 0 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Introduction to graphic design; The term history of graphic design. Universal and communication values of signs; Methodology, stylization of the conceptual sketch. Design as a process; Basic signs of visual perception. Solving spatial (surface) organization. Artistic elements and composition. Typographic elements, typographic sensibility; The genesis of the letter – the letter as a logo. Transformation: drawing – pictogram – sign (drawing – sign – symbol). Sign - logo - visual identity. Book of standards, brand, trademark. Universal and referential function of the sign. Figurative and abstract signs. An icon in contemporary graphic design. The role of context in shaping. Visual interpretation of the message. |
|--------------------------|---|
| Aim of studying | Acquisition of special knowledge, skills and competences through theoretical and practical teaching (exercises) for professional and high-quality, independent or team solving of problems and tasks, as well as for monitoring and realization of ideas in the field of graphic design. |
| Outcomes of the studying | Possession of theoretical and practical knowledge, necessary for professional, creative and innovative work in the field of graphic design, as a multi and interdisciplinary contemporary, very present medium. |
| Skills | The skills of a graphic designer are: Artistic ability, Communication skills, Computer skills, Creativity, Analytical skills. |

BLC.083 Graphic design

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Color. Quantitative color expression. Color description systems. Implementation of color as an important element of graphic expression. Bit map in graphic design. Basic characteristics of print quality. Display of the appearance of the final print on the monitor or test print. Basics of color management (color management). Icc profiles. Principles of black generation: gcr, ucr. Recommendations for folding newspapers and magazines. Creating output file. Working with text. Graphic design of packaging. Certification of the semester and registration of grades. Supplementary classes and remedial exam period. |
|--------------------------|--|
| Aim of studying | Upon completion of the course, students will acquire basic knowledge in the field of color perception, quantitative color expression, and color description system. Students will become familiar with terms related to raster reproduction, color management, principles of color generation and conversion, etc. |
| Outcomes of the studying | Knowledge acquired in this course fully equips the participant to understand, manage and interpret the means of visual expression that are prepared for reproduction electronically and in print. |
| Skills | Color management, color measurement, color correction, newspaper and magazine layout. |

BLC.084 Computer graphics

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Getting to know the hardware equipment needed for computer graphics. Getting to know programs for creating computer graphics - Adobe Photoshop, Adobe Illustrator, Adobe Aftereffects, CorelDraw, Corel Painter, Art Rage, Adobe Flash, Adobe After effects, Adobe XD, Maya 3D, 3D Studio Max Getting to know the principles of vector graphics - creating work in a vector image processing program on a given topic (static image) - Adobe Illustrator or similar. Getting to know the principles of raster graphics - photo processing in the program for processing raster images Adobe Photoshop. Getting to know the basic principles of animation. Introduction to animation - creating a simple animation in Adobe After Effects. An introduction to creating special effects and animations in Adobe After Effects. Introduction to 3D animation, basics, tools and principles (text animation). Introduction to 3D modeling. UV mapping and texturing. Creating a prototype of a mobile application or website in the Adobe XD program. Exporting and compression of prepared graphic elements. |
|-----------------------------|---|
| Aim of studying | The goal of the computer graphics course is to familiarize with the most commonly used programs for vector and raster images, as well as the basic principles of working in a 3D environment, such as Adobe Illustrator, Adobe Flash, Adobe Photoshop, Adobe AfterEffects, Adobe XD, etc., through the creation of practical tasks within each of these areas. In this way, students have the opportunity to understand and master the basic aspects of digital graphics, as well as to acquire a theoretical background in the field of aesthetics and artistic approach to tasks. |
| Outcomes of the studying | Application and principles of interactive 2D and 3D graphics as well as computer animation. Using the latest software solutions for creating 2D and 3D graphics and computer animation. Designing and making realistic 2D and 3D objects. Creating a complex prototype of a mobile application or website by combining 2D, 3D objects, vector and raster graphics and computer animation. |
| Skills | Students acquire skills through lectures and exercises, independent preparation of tasks, learning, consultations and practical and theoretical seminar work. The lectures cover theoretical content and provide conceptual explanations of concepts and individual parts in computer graphics. Within the exercises, emphasis is placed on the development of abilities and skills in the application of individual parts of computer, vector and bitmap graphics. Working and navigating the tools and commands in Adobe Illustrator and Photoshop, AfterEffects and Adobe XD. Ability to use the tools and commands of Adobe Illustrator and Photoshop, AfterEffects and Adobe XD applications to create vector and bitmap graphics. The skill to distinguish and connect the possibilities of applying individual graphic tools in the realization of digital graphic solutions. Through seminar work, the ability to apply certain scientific knowledge and the application and work in software tools are additionally developed with the aim of their integrated use in solving problems on a given topic. |

BLC.085 Visual communication

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | The concept of communication; Theoretical aspects of Visual communication; Design of artistic experience; Media in the function of visual communications; Film and film art; Television and principles of functioning; Use of visual communications in marketing communications; Visual communication and application of graphic design in digital media; Multimedia, internet and virtual reality; Visual communications and packaging design. |
|-----------------------------|---|
| Aim of studying | Acquisition of special knowledge, skills and competencies through theoretical and practical teaching (exercises) for professional and high-quality, independent or team solving of problems and tasks, as well as for monitoring and realization of ideas in the field of graphic design. |
| Outcomes of the studying | The goal of studying the subject of Visual Communication is to provide practical knowledge and critical skills, necessary for a purposeful understanding of visual communication as an important and inevitable component of modern communication and graphic design. Developing the ability or power of reasoning, theoretical reflection and perception of artistic, media work as well as media event based on visual cognition and visual experience. This course provides an overview of many tools and techniques that include typography, layout, color, design, branding, packaging design, illustration, photography, graphics, film and movement. This course will provide an overview of visual communication tools and techniques and, through practical exercises, help students understand how to use them effectively. |
| Skills | Creation of complex graphic solutions within the packaging design process. Advanced level of work in Adobe Illustrator and Adobe Photoshop. Creating press preparations for various packaging printing techniques. Advanced separation of printing inks. Creation of 3D models of packaging. |

BLC.086 Animation

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 30 | 1 |
| Practical work | 0 | 0 |
| Seminar paper | 30 | 1 |
| Consultation | 15 | 0,5 |
| Student's individual work | 75 | 2,5 |
| ECTS | | 6 |

| Course content | Theoretical classes: Introduction to the history, technology and terminology of classic animation; Different approaches and techniques of animated moving images; Stylish language, collective / intimate topics and messages, narration / abstraction; Basic principles of animation (number of images in animation, key images and intersections, pace and speed of movement, acceleration and slowdown, collection and stretching, anticipation and special effects); Animated graphics; Perspective, trajectory traction, tempo / rhythm; Film techniques in animation service (framing, installation, light, sound); Cinematographic phases - Production, production, post-production. Practical classes: Free - hand "Frame by From" (Jump Frog); Free - hand animation "Frame by frame" (cycle of walk in place); Animation of text; Animating inanimate items (bouncing ball). Principle of collection and stretching (basic function of the tool and scene setting, working with the timeline, connection and manipulation of staff); Stop-mousse animation (template: - Forming frame via photography, time line - Timeline in the program, an animated sequence manipulation, rendering frames of animated material); Character animation - a grabble (template: digital collage, character creation, animation). |
|--------------------------|--|
| Aim of studying | Through lectures, students get acquainted with the rich heritage of a variety of topics, content, techniques and artistic approaches in the field of creation and production of a short and feature animated film. Basic knowledge of techniques and media traditional and computer-generated digital animations are acquired, as a precondition for further improvement in the field of animated graphics. Students are training for critical opinion on animation as a bitential aspect of film and multimedia art and design. |
| Outcomes of the studying | Students are trained to design and realize short animated forms in the technique of traditional or computer-generated animation. |
| Skills | Students have mastered the basic principles of the animation of typography, graphic facilities individually created by Karakers. They learned to observe animation in the broader context of digital art, i.e. multimedia design. |

BLC.087 Graphics 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 30 | 1 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 105 | 3,5 |
| ECTS | | 8 |

| Course content | Theoretical teaching: Historical overview of the development of graphic disciplines (IX century, woodcut in China: Diamond Sutra; Beginnings of woodcut in the West, Medieval miniatures and printing on textiles; Discovery of the printing press - Gutenberg; Penance: Albrecht Dürer, Hans Holbein, Hugo da Carpi; Nineteenth century: Japanese color woodcut school Ukiyo, Impressionism: Edgar Degas, Henri Toulouse Lautrec, Paul Gauguin, Edward Munch; Expressionism and the Bridge group: Erich Haeckel, Karl Schmidt-Rothluf, Emil Nolde, Paul Klee, Frank Mark, Kete Kollwitz; Color linocut, twentieth century: Pablo Picasso, Henri Matisse). Practical classes: Deepening knowledge about the elements of art composition as a necessary condition for dealing with graphics as a complex and broad art discipline. Two-tone engraving - introduction of linoleum as a material for making a matrix and its characteristics - templates, cutting, printing, analysis. Color. Image organization using two complementary colors — templates, cutting, printing, analysis. Rhythm line, surface and color in the drawing. Correlation of colors in the drawing. Treatment of white color (paper background) as another color that participates in creating the rhythmicity of the drawing. Rhythm of full and empty (filled with color and not filled with color). Color and complex graphic organization. Using all three basic colors and overlapping them - templates, cutting, printing, and analysis. The culture of the graphic magazine. Selection and proper manipulation of paper, recognition of quality print, determination of print run, print signature and presentation of graphics. |
|--------------------------|---|
| Aim of studying | Training students to produce graphics in letterpress printing techniques in two or more colors and their combinations. The emergence and development of graphic disciplines from the 9th to the 21st century is studied. The following are studied: line as a means of materialization and graphic sign, texture and structure, matter and space; space and shadow, perspective, size relationship, color phenomenon, complementary contrast, two-color and multi-color printing, other color relationships. |
| Outcomes of the studying | The students applied the aesthetic principles of visual arts in the spectrum of graphic possibilities and acquired the necessary professional, artistic and technical knowledge and skills in order to nurture individual artistic poetics. |
| Skills | Complete training is achieved in recognizing and using materials and reaching a free relationship in creating one's own artistic expression based on an exhaustive knowledge of the chosen medium. |

BLC.088 Organization of graphic production

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Definition of organization. Modification of the classic hierarchical theory. Functional theory of organization. Organizational structure. Functional organizational structure. Divisional organizational structure. Matrix organizational structure. Organization of the commercial service. Organization of the marketing service. Organization of transport. Organization of general services |
|--------------------------|--|
| Aim of studying | Acquisition of basic knowledge in the field of organization and management. Setting the foundations for the implementation of standards in the area of quality management. Acquiring knowledge in standardization, organizational action, strategies, motivational theories and definition of organizing theory. Basic terms: organization, legality, forms of work organization, structure strategy, norms, motivation, responsibilities, and powers. |
| Outcomes of the studying | Focusing on understanding the advantages and disadvantages of certain organizational theories for the design of different management structures. |
| Skills | Management of a department, organization or company. Management of documentation. |

BLC.089 Illustration

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 135 | 4,5 |
| ECTS | | 8 |

| Course content | Introduction – concept and types. History (Cave paintings; Egypt, Ancient Greece and Rome; Middle Ages - book illuminations; Renaissance, Leonardo da Vinci (medical and technical illustration), Hans Holbein, Albrecht Dürer; Discovery of printing - Johann Gutenberg; Eighteenth century - Romanticism: William Blake, Ukiyo-e School in Japan; Nineteenth century- The Golden Age of Illustration: Honore Daumier, Gilles Cheret, Henri de Toulouse Lautrec, John Leech, J. Cruikshank, Edmund Evans, Kate Greenaway, Walter Crane, etc.; Russia- Ivan Bilibin; Twentieth century - II Golden age of illustration: Artur Rekam, Edmund Dilak, Howard Pyle, Milena Pavlović Barili, Edward Hopper, Norman Rockwell; Propaganda poster; Second half of the 20th century: influences of the music, film and publishing industry; Genre of fiction in popular culture; Manga and Anime; Typography. Techniques – drawing, painting, digital painting, collage, photography, combined techniques. Illustration styles, character development, story flow. Illustration – medical, biological, technical. Book illustration - cover. Book illustration – for adults. Book illustration - for children, picture book. Function of the picture book, influence on the child's development. Poster. More about this source text For additional information about the translation, the source text is required. Send feedback. Side panels. |
|--------------------------|--|
| Aim of studying | The aim of the illustration course is to get acquainted with the basic aspects and techniques of contemporary illustration, with an emphasis on the practical production of different types of illustrations, training in effective understanding of tasks, professional attitude towards the client and the audience, as well as improving the drawing and painting skills required for illustration practice. |
| Outcomes of the studying | Developing creative abilities and mastering specific practical skills in the field of computer technologies and digital communication technologies in order to create author's illustrations at a high aesthetic and professional level. |
| Skills | Students are trained to form their own style while respecting the requirements of the market and the client. |

BLC.090 Graphic materials and technologies

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 30 | 1 |
| Exercises | 60 | 2 |
| Practical work | 0 | 0 |
| Seminar paper | 15 | 0,5 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 8 |

| Course content | Definition and classification of materials. Structure and properties of materials with different chemical bonds. Mechanical properties of materials. Physical properties of materials. Metal materials. Cellulosic materials. Plastics. The graphics hurt. Adhesives. Tire. Textile materials. Glass. |
|--------------------------|--|
| Aim of studying | Acquisition of basic knowledge in the field of use of graphic materials in the graphic industry. Establishing the basis for thinking about the real possibilities of realizing the imagined product with those materials that are used as a standard as well as with alternative materials. Basic concepts: paper, canvas, paints, varnishes, glues, fabrics, foils. |
| Outcomes of the studying | Focusing on understanding the advantages and disadvantages of individual materials and improving the graphic product by using a wide range of new potential materials. |
| Skills | Working with graphic materials, creative expression through the use of graphic materials, achieving dimensional stability of the graphic product, selection of graphic materials according to use in the graphic industry. |

BLC.091 Photography 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 40 | 1,5 |
| Exercises | 60 | 2 |
| Practical work | 60 | 2 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 10 |

| Course content | Theoretical teaching: digital photography, digital cameras, exterior and interior photography, digital image and resolution, studio photography, photo post-production; Exercises: Operation of the camera, recording and entering the image into the computer; Training and work in Adobe Photoshop and Adobe Lightroom; Studio photography. |
|--------------------------|---|
| Aim of studying | Mastering the theory, technology and technique of photography, and students are trained to independently create and apply photography in traditional and new media. |
| Outcomes of the studying | Students master the skills that develop the ability to understand the technological, thought (aesthetic) and creative processes of the creation and effect of artistic and media contents of photography. |
| Skills | Handling of digital cameras. Work with in a photography studio. Light modeling. Work in Adobe Lightroom and Adobe Photoshop programs. |

BLC.092 Design 2

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 40 | 1,5 |
| Exercises | 60 | 2 |
| Practical work | 60 | 2 |
| Seminar paper | 0 | 0 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 10 |

| Course content | Semantic, semiological, syntactic and morphological elements. Advertising (ad, poster, and billboard). Structure and typology of posters. Publications (books, magazines, catalogs). Packaging design and packaging aesthetics. Computer programs in graphic design (computers, scanners, printers, plotters, cutters). Printing - graphic techniques; technologies for the realization of conceptual solutions. Digital photography in graphic design. Materials in graphic design. Concept and history of illustration (types and applications); Contemporary illustration. Psychosociological factors of target groups in graphic design. Design and ecology today. Design and kitsch, design and larpurartism. Design in the function of marketing. Design and post-industrial society. |
|--------------------------|---|
| Aim of studying | Acquisition of special knowledge, skills and competences through theoretical and practical teaching (exercises) for professional and high-quality, independent or team solving of problems and tasks, as well as for monitoring and realization of ideas in the field of graphic design. |
| Outcomes of the studying | Possession of theoretical and practical knowledge, necessary for professional, creative and innovative work in the field of graphic design, as a multi and interdisciplinary modern, very present medium. |
| Skills | The skills of a graphic designer are: Artistic ability. Communication skills. Computer skills. Creativity. Analytical skills. |

BLC.093 Student practice

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 0 | 0 |
| Exercises | 0 | 0 |
| Practical work | 160 | 5,5 |
| Seminar paper | 60 | 2 |
| Consultation | 15 | 0,5 |
| Student's individual work | 120 | 4 |
| ECTS | | 12 |

| Course content | Student practice is in accordance with the study program that the student is attending. Student practice is carried out with the aim of familiarizing the student with the working environment, work processes and with the aim of acquiring practical knowledge. |
|--------------------------|---|
| Aim of studying | Using teamwork in all life situations. Argument based discussion about various subjects from the domain of business life. Expressing views, negotiations and allowing others to express their views. Understanding processes which are important for the totality of conducting business. |
| Outcomes of the studying | It is expected that after the obligations defined by the curriculum are fulfilled the student will be able to: recognize the basic processes of working environment and understand the basic elements of teamwork. |
| Skills | It provides the candidate with insight into processes of actual working environment, and it trains him/her for teamwork. |

BLC.094 Diploma Thesis

| Teaching methods | Hours | ECTS |
|---------------------------|-------|------|
| Lectures | 0 | 0 |
| Exercises | 0 | 0 |
| Practical work | 0 | 0 |
| Seminar paper | 0 | 0 |
| Consultation | 30 | 1 |
| Student's individual work | 270 | 9 |
| ECTS | | 10 |

| Course content | Based on the assignment, detail study of the technology state, suggest the optimal solution and practically verify it. Develop a thesis of approximately 50 pages. | |
|--------------------------|---|--|
| Aim of studying | To prepare the student to independently create complex projects. | |
| Outcomes of the studying | Independently study a given topic, quote the literature, periodically present the achievements to date, elaborate dedicated issue, perform practical verification and draw conclusions. | |
| Skills | Trains the student to independently research literature, design solutions, perform practical verification and present the problem. | |