CONTENS

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/APO/15	**Name:** Computer Hardware

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 455

A	B	C	D	E	FX
20.0	17.8	26.37	17.14	17.8	0.88

Teacher: prof. András Molnár, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Economics and Informatics

Code: KMI/AIdb/ BS1/15	**Name:** Bachelor Thesis Seminars 1

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 2 / 0 **For the study period:** 0 / 26 / 0
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 386

A	B	C	D	E	FX
63.21	13.73	9.59	2.33	10.62	0.52

Teacher: Mgr. Norbert Annuš, doc. RNDr. József Bukor, PhD., PaedDr. Márk Csóka, PaedDr. Krisztina Czakóová, PhD., RNDr. Štefan Gubo, PhD., prof. József Zoltán Kató, DSc., Dr. habil. Dr. Gábor Kiss, PhD., Dr. habil. Attila Elemér Kiss, CSc., prof. RNDr. Tibor Kmeť, CSc., László Marák, PhD., prof. András Molnár, PhD., Mgr. Dávid Paksi, PaedDr. Bence Pásztor, prof. Sándor Szénási, PhD., Ing. Ondrej Takáč, PhD., prof. Dr. Annamária Várkonyiné Kóczy, DSc., PaedDr. Ladislav Végh, PhD., Mgr. Balázs Vígh

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ BS2/15	**Name:** Bachelor Thesis Seminars 2

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 2 / 0 **For the study period:** 0 / 26 / 0
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 291

A	B	C	D	E	FX
78.35	8.59	4.12	3.09	3.44	2.41

Teacher: prof. Dr. Annamária Várkonyiné Kóczy, DSc., Mgr. Norbert Annuš, doc. RNDr. József Bukor, PhD., PaedDr. Márk Csóka, PaedDr. Krisztina Czakóová, PhD., RNDr. Štefan Gubo, PhD., prof. József Zoltán Kató, DSc., Dr. habil. Dr. Gábor Kiss, PhD., Dr. habil. Attila Elemér Kiss, CSc., prof. RNDr. Tibor Kmeť, CSc., László Marák, PhD., prof. András Molnár, PhD., Mgr. Dávid Paksi, prof. Sándor Szénási, PhD., Ing. Ondrej Takáč, PhD., RNDr. József Udvaros, PhD., PaedDr. Ladislav Végh, PhD., Dr. habil. RNDr. Peter Csiba, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KJP/AIdb/ CJAI 1/15	**Name:** English language 1
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Test (100%)	
Results of education: The aim of the course is to develop students' English communication skills in a working environment. The lessons focus on developing communication skills by improving general IT and business vocabulary. Students acquire those written and verbal skills, which will enable them to use the language at the workplace or in everyday IT and business situations.	
Brief syllabus: 1. Computer users. Information exchange. Information channels 2. Listening: Noting specific information. Grammar: Past simple and Present perfect 3. Computer architecture. How to connect components – describing processes. Prepositions of place 4. Discussion: Exchanging technical information 5. Computer applications 6. Listening and speaking: describing a process. Reading diagrams. 7. Grammar: passive voice. Describing trends 8. Describing function. Listening: describing function. Comparison and contrasting of products and technologies. 9. Operation systems. Comparison of adjectives 10. Reading and speaking: Artificial intelligence and data collection 11. Peripherals 12. Graphic user interface. Grammar revision 13. Test	
Literature: 1. GLENDINNING, E., H. – MCEWAN, J.: Oxford English for Information Technology. Oxford University Press, 2011. ISBN 978-0-19- 4574921 2. DUDÁS, T. – KULCSÁR, ZS. – PISON, E. – SÁNTA, SZ. – SIMON, M.: Angol-magyar-német-szlovák tematikus gazdasági szótár. Komárno: Pont Intézet, 2007. ISSN 1336-135X 3. HEWINGS, M.: Advanced Grammar in Use. Cambridge: University Press, 2003. ISBN 0-521-49868-6	

Language, knowledge of which is necessary to complete a course:
English

Notes:

Evaluation of subjects
Total number of evaluated students: 113

A	B	C	D	E	FX
28.32	16.81	21.24	15.04	15.93	2.65

Teacher: Mgr. Endre Hevesi, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KJP/AIdb/ CJAI 2/15	**Name:** English language 2
Types, range and methods of educational activities: **Form of study:** Seminar **Recommended extent of course (in hours):** **Per week:** 1 **For the study period:** 13 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Test (100%)	
Results of education: The aim of the course is to develop students' English communication skills in a working environment. The lessons focus on developing communication skills by improving general IT and business vocabulary. Students acquire those written and verbal skills, which will enable them to use the language at the workplace or in everyday IT and business situations.	
Brief syllabus: 1. Applications programs. Writing instructions and user manuals 2. Multimedia. Grammar. Conditional sentences 3. Computer networks. Grammar: relative clauses 4. The Internet. Communication through ICT 5. Information exchange: Description of processes. Grammar: Time clauses 6. Websites. Discussion: Exchanging information 7. Webdesign 8. Conditional sentences. Vocabulary extension 9. Case study: Webdesign 10. Communication systems and networks 11. Reading comprehension and discussion: Broadband communication 12. Grammar: predictions, certainty expressions 13. Test	
Literature: 1. GLENDINNING, E., H. – MCEWAN, J.: Oxford English for Information Technology. Oxford University Press, 2011. ISBN 978-0-19- 4574921 2. DUDÁS, T. – KULCSÁR, ZS. – PISON, E. – SÁNTA, SZ. – SIMON, M.: Angol-magyar-német-szlovák tematikus gazdasági szótár. Komárno: Pont Intézet, 2007. ISSN 1336-135X 3. HEWINGS, M.: Advanced Grammar in Use. Cambridge: University Press, 2003. ISBN 0-521-49868-6	
Language, knowledge of which is necessary to complete a course:	

English

Notes:

Evaluation of subjects
Total number of evaluated students: 66

A	B	C	D	E	FX
54.55	19.7	15.15	1.52	7.58	1.52

Teacher: Mgr. Zsuzsa Sovinsky

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KJP/AIdb/ CJAI 3/15	**Name:** English language 3

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 1 **For the study period:** 13
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Test (100%)

Results of education:
The aim of the course is to develop students' English communication skills in a working environment. The lessons focus on developing communication skills by improving general IT and business vocabulary. Students acquire those written and verbal skills, which will enable them to use the language at the workplace or in everyday IT and business situations.

Brief syllabus:
1. Giving advice on technical problems. Computing support.
2. Discussion: diagnosing a fault, giving advice
3. Discussion: Data security 1. Reading: The Anatomy of a Virus
4. Discussion: Computer crime
5. Discussion: Data security 2. Reading comprehension: "The ex-hacker"
6. Grammar: Phrasal verbs
7. Software engineering
8. Career opportunities in IT. Grammar: Modal verbs 1
9. Development of information technologies. Grammar: Modal verbs 2
10. The future of information technology
11. Grammar: types of future tense
12. Electronic publishing. Grammar: Prepositions
13. Final test

Literature:
1. GLENDINNING, E., H. – MCEWAN, J.: Oxford English for Information Technology. Oxford University Press, 2011. ISBN 978-0-19- 4574921
2. DUDÁS, T. – KULCSÁR, ZS. – PISON, E. – SÁNTA, SZ. – SIMON, M.: Angol-magyar-német-szlovák tematikus gazdasági szótár. Komárno: Pont Intézet, 2007. ISSN 1336-135X
3. HEWINGS, M.: Advanced Grammar in Use. Cambridge: University Press, 2003. ISBN 0-521-49868-6

Language, knowledge of which is necessary to complete a course:

English

Notes:

Evaluation of subjects
Total number of evaluated students: 43

A	B	C	D	E	FX
41.86	20.93	25.58	9.3	2.33	0.0

Teacher: Mgr. Zsuzsanna Tóth, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ DBA/15	**Name:** Creation of database applications

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 324

A	B	C	D	E	FX
23.15	21.91	12.35	14.2	11.42	16.98

Teacher: László Marák, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ DBS/15	**Name:** Database Information Systems

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Students create their own database application during the semester. The course is finished by an exam where it is possible to obtain 50 percent. They are assessed according to their average grades from exam (50%) and database application (50%). For assessment A it should be obtained at least 90 percent, for assessment B at least 80 percent, for assessment C at least 70 percent, for assessment D at least 60 percent, for assessment E at least 50 percent. Credits will not be granted to students who obtain less than 50 points.

Results of education:
In this course the students become acquinted with the issue of databases, their design and they study relational databases in detail. After successful finishing the course they gain theoretical knowledge and practical aspects of database information systems too. They learn basic technical terminology in the field and this knowledge they can also adequately use for the analysis of database systems, their design and implementation in the selected database environment.

Brief syllabus:
The basic concepts and database systems terminology.The introduction to database technology. Semantic database models. Hierarchical database models. Network database models. The relational database model. Relational algebra. Normal forms of relational databases. Normalization process within the demonstration practice. Relational database design, the methods of formation. Creating and implementation of a database in the selected area. Solution of the most frequently occurring problems in practice with respect to SRBD. Forming and tuning of databases.

Literature:
1. Tringer, É. – Fodor, I.: Adatbázis kezelés. Budapest : Kossuth Kiadó, 2003. 222 s. ISBN: 963-0944-08-1
2. Ullman J. D. – Widom J.-: Adatbázis rendszerek – Alapvetés. Budapest : Panem Kiadó Kft.,1998. 507s. ISBN 963-545-190-3
3. Garcia-Molina, H. – J. D. Ullman –Widom, J.: Adatbázis rendszerek megvalósítása. Panem Kiadó Kft., 2001. ISBN: 9635452804

Language, knowledge of which is necessary to complete a course:
hungarian language, slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 481

A	B	C	D	E	FX
13.93	34.3	23.49	16.63	10.4	1.25

Teacher: Dr. habil. Attila Elemér Kiss, CSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ DEI/15	**Name:** History of Informatics
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects
Total number of evaluated students: 431

A	B	C	D	E	FX
17.4	13.92	18.33	19.49	26.68	4.18

Teacher:
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ DM1/15	**Name:** Discrete Mathematics 1 - Set Theory, Combinatorics, Boolean Algebra

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 2 / 0 **For the study period:** 13 / 26 / 0
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester will be held two written tests by 20 points. The course is finished by an exam where it is possible to obtain 60 points. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. Credits will not be granted to students who obtain less than 50 points.

Results of education:
At the end of the course, students will obtain an overview of the basic concepts of Set Theory, Combinatorics, Mathematical Logic and Boolean Algebra.

Brief syllabus:
Introduction to the Discrete Mathematics, Peano axioms, principle of Mathematical induction.
Set Theory – basic terms, set operations.
Relations and mappings, composition of mappings, equivalence relation.
Cardinality of sets, finite and nonfinite sets, computable sets.
Combinatorics – combinations and variations (with and without repetition).
Permutations (with and without repetition), combinatorial identities.
Binomial and Polynomial theorem.
Inclusion–exclusion principle, Pigeonhole principle.
Propositions and logical operations, tautologies.
Boolean algebra – binary Boolean functions, realization of Boolean functions by formulas.
Equivalence of Boolean formulas, properties of elementary Boolean functions, principle of duality.
Canonic form of Boolean functions, full disjunctive normal form.
Functional completeness and closure, most important closed classes, Completeness theorem.
Minimization of Boolean functions.

Literature:
JABLONSKIJ, S. V.: Úvod do diskrétnej matematiky. Bratislava : Alfa, 1984., 278 s.
JABLONSKIJ, S. V. a kol.: Diszkrét matematika a számítástudományban. Budapest : Műszaki Könyvkiadó, 1980. 354 s. ISBN 978-963-1025-99-3
SZENDREI, Á.: Diszkrét matematika. Szeged : Polygon, 1998. 380 s. ISSN 1417-0590.

LOVÁSZ, L.: Kombinatorikai problémák és feladatok. Budapest : Typotex, 2008. 670 s. ISBN 978-963-9664-93-7.
LOVÁSZ, L. – VESZTERGOMBI, K. – PELIKÁN, J.: Diszkrét matematika. Budapest : Typotex, 2006. 292 s. ISBN 978-963-9664-02-9.

Language, knowledge of which is necessary to complete a course:
Hungarian, Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 660

A	B	C	D	E	FX
6.67	8.33	13.48	15.76	29.85	25.91

Teacher: prof. László Szalay, DSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ DM2/15	**Name:** Discrete Mathematics 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 1 / 1 **For the study period:** 26 / 13 / 13 **Methods of study:** present	
Number of credits: 6	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 485

A	B	C	D	E	FX
10.93	12.16	14.85	17.32	32.78	11.96

Teacher: prof. László Szalay, DSc., RNDr. Štefan Gubo, PhD.
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KEK/AIdb/ EK1/15	**Name:** Economics 1
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Successful completion of the final written test at the end of the semester. To obtain evaluation A is necessary at least 90% of the maximum score of the final review, to obtain evaluation B at least 80%, for the assessment of at least 70% C, D for the assessment of at least 60%, and the evaluation E at least 50% of the maximum points. Credit won't be granted to a student who did not receive at least 50% of the maximum of score on the written test.	
Results of education: After the completion of the course the student will know the basic concepts of microeconomics system and the individual decisions of market participants. The student will be able to prepare basic microeconomic analysis of demand and supply.	
Brief syllabus: The basics of microeconomic theory 2. The state as a market balance factor - demand, supply, market balance 3. The theoretical basics of consumption, consumer preferences 4. General characteristics of the utility functions, maximum utility 5. The consumer's optimal choice - changes in income, changes in unit prices, consumer surplus 6. Price elasticity, income elasticity, cross-price elasticity 7. The basics of supply theory - companies 8. Costs, revenues, profits of companies 9. Enterprises and market structures - perfect competition 10. The company's offerings - supply curve 11. Monopoly, oligopoly 12 Taxation – consumption, production of goods and services 13. Support – consumption, production of goods and services	
Literature: 1. LISÝ, J. a kol.: Ekonómia v novej ekonomike. Bratislava : Iura Edition, 2005, s. 622s. ISBN 80-8078-063-3. 2. FENDEK, M. – FENDEKOVÁ, E. Mikroekonomická analýza. Bratislava : Iura Edition, 2008, s. 576. ISBN 978-80-8078-180-4.	

3. FENDEKOVÁ, E. a kol.: Zbierka príkladov z mikroekonómie. Bratislava : Iura Edition, 2009, s. 200. ISBN 978-80-8078-242-9.
4. JUREČKA, V. a kol.: Mikroekonomie. Praha : Grada Publishing, 2010, s. 360. ISBN 978-80-247-3259-6.
5. KOPPÁNY, M.: Mikroökonómia. Budapest : Akadémia Kiadó, 2009, s. 555. ISBN 978-963-05-8567-5.
6. VARIAN, H. R.: Mikroökonómia középfokon. Budapest : Akadémia Kiadó, 2005, s. 745. ISBN 963-05-8308-9.

Language, knowledge of which is necessary to complete a course:
Hungarian and Slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 581

A	B	C	D	E	FX
19.62	13.77	17.73	17.9	20.48	10.5

Teacher: PhDr. Enikő Kahler Korcsmáros, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KEK/AIdb/ EK2/15	**Name:** Economics 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Successful completion of the final written test at the end of the semester. To obtain evaluation A is necessary at least 90% of the maximum score of the final review, to obtain evaluation B at least 80%, for the assessment of at least 70% C, D for the assessment of at least 60%, and the evaluation E at least 50% of the maximum points. Credit won't be granted to a student who receive 49% or less from the maximum of score on the written test.	
Results of education: After the completion of the course the student will know the basic knowledge about the macro-economic context. The student learns the factors influencing GDP, inflation, unemployment rate and will be able to prepare basic macro-economic analysis of the economy.	
Brief syllabus: 1. The basics of macroeconomic theory. 2. The economic possibilities and methods of performance measurement - the approach in expenditure and the revenue side, the value-added method. 3. Classic model 4. Length-Term Growth - Solow model 5. The fiscal and monetary policy of the state 6. Labour market - unemployment and employment rates, effective wage, the rate of economic activity 7. Money and money markets, Baumol - Tobin model 8. The relationship between inflation and unemployment - Philips curve 9. Aggregate demand and aggregate supply 10. AD-AS model 11. Keynes's approach 12. IS-LM model 13. Economic growth, economic cycle	
Literature: 1. LISÝ, J. a kol.: Ekonomický rast a ekonomický cyklus. Bratislava : Iura Edition, 2011, s. 273. ISBN 978-80-8078-405-8.	

2. LISÝ, J. a kol.: Ekonomika v novej ekonomike. Bratislava : Iura Edition, 2007, s. 715. ISBN 808-078-164-4.
3. JUREČKA, V. a kol.: Makroekonomie. Praha : Grada Publishing, 2010, s. 336. ISBN 978-80-247-3258-9.
4. MANKANIE, N.G.: Makroökonómia. Budapest : Osiris Kiadó, 2002, s. 566. ISBN 963-33-794-18-8.
5. SIMON, A.: Útmutató a makroökonómiához. Budapest : Osiris Kiadó, 2002, s. 239. ISBN 963-379-419-6.
6. MISZ, J.: Makroökonómia feladatgyűjtemény. Budapest : Panem Kiadó, 2004, s. 188. ISBN 963-545-434-1.

Language, knowledge of which is necessary to complete a course:
Slovak language and Hungarian language

Notes:

Evaluation of subjects
Total number of evaluated students: 234

A	B	C	D	E	FX
20.09	19.23	14.96	20.51	11.11	14.1

Teacher: PhDr. Enikő Kahler Korcsmáros, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ GED/15	**Name:** Computer Graphics - Graphic Editors

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 472

A	B	C	D	E	FX
39.83	23.52	13.77	10.81	11.02	1.06

Teacher: RNDr. Štefan Gubo, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KEK/AIdb/ HOP/15	**Name:** Economic Law

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 2 / 0 **For the study period:** 26 / 0
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Successful completion of the final written test at the end of the semester. To obtain evaluation A is necessary at least 90% of the maximum score of the final review, to obtain evaluation B at least 80%, for the assessment of at least 70% C, D for the assessment of at least 60%, and the evaluation E at least 50% of the maximum points. Credit won't be granted to a student who did not receive at least 50% of the maximum of score on the written test.

Results of education:
The object of the Commercial Law of the Slovak Republic and the legal system deals with a review of the regulatory environment, which relying on the government to implement economic policy. The teaching of Business Law is designed to give students a systematic review of economic regulation.

Brief syllabus:
1. The structure of the legal system and status of economic law therein, 2. constitutional foundations, 3. ownership, 4. management of state property in the business and non-business sector, 5. privatization, protection of competition, state aid, 6. bankruptcy legislation, business - commercial, public procurement, 7. state price regulation, 8. tax law

Literature:
1. SUCHOŽA, J. a kol.: Obchodné právo. Bratislava : IURA EDITION, 2010, s. 1032. ISBN 978-808-782-90-0.
2. ŠKRINÁR, A. – NEVOLNÁ, Z. a kol.: Obchodné právo. Praha : Aleš Čeněk, 2012, s. 376. ISBN 978-8073-803-65-0.
3. Aktuálne právne predpisy a vyhlášky.

Language, knowledge of which is necessary to complete a course:
Slovak Language

Notes:

Evaluation of subjects
Total number of evaluated students: 145

A	B	C	D	E	FX
19.31	11.03	21.38	24.14	21.38	2.76
Teacher: JUDr. Ing. Gabriel Katona, PhD.					
Date of last update: 03.03.2023					
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ INS/15	**Name:** Inteligent Systems

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 0 **For the study period:** 26 / 0 / 0
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 284

A	B	C	D	E	FX
27.82	29.23	20.07	11.62	10.56	0.7

Teacher: prof. András Molnár, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ KS1/15	**Name:** Office Information Systems 1
Types, range and methods of educational activities: **Form of study:** Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 **For the study period:** 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, midterm tests are written by students. Based on the average of the results: above 90% A, between 80 to 90% B, 70-80% C, 60-70% D, 50-60% E below 50% FX.	
Results of education: The purpose of the course is that students acquire basic skills to work with the computer and computer applications, especially the use of MS Office software. Students will acquire theoretical and practical knowledge of word processing, graphics editor and spreadsheet application software, and using the Internet Services. The main focus is on the application basic priciples.	
Brief syllabus: Basic concepts of computer use (OS, element,filetypes, folder ...). Use a text editor (description of the environment, the basic functions). Creating Documents (font, format), text wrapping, the graphics operations. differences between different types of editors (WYSIWYG). How to use the language corrector. Using a graphical environment (description of the environment, control elements). Selected objects from work (copy, rotate, zoom ...). Illustrations and other objects you insert into your document (with different applications running).	
Literature: 1. STOFFA,V. - CSÍZI,L. - SZŐKÖL, I. - TÓTH, K. - VÉGH,L.: Az informatika alapjai I. Komárno: UJS, 2007, s. 268. ISBN 978-80-89234-29-5. 2. STOFFOVÁ, V. - CSÍZI, L. - TÓTH, K. - SZŐKÖL, Š.: Informačné a komunikačné technológie v praxi II. Komárno : Univerzita J. Selyeho, 2007, s. 316. ISBN 978-80-89234-42-4. 3. STOFFOVÁ, V. - CSÍZI, L. - TÓTH, K. - SZŐKÖl, Š.: Információs és kommunikációs technológiák a gyakorlatban II. Komárno : Univerzita J. Selyeho, 2007, s. 316. ISBN 978-80-89234-69-1. 4. BAKA, M. - KOCZKA, F.: Informatika, Szövegszerkesztés. Eger : EKTF LÍCEUM KIADÓ,1997. 5. CAWSEY, A.: Mesterséges intelligencia. Budapest : Panem Kft., 2002, s. 207. ISBN 963 545 285 3.	
Language, knowledge of which is necessary to complete a course:	

Notes:

Evaluation of subjects
Total number of evaluated students: 634

A	B	C	D	E	FX
50.79	20.98	12.3	5.36	6.47	4.1

Teacher: RNDr. József Udvaros, PhD., Mgr. Dávid Paksi

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ KS2/15	**Name:** Office Information Systems 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester, midterm tests are written by students. Based on the average of the results: above 90% A, between 80 to 90% B, 70-80% C, 60-70% D, 50-60% E below 50% FX.	
Results of education: The course aim is to introduce the spreadsheets to the students and to point out their importance in solving the problems of everyday life. A further aim is that students acquire independent and creative work with the spreadsheet tools.	
Brief syllabus: The basic philosophy of spreadsheets, basic concepts. Simple tables and formula entry, formatting options. Spreadsheet functions, function wizard. Mathematical and statistical functions. Operations, logic functions and their significance. Search, database functions and special properties. Filtering spreadsheets. Graphics options, preparation of charts. Proximity application functions (linear, polynomial, exponential) Subtotals. Solving equations and solver. Create macros. Make your own applications	
Literature: 1. COHNER, K. J.- OZSVÁTH, M. – NAGY, G. J.: Office 2000. Budapest : ComputerBooks, 2002, s. 458. ISBN 963 618 235 3. 2. BÁRTFAI, B.: Office XP. Budapest : BBS-INFO Kft., 2002, s. 352. ISBN 963 862 329 2. 3. BOTT, E. – WOODY, L.: Office 2000. Budapest : Kiskapu Kft., 2002, s.1790. ISBN 963 860 103 5. 4. STOFFA, V. – CSÍZI, L. – SZŐKÖL , I. – TÓTH, K. – VÉGH, L.: Az informatika alapjai I. Komárno : Univerzita J. Selyeho, 2007, s. 269. ISBN 978-80-89234-29-5.	
Language, knowledge of which is necessary to complete a course:	
Notes:	
Evaluation of subjects Total number of evaluated students: 581	

A	B	C	D	E	FX
35.8	15.49	12.91	11.02	14.97	9.81
Teacher: RNDr. József Udvaros, PhD., Mgr. Dávid Paksi					
Date of last update: 03.03.2023					
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.					

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ MA1/15	**Name:** Mathematics for Informaticians 1

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 1 / 1 **For the study period:** 26 / 13 / 13
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester will be held two written clearance by 40 points and for the active work of student in WebWork-system can the student obtain 20 points. Of the total of 100 points it is needed to obtain at least 90 points on the valuation A, for grade B is necessary to obtain 80 points, for grade C at least 70 points, for grade D at least 60 points and for grade E at least 50 points. For the student, who obtained less than 20 points in any written clearance, at the end of semester a final written clearance will be held with max. 80 points.

Results of education:
After successful completion of this course students will know and control the basic properties of algebraic structures and the basic concepts of linear algebra. In solving the tasks of daily practice are able to apply basic methods of linear algebra. Furthermore, students are able to solve tasks and the computer in the CAS system using MATLAB or other suitable free software.

Brief syllabus:
Algebraic structures.
Vector space. Subspace of a vector space.
Linear dependence and independence of vectors.
Dimension and base vector space.
Matrices, operations with matrices.
Rank of a matrix.
Linear mapping, matrix of the linear mapping.
Composition of linear mappings.
Matrix inversion.
Solving homogeneous and inhomogeneous systems of linear equations.
Determinant, basic features and applications.
Eigenvalues and eigenvectors.

Literature:
1. Katriňák, T. a kol.: Algebra a teoretická aritmetika 1. Bratislava : UK Bratislava, 1995, s. 351. ISBN 80-223-0986-9.
2. SZENDREI, J.: Algebra és számelmélet. Budapest : Nemzeti tankönyvkiadó, 2001, s. 475. ISBN 963 19 2401 7.

3. Fried, E.: Algebra I.: Elemi és lineáris algebra. Budapest : Nemzeti Tankönyvkiadó, 2000, s. 334. ISBN 963 19 11764.

Language, knowledge of which is necessary to complete a course:
hungarian, slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 669

A	B	C	D	E	FX
5.83	10.76	26.31	26.01	18.09	13.0

Teacher: prof. László Szalay, DSc., RNDr. Zuzana Árki, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ MA2/15	**Name:** Mathematics for Informaticians 2
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 1 / 1 **For the study period:** 26 / 13 / 13 **Methods of study:** present	
Number of credits: 6	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 586

A	B	C	D	E	FX
8.7	7.85	10.58	23.21	36.69	12.97

Teacher: doc. RNDr. József Bukor, PhD.
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ MA3/15	**Name:** Mathematics for Informaticians 3
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 1 / 1 **For the study period:** 26 / 13 / 13 **Methods of study:** present	
Number of credits: 6	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 533

A	B	C	D	E	FX
8.63	8.44	14.82	19.14	37.52	11.44

Teacher: doc. RNDr. Ferdinánd Filip, PhD., Mgr. Szilárd Svitek
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KM/AIdb/ MAN/15	**Name:** Management

Types, range and methods of educational activities:
Form of study: Lecture
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester the student is obliged to successfully complete the 100-point written test. To obtain grade „A“ students have to obtain minimum 90% of the total score, to obtain grade „B“ students have to obtain 80% of the total score, to obtain grade „C“ students have to obtain 70% of the total score, to obtain grade „D“ students have to obtain 60% of the total score, to obtain grade „E“ students have to obtain 50% of the total score.

Results of education:
In order to achieve strategic objectives, companies have to adapt to changes which in the daily operational tasks are always different. After completion of the course the students become familiar with the process of project planning and execution, as well as see through management duties in theory and practice.

Brief syllabus:
1. Management and project management basics
2. Characteristics of the project process and its actors
3. Analysis of the project risk
4. Project planning basics
5. Analysis of the project planning process
6. Company time planning basics
7. Enterprise resource planning basics
8. Project cost analysis
9. Project control
10. Organizational project management solutions
11. Tools and decision-making methodology of the project strategy
12. Characteristics of the project proposal and evaluation, contracting process
13. Project success, project marketing

Literature:
1. SEDLÁK, M.: Základy manažmentu. Bratislava : IURA EDITION, 2009, s. 310. ISBN 978-808-0781-93-4.
2. MAJTÁN, M.: Projektový manažment. Bratislava : Sprint dva, 2009, s. 299. ISBN 978-808-9393-05-3.

3. KREMEŇOVÁ, I.: Projektový manažment. Bratislava : EDIS, 2009, s. 442. ISBN 978-805-5401-48-5.
4. CLELAND, D. – IRELAND, L.: Project Management: Strategic Design and Implementation. New York : McGraw-Hill Professional, 2007. ISBN 978-007-1471-60-2.
5. GÖRÖG, M.: A projektvezetés mestersége. (Majstrovstvo projektového riadenia). Budapest : AULA Kiadó, 2007, s. 376. ISBN 978-963-9478-5-72.
6. BENCSIK, A.: Menedzsment- és projekttechnikák. (Manažérske a projektové techniky). Veszprém : Pannon Kiadó, 2005, s. 438. ISBN 978-963-9495-68-9.
7. HENCZI L. – MURVAI L.: Projekttervezés és projektmenedzsment. (Projektové plánovanie a projektový manažment). Budapest : Saldó Kiadó Zrt., 2012, s. 184. ISBN 978-963-6384-09-8.

Language, knowledge of which is necessary to complete a course:
Hungarian language and Slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 175

A	B	C	D	E	FX
33.14	10.86	22.29	11.43	17.71	4.57

Teacher: prof. Dr. József Poór, DSc., Dr. habil. Ing. Peter Karácsony, PhD., Mgr. Adriana Mezeiová, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ MIT/15	**Name:** Materials and Technologies for Informaticions
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 384

A	B	C	D	E	FX
27.34	30.73	22.66	7.55	10.68	1.04

Teacher: Ing. Ondrej Takáč, PhD.
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KM/AIdb/ MRK/15	**Name:** Marketing

Types, range and methods of educational activities:
Form of study: Lecture / Seminar
Recommended extent of course (in hours):
Per week: 1 / 1 **For the study period:** 13 / 13
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
Exam: max. 100 points. To obtain grade „A“ students have to obtain minimum 90% of the total score, to obtain grade „B“ students have to obtain 80% of the total score, to obtain grade „C“ students have to obtain 70% of the total score, to obtain grade „D“ students have to obtain 60% of the total score, to obtain grade „E“ students have to obtain 50% of the total score. There is no credit for the subject if a student obtains less than 50%.

Results of education:
The objective of the subject is to give a knowledge about the corporate market operations for the students. During the semester we will deal with the basic elements of marketing, market, individual and organizational behavior, the application of the marketing tools. It will show the operation of the marketing tools, especially the process of market research.

Brief syllabus:
1. Marketing theories, corporate marketing orientations
2. Market and market competition, segmentation, STP strategies
3. Consumer behavior as meta theory
4. Organizational buying behavior, relationship marketing
5. Brand and product. Fight for the consumers
6. Product policy, product developments, portfolio analysis, product life cycle
7. Product policy, pricing methods
8. Distribution system, logistic and the other functions
9. The participants of the distribution system, trends in retailing, personal selling
10. Advertisements and communication, forms of advertisement. The measure of efficiency of advertising
11. Marketing information system, market definitions
12. Marketing functions and marketing organizations
13. Marketing in international environment

Literature:
1. KITA, J. a kol.: Marketing. Bratislava : Iura Edition, 2005, s. 431. ISBN 808-078-0498.
2. NÍZKA, H.: Aplikovaný marketing. Bratislava : Iura Edition, 2007, s. 198. ISBN 978-80-8078-157-6.

3. HINORA, F. – SZÁNTÓ, SZ.: Minden, ami marketing. Budapest : Hinora Kommunikációs Ügynökség, 2010, s. 372. ISBN 978-963-069-1369.
4. BERNSCHÜTZ, M. – DEÉS, SZ. – KENÉZ, A.: Marketing esettanulmányok. Budapest : Akadémia Kiadó Zrt., 2013, s. 277. ISBN 978-963-059-3830.
5. SZILÁGYI, Z. – VERES, Z.: A marketing alapjai. Budapest : Perfekt, 2007, s. 316. ISBN 978-963-394-6022.

Language, knowledge of which is necessary to complete a course:
Hungarian and Slovakian language

Notes:

Evaluation of subjects
Total number of evaluated students: 117

A	B	C	D	E	FX
3.42	13.68	26.5	31.62	17.09	7.69

Teacher: prof. Dr. László Józsa, CSc., PhDr. Erika Seres Huszárik, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ MS/18	**Name:** Introduction to the Modeling and Simulation

Types, range and methods of educational activities:
Form of study: Lecture / Practical
Recommended extent of course (in hours):
Per week: 2 / 2 **For the study period:** 26 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 246

A	B	C	D	E	FX
10.98	13.41	23.17	19.92	20.33	12.2

Teacher: prof. RNDr. Tibor Kmeť, CSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/OBP/15	**Name:** Bachelor thesis and its defence
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 10	
Recommended semester/trimester of study: 5., 6..	
Level of study: I.	
Prerequisites: KMI/AIdb/MA1/15 and KMI/AIdb/PHW/15 and KMI/AIdb/PR1/15 and KMI/AIdb/UDI/15 and KMI/AIdb/DM1/15 and KMI/AIdb/MA2/15 and KMI/AIdb/PR2/15 and KMI/AIdb/TEI/18 and KMI/AIdb/MA3/15 and KMI/AIdb/PR3/15 and KMI/AIdb/MS/18 and KMI/AIdb/TWS/15 and KMI/AIdb/APO/15 and KMI/AIdb/DBS/15 and KMI/AIdb/DM2/15 and KMI/AIdb/PR4/15 and KMI/AIdb/OPX/15 and KMI/AIdb/INS/15 and KMI/AIdb/OS1/15 and KMI/AIdb/PGG/15 and KMI/AIdb/PPR/15 and KMI/AIdb/PSI/15 and KMI/AIdb/OS2/15 and KMI/AIdb/PST/15	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 271

A	B	C	D	E	FX
37.27	23.62	16.61	12.92	6.27	3.32

Teacher:	
Date of last update: 03.03.2023	
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.	

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/OPX/15	**Name:** Professional Practice
Types, range and methods of educational activities: **Form of study:** **Recommended extent of course (in hours):** **Per week: For the study period:** **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 3., 4.., 5., 6..	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects
Total number of evaluated students: 366

a	n
100.0	0.0

Teacher:
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Economics and Informatics

Code: KMI/AIdb/OS1/15	**Name:** Operating Systems 1

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 1 **For the study period:** 26 / 0 / 13
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:
Introduction to the Operating systems, basic terms. History and classification of operating systems. Architecture of operating systems. Graphical User Interface and Application Programming Interface of operating systems. File management, Authorization and access control. Disk management. Resource management. Processor and process management. Memory management. Virtual memory management.

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 445

A	B	C	D	E	FX
3.37	6.29	13.48	24.94	37.98	13.93

Teacher: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ OS2/15	**Name:** Operating Systems 2

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 1 **For the study period:** 26 / 0 / 13
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 336

A	B	C	D	E	FX
2.68	6.25	15.18	30.06	38.1	7.74

Teacher: prof. Dr. Annamária Várkonyiné Kóczy, DSc., RNDr. Štefan Gubo, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KEK/AIdb/ PFN/15	**Name:** Corporate finance
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar **Recommended extent of course (in hours):** **Per week:** 1 / 1 **For the study period:** 13 / 13 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: Successful completion of the final written test at the end of the semester. To obtain evaluation A is necessary at least 90% of the maximum score of the final review, to obtain evaluation B at least 80%, for the assessment of at least 70% C, D for the assessment of at least 60%, and the evaluation E at least 50% of the maximum points. Credit won't be granted to a student who receive 49% or less from the maximum of score on the written test.	
Results of education: After the completion of the course the student will know the basic knowledge about the corporate finance. They understand financial processes related to the company, they are able to prepare basic analyze of the investment opportunities, they will be able to interpret the data connected with corporate cash flow.	
Brief syllabus: Introduction to Corporate Finance 2. General characteristics of money and currency 3. The time value of money 4. Interest Calculation methods - nominal and effective interest rate 5. Long-term financial assets - bonds 6. Long-term financial assets - shares 7. Risk, return, portfolio theory 8. Criteria for investment decisions 9. Corporate Cash Flow 10. Analysis of Investment Risk 11. Corporate resource structure characterization - equity, debt capital 12. Long-term financial decisions and capital structure 13. Effective market and corporate dividend policy	
Literature: 1. VLACHYNSKÝ, K. a kol.: Podnikové financie. Bratislava: Iura Edition, 2009, s. 524. ISBN 978-80-8078-258-0. 2. FETISOVOVÁ, E. a kol.: Podnikové financie – praktické aplikácie a zbierka príkladov. Bratislava: Iura Edition, 2009, s. 177. ISBN 978 -0-8078-367-9.	

3. SOBEKOVÁ MAJKOVÁ, M.: Ako financovať malé a stredné podniky. Bratislava: Iura Edition, 2011, s. 228. ISBN 978-80-8078-413-3.
4. BREALY, R.A. – MYERS, S.C.: Modern vállalati pénzügyek. Budapest: Panem Kiadó, 2005, s. 1176. ISBN 963-545-422-8.
5. DOBAI KORCSMÁROS, E.: Bevezetés a vállalati pénzügyekbe (elméleti és gyakorlati alapok). Komárom: Selye János Egyetem, 2013, s. 179. ISBN 978-80-8122-076-0.
6. GYULAI, L.: Kis- és középvállalatok üzletfinanszírozása. Budapest: Saldo, 2011, s. 168. ISBN 978-963-638-380-0.
7. BUDAPESTI CORVINUS EGYETEM: Vállalati pénzügyek példatár. Budapest: Aula Kiadó, 2005, s. 160. ISBN 978-9639-5856-76.

Language, knowledge of which is necessary to complete a course:
Hungarian and Slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 148

A	B	C	D	E	FX
14.19	20.95	21.62	22.97	11.49	8.78

Teacher: PhDr. Enikő Kahler Korcsmáros, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Economics and Informatics

Code: KMI/AIdb/ PGG/15	**Name:** Computer Geometry and Graphics

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:
.

Literature:
1. SOBOTA, B. – MILIÁN, J.: Grafické formáty. České Budejovice : Kopp, 1996, s. 157. ISBN 80-85828-58-8.
2. CHAPMAN, N. - CHAPMAN, J.: Digital multimedia. John Wiley & Sons, Second Edition, 2003, s. 700. ISBN 0470858907.
3. BODNÁR, I. - NAGY, Z.: Számítógépes prezentáció és grafika. Budapest : PC-START STÚDIÓ, 1998, s. 186. ISBN 9630499371.
4. SZIRMAY - KALOS, L.: Háromdimenziós grafika, animáció és játékfejlesztés. Budapest : ComputerBooks, 2004, s. 486. ISBN 9636183031.
5. SZIRMAY - KALOS, L.: Számítógépes grafika. Budapest : ComputerBooks, 2003, s. 334. ISBN 963 618 208 6.
6. VARGA, M.: 3D grafika a modellezés és megjelenítés. Bicske : Szak, 2004, s. 200. ISBN 9789639131613.

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 418

A	B	C	D	E	FX
11.72	21.77	32.78	19.86	11.48	2.39

Teacher: prof. József Zoltán Kató, DSc., László Marák, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PHW/15	**Name:** Computer Hardware
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 0 / 1 **For the study period:** 26 / 0 / 13 **Methods of study:** present	
Number of credits: 5	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The course is finished by an exam. Students are assessed according to the average percentage obtained on the exams. For assessment A should be obtained at least 90 percent, for assessment B at least 80 percent, for assessment C at least 70 percent, for assessment D at least 60 percent, for assessment E at least 50 percent. Credits will not be granted to students who obtain less than 50 percent.	
Results of education: After successful completion of this course students get an overview of computer hardware, they can perform the essential replacement parts and computer components, familiar way of connecting individual functional parts of the computer and the principles of their work.	
Brief syllabus: Basic Concepts of hardware. Occupational safety and health in the laboratory. The basic hardware components of your computer. Compatibility and hardware requirements. Computer cases, main cables and connectors in the cabinet. Motherboard, its role, components, and installation. Memory modules, types of memory modules and their installation. Processor, CPU features and its installation. Installing a video card in your computer. Add-on cards and their installation. A second hard drive and connect them to the motherboard. Floppy disk, CD or other drives and their installation. Special Computer peripherals and connectivity.	
Literature: 1. ROUBAL, P.: Hardware pro úplné začátečníky. Bratislava : Computer Press, 2003. s. 154, ISBN 8072267302 2. HORÁK, J.: Hardware. Brno : CP Books, 2005, s. 345. ISBN 8025106470. 3. STOFFA, V. – CSÍZI, L. – SZŐKÖL, I. – TÓTH, K. – VÉGH, L.: Az informatika alapjai I. Komárno : Univerzita J. Selyeho, 2007, s. 268. ISBN 978-80-89234-29-5.	

Language, knowledge of which is necessary to complete a course:
hungarian language, slovak language

Notes:

Evaluation of subjects
Total number of evaluated students: 664

A	B	C	D	E	FX
5.87	16.72	22.44	22.14	19.43	13.4

Teacher: László Marák, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University

Name of the faculty: Faculty of Economics and Informatics

Code: KMI/AIdb/ PPR/15	**Name:** Processor programming - Assembler

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, midterm tests are written by students. Based on the average of the results: above 90% A, between 80 to 90% B, 70-80% C, 60-70% D, 50-60% E below 50% FX.

Results of education:
Students will gain hands-on experience of the x86 family of processors from machine-level programming (Assembly).

Brief syllabus:
Architectural overview of known processors. Register set, instruction set. runtime mechanisms, their relationship to the operating system machine level programs. Features of compilers. The structure of the executable files (EXE and COM files structure) Creating a simple, sequential programs iterations, the implementation of input / output operations. Calculations, data conversions, creating simulations. Peripheral device access and programming (Graphic Display elements, key management).

Literature:
1. Agárdi G.: Gyakorlati Assembly, LSI oktatóközpont, 2002. 212 s. ISBN 963 577 1177.
2. Agárdi G.: Gyakorlati Assembly haladóknak, LSI oktatóközpont, 2002. 208 s. ISBN 963577141X.

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 287

A	B	C	D	E	FX
34.15	9.76	14.98	10.45	28.57	2.09

Teacher: prof. András Molnár, PhD., Mgr. Norbert Annuš

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PR1/15	**Name:** Programming 1 - Algorithmization and Programming

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester, students write two practical assessments. Students also solve some programming projects individually at home. The activity of students in classes is also taken into consideration, so students can get plus points. In practical assessments and programming project students need to achieve a minimum of 50%. Using all these assessments, the teacher of seminars prepare students continuous evaluation. The exam consists of a practical and theoretical programming tasks. Students in exam have to reach also a minimum of 50%. The final grade is calculated as a mean of continuous evaluation and exam mark. For the classification A at least 90%, for B at least 80%, for C at least 70%, for D at least 60%, and for E at least 50% must be obtained. Those students, who did not achieve the minimum 50% from any part, do not finish the course successfully.

Results of education:
After successful completion of course, students will know the fundamentals of structural programming, will be able to write algorithms as sequence of logical steps to different problems, draw flowcharts, and rewrite them into programs. Students will have experiences in the usage of programming environment, practice in programming using standard control structures and functions.

Brief syllabus:
Algorithmization:
Basic features of algorithms, forms of creating and expressing algorithms.
Oral and graphical expression of algorithms.
Basic elements of algorithms, and their usage.
Programming:
The structure of programs in programming language. Syntax and semantics.
Data types, representation of standard data types in the programming language.
Standard data structures, basic commands.
Standard functions and procedures.
Programming, solving tasks (sorting algorithms).
Procedures and functions: hierarchy of program structure. Defining own functions. Global and local variables.

Procedures with and without parameters.
Extending the concept of data types using additional standard types and structures, their importance in solving problems (enumerated types, sets, files, etc.).
The file, as useful tool of exchanging data between programs and their environment. The structure of files, declaration of files, file types, accessing files, operation on files.
Standard procedures for processing files. Methods of file handling.
Complex solution of problems.

Literature:

1. STOFFA, V.: Algoritmizáció és programozás. (Algoritmizácia a progra-movanie). 1. vyd. Komárno : Univerzita J. Selyeho v Komárne, 2005, s. 174. ISBN 80-969251-7-2.
2. BENKŐ, T. – BENKŐ, L. – TÓTH, B. – VARGA, B.: Programozzunk Turbo Pascal nyelven! Objektum orientált programozás. Budapest : Computer Books, 2002, s. 552. ISBN 963618223X.
3. BENTLEY, J.: Programming Pearls. 2. vyd. Boston : Addison-Wesley Professional, 2000, s. 239. ISBN 0-201-65788-0.
4. MOLNÁR, Cs. – SÁGI G.: Programozás Turbo Pascal nyelven. (Programovanie v jazyku Turbo Pascal). Budapest : BBS-E Betéti Társaság, 2001, s. 232. ISBN 963 03 7152 9.
5. PONGOR, Gy.: Szabványos Pascal programozás és algoritmusok. (Štandardné programovanie v Pascale a algoritmy). Műszaki könyvkiadó : Budapest, 2002, s. 424. ISBN 9631625737.
6. VITEK, A. a kol.: Problems in Programming. Experience through Practice. New York : John Wiley & Sons Inc., 1991, s. 330. ISBN 978-0471930174.

Language, knowledge of which is necessary to complete a course:
Hungarian, Slovak, English

Notes:

Evaluation of subjects
Total number of evaluated students: 780

A	B	C	D	E	FX
13.46	17.31	20.13	23.33	21.54	4.23

Teacher: prof. József Zoltán Kató, DSc., PaedDr. Ladislav Végh, PhD., PaedDr. Márk Csóka

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PR2/15	**Name:** Programming 2 - Programming and Data Structures

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 2.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The course ends with exam, where students can get 100 points. For the classification A at least 90 points, for B at least 80 points, for C at least 70 points, for D at least 60 points, and for E at least 50 points must be obtained.

Results of education:
After the successful accomplishment of the course, students will understand the concept of dynamic variable, dynamic data structures, and their implementation in the given programming language. They will acquire knowledge about the searching and sorting algorithms. Furthermore, students will be acquaint with various programming techniques.

Brief syllabus:
• Procedures and functions, creating own procedures and functions.
• Data structures: set, record, enumerated type.
• Using files: text files, typed binary files, untyped binary files.
• Standard modules: System, Dos, Crt, Graph, String.
• Special algorithms: Sorting, as an example for finding an effective algorithm: insertion sort, selection sort, bubblesort, binary insertion sort, shaker sort, lexicographic sort, merge sort, heapsort....
• Sorting files.
• Programming techniques: Recursion. Recursive sorting algorithms: quicksort, merge sort. Comparing complexity of sorting algorithms.
• Programming techniques: backtracking, iterative algorithms
• Graph unit: graphic mode and its parameters (graphic driver, graphic mode and color depth, initializing graphic mode), procedures and functions of the graph unit, and their usage.
• Graph, Winmouse units: Creating simple animations, using mouse (Winmouse unit).
• Dynamic types and data structures: concept of dynamic variable, its representation in the computer's memory. Examples of dynamic data structures: linked list, stack, queue, and their usage in programming.
• Implementing standard data structures (shift register, single linked list, double linked list, cyclic list, tree structure, net structures. Using appropriate data structure for simplifying the solution of problems.

• Developing software products: from top to bottom, from bottom to top, functional and procedural programming, modular programming, creating units, Jackson method.
• Developing of software systems: Rules of developing programs: analyzing the problem, redefining problems, dividing problems into smaller parts, etc. Methods of developing software projects, and their characterization. Collaborating and managing a programming group.

Literature:

1. STOFFOVÁ, V.: Algoritmizáció és programozás I. Komárno : Univerzita J. Selyeho, 2005, s. 174. ISBN 80-969251-7-2.
2. WIRTH, N.: Algoritmy a štruktúry údajov. Bratislava : Alfa, 1987, s. 500. ISBN 80-05-00153-3.
3. MOLNÁR, Cs.: Programozás Turbo Pascal nyelven. Budapest : BBS-INFO, 2001, s. 234. ISBN 963-0371-52-9.
4. ANGSTER, E.: Programozás tamkönyv II.: Strukturált tervezés Turbo Pascal. Budapest : 4KÖR Bt., 2003, s. 288. ISBN 963-4509-57-6.
5. PONGOR, Gy.: Szabványos Pascal: Programozás és algoritmusok. Budapest : Műszaki könyvkiadó, 2003, s. 424. ISBN 963-1625-73-7.
6. VÉGH, L.: Pascal II. Komárno, 2011. Dostupné na adrese: http://prog.ide.sk/pas2.php
7. STOFFOVÁ, Veronika – CZAKÓOVÁ, Krisztina – VÉGH, Ladislav: Programozás a gyakorlatban : Algoritmizáció és programozás II. Komárno : Univerzita J. Selyeho, 2015, 1. vyd. 124 s. ISBN 978-80-8122-146-0.

Language, knowledge of which is necessary to complete a course:
Hungarian

Notes:

Evaluation of subjects
Total number of evaluated students: 741

A	B	C	D	E	FX
18.76	17.81	19.16	19.3	14.3	10.66

Teacher: PaedDr. Ladislav Végh, PhD., prof. József Zoltán Kató, DSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PR3/15	**Name:** Programming 3 - Programming under Windows OS
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 0 / 2 **For the study period:** 26 / 0 / 26 **Methods of study:** present	
Number of credits: 6	
Recommended semester/trimester of study: 3.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The course ends with exam, where students can get 100 points. For the classification A at least 90 points, for B at least 80 points, for C at least 70 points, for D at least 60 points, and for E at least 50 points must be obtained.	
Results of education: After the successful accomplishment of the course, students will be familiar with the visual, event-driven programming, and developing applications with graphical user interface under the modern operating systems. Furthermore, students will have knowledge about creating software products in visual environments, and will have fundamental knowledge needed for deeper understanding of object-oriented programming.	
Brief syllabus: Programming under Windows operating system, review of programming languages, visual, event-driven programming. Basic components and events, properties of components. Object oriented programming, classes and objects, attributes and methods. Constructor, destructor, visibility modifiers (public, private, protected). Objects, inheritance, polymorphism, virtual, dynamic, and abstract methods. Compatibility and casting classes. Objects that are available for creating a simple application. Graphics, drawing on canvas, creating simple animations. Handling files, saving preferences into ini files and registers. Standard dialogs (OpenDialog, SaveDialog, FontDialog, ColorDialog, ...). Using more windows in an applications, developing SDI and MDI applications. Events of the operating system, messages, reactions to the events of the operating system. OOP in practice – practical examples, runtime creating of visual objects. User requirements and taking them into consideration, written and unwritten rules of software development. Testing software products, copyright, copyright protection.	
Literature:	

1. CANTÚ, M.: Delphi 7 mesteri szinten I. kötet. Budapest : Kiskapu, 2003, s. 638. ISBN 963-9301-66-3.
2. KADLEC, V.: Delphi k okamžitému použití – Hotová řešení. Brno : CP Books, 2005, s. 312. ISBN 80-251-0017-0.
3. VÉGH, L.: Programozás Delphi-ben I. Komárno : Univerzita J. Selyeho, 2012. ISBN 3. 978-80-8122-050-0.
4. VÉGH, L.: Programozás Delphi-ben II. Komárno : Univerzita J. Selyeho, 2012. ISBN 978-80-8122-051-7.
5. BENKŐ, L. – BENKŐ, T. – POPPE, A.: Objektum-orientált programozás C++ nyelven. Budapest : ComputerBooks, 2002, s. 378. ISBN 963-6182-70-1.
6. ANGSTER, E.: Objektumorientált tervezés és programozás Java. Budapest, 4KÖR, 2003. ISBN 963-0062-63-1.

Language, knowledge of which is necessary to complete a course:
Hungarian, Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 688

A	B	C	D	E	FX
19.91	13.37	12.35	15.99	25.87	12.5

Teacher: PaedDr. Ladislav Végh, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PR4/15	**Name:** Programming 4 - Object Oriented Programming

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 2 **For the study period:** 13 / 0 / 26
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 4.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The course ends with combined exam, where students can get 100 points (30 points from theoretical exam and 70 points from practical exam). For the classification A at least 90%, for B at least 80%, for C at least 70%, for D at least 60%, and for E at least 50% must be obtained.

Results of education:
After the successful accomplishment of the course, students will understand special features of programming under modern, graphical, user-oriented operating systems. They will have deeper knowledge and experience in object oriented programming.

Brief syllabus:
1. The structure of Java program. Control structures – for, while, do..while loops, if statement, variables – primitive types, type conversion, non-primitive types, void, strings. Declaring and using one- and multidimensional arrays. Sorting arrays.
2. User input (Scanner class). Generating random numbers (Random class).
3. Classes and objects. Defining own classes, instantiating objects. Attributes, methods. Constructor, constructor overloading. Getters and setters. Visibility modifiers. Static, final modifiers.
4. Inheritance, polymorphism. Upcast and downcast. Abstract classes, abstract modifier. Anonym classes.
5. Using packages.
6. Interfaces, creating own interfaces. Defining natural ordering (Comparable interface), defining other orderings (Comparator interface).
7. Using iterators (Iterable, Iterator interfaces).
8. Generic classes and interfaces. Using wildcards. Creating own generic classes.
9. Handling files. Using Scanner class for reading text files. Reading files with FileReader, writing files with FileWriter (File, FileReader, BufferedReaded, FileWriter, BufferedWriter classes).
10. Handling exceptions. Creating own exception class. Throwing exceptions. Handling multiple exceptions. Runtime and checked exceptions.
11. Java Collections Framework. Lists (ArrayList, LinkedList), sets (HashSet, TreeSet, LinkedHashSet), maps (HashMap, TreeMap, LinkedHashMap).
12. Enum type. Constructor of enum type, getters, defining own methods.

13. Threads. Creating a new thread (Thread class, Runnable interface). Synchronizing threads (volatile, synchronized modifiers, synchronized command).

Literature:

1. NYÉKYNÉ GAIZLER, J.: Java I. Budapest : ELTE Eötvös Kiadó, 2001. ISBN 963-4634-86-9.
2. NYÉKYNÉ GAIZLER, J.: Java II. Budapest : ELTE Eötvös Kiadó, 2001. ISBN 963-4634-87-7.
3. ANGSTER, E.: Objektumorientált tervezés és programozás Java. Budapest, 4KÖR, 2003. ISBN 963-0062-63-1.
4. PURCELL, J.: Java for Complete Beginners. UDEMY online kurz, 2013. Dostupné na adrese: https://www.udemy.com/java-tutorial/
5. PURCELL, J.: Java Multithreading. UDEMY online kurz, 2013. Dostupné na adrese: https://www.udemy.com/java-multithreading/

Language, knowledge of which is necessary to complete a course:
Hungarian, Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 480

A	B	C	D	E	FX
24.17	32.71	17.08	12.71	11.04	2.29

Teacher: prof. Sándor Szénási, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PRP/15	**Name:** Programming in Perl

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 0 / 0 / 2 **For the study period:** 0 / 0 / 26
Methods of study: present

Number of credits: 3

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 426

A	B	C	D	E	FX
22.54	7.51	16.9	21.83	26.53	4.69

Teacher: doc. RNDr. József Bukor, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PSI/15	**Name:** Computer Networks

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 0 / 2 **For the study period:** 26 / 0 / 26
Methods of study: present

Number of credits: 6

Recommended semester/trimester of study: 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 451

A	B	C	D	E	FX
8.65	13.3	23.95	23.06	25.06	5.99

Teacher: Ing. Ondrej Takáč, PhD., Dr. habil. Dr. Gábor Kiss, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ PST/15	**Name:** Probability and Statistics

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 2 / 1 / 1 **For the study period:** 26 / 13 / 13
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 6.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The course is finished by a written exam.
The assessment results are calculated from interim tests (50%) and from the final written exam (50%).
For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points.

Results of education:
The goal is to present the basics of probability theory and statistics. The successful completion of the course gives basic knowledge from probability theory and an overview of statistical methods.

Brief syllabus:
Definition of the probability. The Kolmogorovs field of probability. Conditional probability. Bayes theorem. Independence of events. Bernoulli trials. Random variable. Probability distribution, probability density function. Characteristics of random variable. Discrete and continuous distributions. Laws of large numbers. Central limit theorem. Random sampling. Sampling methods. Theory of point estimation, basic properties of estimators. Estimation methods (maximum likelihood). Interval estimations. Confidence interval for the mean and variance. Hypothesis testing. Parametric and non-parametric tests. Correlation and regression analysis.

Literature:
1. OBÁDOVICS, J. GY. Valószínűségszámítás és matematikai statisztika. Budapest : Scolar Kiadó. 2003, s. 302. ISBN 963-9534-00-5. 2. LUKÁCS, O. Matematikai statisztika. Budapest : Műszaki könyvkiadó. 2003, s. 570. ISBN 963-16-3036-6. 3. BUKOR, J. – ÁRKI, Z. – FEHÉR, Z. Valószinűségszámitás. Komárno : Univerzita J. Selyeho. 2010, s. 120. ISBN 978-80-89234-94-3. 4. HUNYADI, L. Statisztika. Budapest : Aula Kiadó Kft. 2001, s. 882. ISBN 963-9215-56-2.

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects

Total number of evaluated students: 346

A	B	C	D	E	FX
10.69	14.16	21.1	27.75	24.86	1.45

Teacher: RNDr. Zoltán Fehér, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ SP1/15	**Name:** Programming Seminar 1
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 1.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 583

A	B	C	D	E	FX
37.56	18.87	15.78	8.4	16.3	3.09

Teacher:
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ TEH/15	**Name:** Game Theory
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 2 / 0 **For the study period:** 0 / 26 / 0 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 5.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects
Total number of evaluated students: 408

A	B	C	D	E	FX
28.92	19.61	19.12	13.24	15.69	3.43

Teacher: doc. RNDr. Ferdinánd Filip, PhD.
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ TEI/18	**Name:** Theoretical Informatics
Types, range and methods of educational activities: **Form of study:** Lecture / Practical **Recommended extent of course (in hours):** **Per week:** 2 / 2 **For the study period:** 26 / 26 **Methods of study:** present	
Number of credits: 6	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: During the semester will be held two written tests by 20 points. The course is finished by written exam where it is possible to obtain 60 points. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. Credits will not be granted to students who obtain less than 50 points.	
Results of education: At the end of the course, students will obtain an overview of the basic concepts of Theory of Formal Languages and Automata and an overview of the basic concepts of Algorithm and Complexity Theory. They will be able to create regular and context-free grammars, finite and push-down automata, they will be familiar with sorting algorithms, mathematical models of computers, complexity classes and algorithmically unsolvable problems.	
Brief syllabus: 1. Introduction to the Theory of Formal Languages and Automata, basic terms. 2. Regular languages – basic terms, finite automata. 3. Connection between nondeterministic and deterministic finite automata, connection between regular grammars and finite automata. 4. Regular expressions, pumping lemma for regular languages. 5. Context-free languages – basic terms, pushdown automata. 6. Top-down parsing, bottom-up parsing. 7. Algorithm, properties of algorithms, complexity of algorithms. 8. Algorithms for searching in sorted array. Linear and Binary search. 9. Sorting algorithms and their complexity. 10. Hash tables and their use. Hash functions. 11. Mathematical models of computers: Turing machine and RAM. 12. Computation Theory – recursively enumerable and recursive languages, and partial recursive and recursive functions. Church–Turing thesis. 13. Complexity classes P and NP. NP-complete problems. The NPC class.	
Literature:	

1. GUBO, Š.: Formális nyelvek és automaták. Komárno : Univerzita J. Selyeho, 2015, 131 s. ISBN 978-80-8122-148-4.
2. FÜLÖP, Z.: Formális nyelvek és szintaktikus elemzésük. Szeged : Polygon, 1999, 124 s. ISSN 1417-0590.
3. BACH, I.: Formális nyelvek. Budapest : Typotex, 2005, 227 s. ISBN 978-963-9132-92-4.
4. WIRTH, N.: Algoritmy a štruktúry údajov. Bratislava : Alfa, 1989, 488 s. ISBN 80-05-00153-3.
5. RÓNYAI, L. – IVANYOS, G. – SZABÓ, R.: Algoritmusok. Budapest : Typotex, 2005, 350 s. ISBN 978-963-2790-14-5.
6. CORMEN, T. H. – LEISERSON, CH. E. – RIVEST, R. L. – STEIN, C.: Új algoritmusok. Budapest : Scolar Kft., 2003, 992 s. ISBN 978-963-9193-90-1.
7. SINGH, A.: Elements of Computation Theory. London : Springer-Verlag, 2009. 422 s. ISBN 978-1-84882-496-6.

Language, knowledge of which is necessary to complete a course:
Hungarian language, Slovak language, English language.

Notes:

Evaluation of subjects
Total number of evaluated students: 344

A	B	C	D	E	FX
1.74	4.36	10.47	15.7	32.27	35.47

Teacher: RNDr. Štefan Gubo, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/TEX/15	**Name:** Typography Systems
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 4.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 432

A	B	C	D	E	FX
45.14	24.07	15.28	10.19	5.32	0.0

Teacher: Mgr. Miklós Vontszemű
Date of last update: 03.03.2023
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ TMA/15	**Name:** Creation of multimedia applications
Types, range and methods of educational activities: **Form of study:** Lecture / Seminar / Practical **Recommended extent of course (in hours):** **Per week:** 0 / 0 / 2 **For the study period:** 0 / 0 / 26 **Methods of study:** present	
Number of credits: 3	
Recommended semester/trimester of study: 2.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject:	
Results of education:	
Brief syllabus:	
Literature:	
Language, knowledge of which is necessary to complete a course:	
Notes:	

Evaluation of subjects

Total number of evaluated students: 393

A	B	C	D	E	FX
41.48	15.78	15.52	8.14	7.63	11.45

Teacher: László Marák, PhD.	
Date of last update: 03.03.2023	
Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.	

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ TWS/15	**Name:** Website Development

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 0 / 2 **For the study period:** 13 / 0 / 26
Methods of study: present

Number of credits: 4

Recommended semester/trimester of study: 3.

Level of study: I.

Prerequisites:

Conditions for passing the subject:

Results of education:

Brief syllabus:

Literature:

Language, knowledge of which is necessary to complete a course:

Notes:

Evaluation of subjects
Total number of evaluated students: 564

A	B	C	D	E	FX
30.85	34.57	23.58	9.4	1.24	0.35

Teacher: prof. Sándor Szénási, PhD.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ UDI/15	**Name:** Introduction to Informatics

Types, range and methods of educational activities:
Form of study: Lecture / Seminar / Practical
Recommended extent of course (in hours):
Per week: 1 / 2 / 0 **For the study period:** 13 / 26 / 0
Methods of study: present

Number of credits: 5

Recommended semester/trimester of study: 1.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
During the semester the students complete a minimum of two written checks of percentage evaluation. During the semester is monitored also student activity on the seminars. Active students receive a bonus, which is added to the assessment of continuous training of the student during the semester. Students from any written checks must obtain at least the 50% score to be allowed to take the exam. Students from any written checks must obtain at least the 50% score to let them to be allowed to absolve the exam. A teacher, who leads seminars, prepares a percentage evaluation of students based on the results of the continuous preparation for the semester. The exam is combined and consists of written and oral part. Students must be at least 50% successful also on the exam to have been classified. Students are classified according to the average obtained in the overall assessment of continuous training during the semester and to the results of exam. For obtaining the classification A must be obtained at least 90% share of average, at least 80% for B, for C at least 70%, at least 60% for D, for E at least 50%. Credits for subject will not be assigned for the student, who is not at least 50% successful of the individual parts of exam.

Results of education:
After successful completion of this course students can use the basic principles of encoding and displaying information in the computer and easy ways of the processing. Students understand the difference between encoding and encryption, the presentation and processing of integers and real numbers and also the importance of declarations of variables in the program. Students learn as implemented, displayed and processed simple data types of the programming language. They understand how to perform the individual machine instructions, what is instruction cycle and what is the memory cycle.

Brief syllabus:
Coding of information, binary code, character encoding (ASCII code), encrypting.
Positional number system, binary number system.
Conversion between positional number systems, realization of basic arithmetic operations (+, -, *, /).
Internal implementation of numerical information in the computer.
Simple data types and their internal implementation.
Display and processing of integers (fixed point).

Inverse and additional code.
Displaying and processing of real numbers (floating point presentation).
Coding of the instructions (instruction set of processor, execution of the instruction cycle, execution of the memory cycle).
View the program source code.
Translation of the program and execution of the source code (translated program).

Literature:

1. STOFFA, V. a kol.: Az informatika alapjai I. (Základy informatiky I). 1. vyd. Komárno : Univerzita J. Selyeho, 2007, s. 369. ISBN 978-80-89234-29-5.
2. STOFFA, V.: Algoritmizáció és programozás. (Algoritmizácia a programovanie). 1. vyd. Komárno : Univerzita J. Selyeho, 2005, s. 174. ISBN 80-969251-7-2.
3. STOFFOVÁ, V. a kol.: Informatika, informačné technológie a výpočtová technika. Terminologický a výkladový slovník. Nitra : FPV UKF, 2001, s. 230. ISBN 80-8050-450-4.

Language, knowledge of which is necessary to complete a course:
Hungarian langage, Slovak language

Notes:
none

Evaluation of subjects
Total number of evaluated students: 660

A	B	C	D	E	FX
27.58	17.27	14.85	20.91	17.12	2.27

Teacher: Dr. habil. Attila Elemér Kiss, CSc.

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ ROB1/16	**Name:** Robotics 1
Types, range and methods of educational activities: **Form of study:** Practical **Recommended extent of course (in hours):** **Per week:** 2 **For the study period:** 26 **Methods of study:** present	
Number of credits: 2	
Recommended semester/trimester of study: 4., 6.	
Level of study: I.	
Prerequisites:	
Conditions for passing the subject: The course is finished by an exam. Students are assessed according to the average percentage obtained on the exams. For assessment A should be obtained at least 90 percent, for assessment B at least 80 percent, for assessment C at least 70 percent, for assessment D at least 60 percent, for assessment E at least 50 percent. Credits will not be granted to students who obtain less than 50 percent.	
Results of education: Students will gain hands-on experience with low-level programming languages and learn about the development of software for embedded systems and handling characteristics of simple sensors. During the semester, students must prepare a complex Arduino-based robots.	
Brief syllabus: 1. Introduction, terminology 2. General description of microcontrollers, familiarity with the Arduino board 3. programming / debugging, semestral project 4. GPIO peripherals, LED control and switch 5. ADC / DACs, potentiometers 6. USART communication 7. I2C, SPI serial communication 8. Timers, PWM signal 9. Interrupts, watchdog 10. Real-time applications 11. Complex tasks, motor control 12. The management and navigation ground-based robots 13. Transmission and evaluation of semestral projects	
Literature: Kiss, R. - Pásztor, A.: Mobil robotok programozása NXC és NXT-G nyelven. Kecskemét : Kecskeméti Főiskola, 2009. Kelly, J. F.: LEGO Mindstorms NXT G. Programming Guide. New York, NY : Apress, 2010.	
Language, knowledge of which is necessary to complete a course:	

Hungarian language

Notes:

Evaluation of subjects
Total number of evaluated students: 103

A	B	C	D	E	FX
92.23	1.94	1.94	1.94	1.94	0.0

Teacher:

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.

INFORMATION SHEET

Name of the university: J. Selye University	
Name of the faculty: Faculty of Economics and Informatics	
Code: KMI/AIdb/ ZLD/16	**Name:** Basics of Aviation

Types, range and methods of educational activities:
Form of study: Seminar
Recommended extent of course (in hours):
Per week: 2 **For the study period:** 26
Methods of study: present

Number of credits: 2

Recommended semester/trimester of study: 3., 5.

Level of study: I.

Prerequisites:

Conditions for passing the subject:
The subject assessment consists of theoretical and practical part. The course is finished by a written test where it is possible to obtain 75 points. During the practical part (flight on the simulator) it is possible to obtain 25 points. For assessment A should be obtained at least 90 points, for assessment B at least 80 points, for assessment C at least 70 points, for assessment D at least 60 points, for assessment E at least 50 points. Credits will not be granted to students who obtain less than 50 points.

Results of education:

Brief syllabus:
History of aviation.
Aircraft general knowledge.
Airplane performance and flight planning.
Aviation meteorology.
The basics of flight – aerodynamics.
Communication.
Air navigation.
The ICAO map of Slovakia.
Operational procedures.
Aviation law.
Flight on the simulator DJI Phantom 3 Flight Simulator.
Flight on drone DJI Phantom 3 (only for students who have successfully absolved flight on the simulator).

Literature:
KELLER, L et al.. Učebnice pilota 2016. Cheb : Svět křídel, 2016. 408 s. ISBN 978-80-875-6789-0.
Letecká mapa ICAO Slovenska 2016.
BIRD, R.W. – McLAIN, T. W. Small Unmanned Aircraft : Theory and Practice. New Jersey, NJ : Princeton University Press, 2012. 300 s. ISBN 978-0-691-14921-9.
FAHLSTROM, P. G. – GLEASON, T. J. Introduction to UAV Systems. Chichester, UK : John Wiley & Sons Ltd., 2012. 280 s. ISBN 978-1-119-97866-4.

Language, knowledge of which is necessary to complete a course:
Hungarian, Slovak

Notes:

Evaluation of subjects
Total number of evaluated students: 192

A	B	C	D	E	FX
85.94	13.02	0.0	0.52	0.52	0.0

Teacher:

Date of last update: 03.03.2023

Approved by: prof. Dr. Annamária Várkonyiné Kóczy, DSc.