Recomended pass through the study plan

Name of the pass: Open Informatics - Passage through study

Faculty/Institute/Others: Faculty of Electrical Engineering

Department:

Pass through the study plan: Open Informatics

Branch of study guranteed by the department: Common courses

Guarantor of the study branch: Program of study: Open Informatics Type of study: Bachelor full-time

Note on the pass:

Coding of roles of courses and groups of courses:

P - compulsory courses of the program, PO - compulsory courses of the branch, Z - compulsory courses, S - compulsory elective courses, PV - compulsory elective courses, F - elective specialized courses, V - elective courses, T - physical training courses

Coding of ways of completion of courses (KZ/Z/ZK) and coding of semesters (Z/L):

KZ - graded assesment, Z - assesment, ZK - examination, L - summer semester, Z - winter semester

Number of semester: 1

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
B4B01DMA	Discrete Mathematics Petr Habala Petr Habala (Gar.)	Z,ZK	5	2P+2S	Z	Р
B0B01LAG	Linear Algebra Daniel Gromada, Ji í Velebil, Jakub Rondoš, Natalie Žukovec, Mat j Dostál Ji í Velebil Ji í Velebil (Gar.)	Z,ZK	8	4P+2S	Z	Р
B0B36PRP	Procedural Programming Jan Faigl Jan Faigl (Gar.)	Z,ZK	6	2P+2C	Z	Р
B4B33RPH	Solving Problems and other Games Tomáš Svoboda, Petr Pošík Petr Pošík Tomáš Svoboda (Gar.)	KZ	6	2P+3C	Z	Р
BEZZ	Basic Health and Occupational Safety Regulations Vladimír K la, Radek Havlí ek, Ivana Nová Radek Havlí ek Vladimír K la (Gar.)	Z	0	2BP+2BC	Z	Р
2018_BOIVOL	Volitelné odborné p edm ty	Min. cours.	Min/Max 0/999			V

Number of semester: 2

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
B0B35APO	Computer Architectures	Z,ZK	5	2P+2L	L	Р
BEZB	Safety in Electrical Engineering for a Bachelor's Degree Vladimír K la, Radek Havlí ek, Ivana Nová Radek Havlí ek Vladimír K la (Gar.)	Z	0	2BP+2BC	Z,L	Р
B0B01LGR	Logic and Graphs Mat j Dostál, Alena Gollová Alena Gollová Marie Demlová (Gar.)	Z,ZK	5	3P+2S	Z,L	Р
B0B01MA1	Mathematical Analysis 1 Martin K epela, Josef Dvo ák Josef Tkadlec Josef Tkadlec (Gar.)	Z,ZK	7	4P+2S	Z,L	Р
B4B38PSIA	Computer Networks	Z,ZK	5	2P+2L	L	Р
B0B36PJV	Programming in Java	Z,ZK	6	2P+3C+7D	L	Р
2018_BOIVOL	Volitelné odborné p edm ty	Min. cours.	Min/Max 0/999			V

List of groups of courses of this pass with the complete content of members of individual groups

Kód	Name of the group of courses and codes of members of this group (for specification see here or below the list of courses)	Completion	Credits	Scope	Semester	Role
2018_BOIVOL	DL Volitelné odborné p edm ty	Min. cours.	Min/Max			.,
		0	0/999			, v

List of courses of this pass:

Code	Name of the course	Completion	Credits
B0B01LAG	Linear Algebra	Z,ZK	8
The course covers	the initial parts of linear algebra. Firstly, the basic notions of a linear space and linear mappings are covered (linear dependence and indo	ependence, basis,	coordinates,
etc). The calculus	of matrices (determinants, inverse matrices, matrices of a linear map, eigenvalues and eigenvectors, diagonalisation, etc) is covered	• • • • • • • • • • • • • • • • • • • •	ons include
	solving systems of linear equations, the geometry of a 3D space (including the scalar product and the vector product) and S'		
B0B01LGR	Logic and Graphs	Z,ZK	5
This course covers	basics of mathematical logic and graph theory. Syntax and semantics of propositional and predicate logic are introduced. The importanc		onsequence
	and of the relationship between a formula and its model is stressed. Further, basic notions from graph theory are introduce		
B0B01MA1	Mathematical Analysis 1	Z,ZK	7
	The aim of the course is to introduce students to basics of differential and integral calculus of functions of one variable.		
B0B35APO	Computer Architectures	Z,ZK	5
B0B36PJV	Programming in Java	Z,ZK	6
The course builds	on the basics of algorithms and programming from the first semester and introduces students to the Java environment. The course al	so focus on the ob	ect concept
of the Java languag	ge. The topics of the course includes exceptions, event handling, and building a graphical interface. Basic library methods, working wit	h files and using g	eneric types
will be introduced.	An important topic is models of multithreaded applications and their implementation. Practical exercises of practical skills and knowled	ge of Java is tested	d in the form
of solving partial ta	sks and semester work, which will be submitted continuously through the source code version control system. The semester work so	oring consists of p	oints for the
	correctness and efficiency of the code, as well as points that take into account the quality of the source codes, their readability and	reusability.	
B0B36PRP	Procedural Programming	Z,ZK	6
The course accomp	vanies basic programming emphasizing the data representation in computer memory. Furthermore, the concepts of linked data structu	res and processing	user inputs
are developed. S	tudents master the practical implementation of simple individual tasks. The course emphasizes acquiring programming habits for cre	ating readable and	l reusable
and linking but also Student independ	es a direct link between the program data structures and their representation in the computer memory. Students will get acquainted not with debugging and profiling. Labs aim to acquire practical skills of implementing simple individual tasks, emphasizing functionality ard dence is developed by a set of homework with the possibility of optional and bonus assignments. The final task is an integration of a liplementations. Evaluation of coding style motivated by writing legible, understandable, and maintainable codes is also a part of the s	nd accuracy of impl arger program usir	ementation.
B4B01DMA	Discrete Mathematics	Z.ZK	5
_	posciete infattier lattics ents meet some important topics from the field of discrete mathematics. Namely, they will explore divisibility and calculations modulo n	,	
	ans meet some important topics from the field of discrete mathematics. Namely, they will explore divisibility and calculations modulo his ngs, cardinality of sets, induction, and recurrence equations. The second aim of this course is to teach students the language of math		
тсіапопо, таррії	actively, and introduce them to mathematics as science.	ciriatios, botir past	Sivery and
B4B33RPH	Solving Problems and other Games	KZ	6
	ion is to let students to deal with real-world problems properly. When working on real problems the student shall learn how to decom		_
	how to test and validate individual steps and so on. Many problems will actually be beyond the first-year-student skills. And many pro-		
	unsolved parts should motivate the students to study difficult theoretical subjects. They should generate the important questions. Idea		
' '	be eager to study deeper about informatics. The course also explains the basis of the object oriented design, software testing, ways	•	
	codes.	g	
B4B38PSIA	Computer Networks	Z,ZK	5
BEZB	Safety in Electrical Engineering for a Bachelor's Degree	7	0
	safety course is to give the students basic knowledge of electrical equipment and installation as to avoid danger arising from operation	_	
	amentals of Safety Electrical Engineering. In this way the students receive qualification of instructed person that enables them to wor		-
BEZZ		7	0
	Basic Health and Occupational Safety Regulations	_	
•	e worked out based on The Training Scheme for Health and Occupational Safety designed for employees and students of the Czech		
wnich was provide	d by the Rector's Office of the CTU. Safety is considered one of the basic duties of all employees and students. The knowledge of He	ann and Occupati	unan sarety
	regulations forms an integral and permanent part of qualification requirements. This program is obligatory.		

For updated information see http://bilakniha.cvut.cz/en/f3.html Generated: day 2025-10-19, time 15:02.