Study plan

Name of study plan: Software Engineering and Technology

Faculty/Institute/Others: Faculty of Electrical Engineering

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Software Engineering and Technology

Type of study: Bachelor full-time

Required credits: 167 Elective courses credits: 13 Sum of credits in the plan: 180

Note on the plan:

Name of the block: Compulsory courses in the program

Minimal number of credits of the block: 137

The role of the block: P

Code of the group: 2021_BSITBAP Name of the group: Bachelor Project

Requirement credits in the group: In this group you have to gain 20 credits Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 20 Note on the group:

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
BBAP20	Bachelor thesis Roman meila Roman meila (Gar.)	Z	20	12S	L,Z	Р

Characteristics of the courses of this group of Study Plan: Code=2021_BSITBAP Name=Bachelor Project

DDAI 20 Dacrieloi triesis		achelor thesis	Z		J
---------------------------	--	----------------	---	--	---

Code of the group: 2021 BSITBBE

Name of the group: Safety of the bachelor's studies

Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0 Note on the group:

BEZZ

•						
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
BEZB	Safety in Electrical Engineering for a Bachelor's Degree Ivana Nová, Radek Havlí ek, Vladimír K la Radek Havlí ek Vladimír K la (Gar.)	Z	0	2BP+2BC	Z,L	Р
BEZZ	Basic Health and Occupational Safety Regulations Ivana Nová, Radek Havlí ek, Vladimír K la Radek Havlí ek Vladimír K la (Gar.)	Z	0	2BP+2BC	Z	Р

Characteristics of the courses of this group of Study Plan: Code=2021_BSITBBE Name=Safety of the bachelor's studies

Basic Health and Occupational Safety Regulations

BEZB	Safety in Electrical Engineering for a Bachelor's Degree	Z	0				
The purpose of the safety course is to give the students basic knowledge of electrical equipment and installation as to avoid danger arising from operation of it. This introductory course							
contains fundamentals of Safety Electrical Engineering. In this way the students receive qualification of instructed person that enables them to work on electrical equipment.							

Ζ

The guidelines were worked out based on The Training Scheme for Health and Occupational Safety designed for employees and students of the Czech Technical University in Prague, which was provided by the Rector's Office of the CTU. Safety is considered one of the basic duties of all employees and students. The knowledge of Health and Occupational Safety regulations forms an integral and permanent part of qualification requirements. This program is obligatory.

Code of the group: 2021_BSITP

Name of the group: Compulsory subjects of the programme

Requirement credits in the group: In this group you have to gain 117 credits

Requirement courses in the group: In this group you have to complete 22 courses

Credits in the group: 117

Note on the group:

Note on the gi	Name of the course / Name of the group of courses					
Code	(in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
B0B36DBS	Database Systems Martin imná, Václav Kratochvíl Martin imná Martin imná (Gar.)	Z,ZK	6	2P+2C+4C) L	Р
B6B36DSA	Data Structures and Algorithms Karel Richta, Jan Drchal Karel Richta Karel Richta (Gar.)	Z,ZK	6	2P+3C+3D	L	Р
B6B16INS	Information Systems Pavel Náplava, Jan Ko í Pavel Náplava Pavel Náplava (Gar.)	KZ	4	2P+2S+3D	L	Р
B0M32KSB	Cryptography and Network Security Tomáš Van k Ivan Pravda Tomáš Van k (Gar.)	Z,ZK	6	2P+2L+4C	Z	Р
B6B01LAG	Linear Algebra Ji í Velebil, Jakub Rondoš Ji í Velebil Ji í Velebil (Gar.)	Z,ZK	7	4P+2C+2C	L	Р
B6B01MAA	Mathematics Analysis Natalie Žukovec, Karel Pospíšil Natalie Žukovec Natalie Žukovec (Gar.)	Z,ZK	5	2P+2S+2D	Z	Р
B6B36NSS	Design of Software Systems Ji í Šebek Ji í Šebek Ji í Šebek (Gar.)	Z,ZK	5	2P+2C+2D	L	Р
В6В36ОМО	Object-oriented design and Modeling David Kadle ek David Kadle ek David Kadle ek (Gar.)	Z,ZK	6	2P+2C+4D	Z	Р
B6B32PSI	Computer Networks Tomáš Van k, Zbyn k Kocur, Leoš Bohá Ján Ku erák Leoš Bohá (Gar.)	Z,ZK	5	2P + 2C + 3D	Z	Р
B6B36PCC	Programming in C/C++ Radek Havli ek, Ingrid Nagyová, Karel Richta, Petr Ryšavý Karel Richta Karel Richta (Gar.)	Z,ZK	5	2P+2C+4C	Z	Р
B0B36PJV	Programming in Java Ji í Vok ínek, Martin Mudroch, Ladislav Serédi Ji í Vok ínek Ji í Vok ínek (Gar.)	Z,ZK	6	2P+3C+7C	L	Р
B6B36PM2	Management of Software Projects Miroslav Bureš Miroslav Bureš Miroslav Bureš (Gar.)	KZ	4	2P+2C+2D	Z	Р
B6B36SMP	Analysis and Modeling of Software Requirements Martin Komárek Martin Komárek Martin Komárek (Gar.)	Z,ZK	6	2P+3C+3D	L	Р
B6BPROJ6	Semestral Project Ji í Šebek, Jaroslav Sloup, Petr Pošík Jaroslav Sloup Jaroslav Sloup (Gar.)	Z	6	2s	L,Z	Р
B6B01PRA	Statistics and Probability Jakub Stan k, Kate ina Helisová Kate ina Helisová (Gar.)	Z,ZK	5	2P+2S+1C	L	Р
B6B36TS1	Software Testing Miroslav Bureš Miroslav Bureš (Gar.)	Z,ZK	5	2P+2C+2D	L	Р
B0B36ZAL	Introduction to Programming Ji i Vok inek Ji i Vok inek Ji i Vok inek (Gar.)	Z,ZK	6	2P+2C+8D	Z	Р
B6B01ZDM	Introduction to Discrete Mathematics Jaroslav Tišer Jaroslav Tišer Jaroslav Tišer (Gar.)	Z,ZK	5	2P+2S+2D	Z	Р
B6B39ZMT	Foundations of Multimedia Production Roman Berka, František Rund Roman Berka Roman Berka (Gar.)	KZ	3	4P+4L+2C	Z	Р
B6B38ZPS	Basics of Computer Systems Ji í Novák Ji í Novák Ji í Novák (Gar.)	Z,ZK	6	4P+2L+2C	Z	Р
B6B36ZSO	Introduction to Project Management Pavel Náplava, Martin Dobiáš, Jitka Pinková Pavel Náplava Pavel Náplava (Gar.)	KZ	5	2P+2C+5C	Z	Р
B6B39ZWA	Foundations of Web Applications Martin Klima, Martin Mudra Martin Klima (Gar.)	Z,ZK	5	2P+2C+3D	Z	Р

Characteristics of the courses of this group of Study Plan: Code=2021_BSITP Name=Compulsory subjects of the programme

B0B36DBS	Database Systems	Z,ZK	6
The course is designed	as a basic database course mainly aimed at the student ability to design a relational data model and to use the SQL langua	ge for data definit	ion as well as for
data querying and to ch	oose the appropriate degree of transaction isolation. Students will also get acquainted with the most commonly used indexir	g techniques, dat	abase system
architecture and their m	anagement. They will verify their knowledge during the elaboration of a continuously submitted seminar task.		

			,	- 0	 <u> </u>		
B6B36DSA	Data S	Structures	and Algo	rithms		Z,ZK	6
B6B16INS	Inform	ation Sys	tems			K7	4

The goal of this course is to familiarise students with the information systems topic and information systems implementation principles. During the course, students are introduced to "on the market" existing types of systems and their usage in specific industry segments. Students are familiarised with the CRM, ERP, MRP and other types of information systems. The fundamental part of the course is the introduction to key ideas of an information system selection, evaluation of information system benefits, ways of information systems implementation and information system implementation based on the project management principles. The emphasis is on the initial customer analysis, customer insight and ability to decide whether it is better to implement any existing information system or to develop a new one from scratch. These factors determine the information system implementation success. At the end of the course information systems security, operation, support, maintenance, legislation impacts, and government information systems topics are discussed.

B0M32KSB	Cryptography and Network Security	Z,ZK	6
	ity course provides a complete source of information on the field of security of information systems and information technolog		mation in today
society is created, trar	sferred, stored in electronic form so information security is very important part of it. Technical background for information security	curity is provided by o	cryptology.
B6B01LAG	Linear Algebra	Z,ZK	7
B6B01MAA	Mathematics Analysis	Z,ZK	5
	duction to differential and integral calculus. It covers basic properties of functions, limits of functions, derivative and its applic	1 '	_
	integral with its applications, sequences and series.	3, 3,	. , ,
B6B36NSS	Design of Software Systems	Z,ZK	5
B6B36OMO	Object-oriented design and Modeling	Z,ZK	6
B6B32PSI	Computer Networks	Z,ZK	5
	·		
B6B36PCC	Programming in C/C++	Z,ZK	5
B0B36PJV	Programming in Java	Z,ZK	6
	he basics of algorithms and programming from the first semester and introduces students to the Java environment. The cour		-
1	The topics of the course includes exceptions, event handling, and building a graphical interface. Basic library methods, working	-	
	mportant topic is models of multithreaded applications and their implementation. Practical exercises of practical skills and known and their implementation.	-	
I	and semester work, which will be submitted continuously through the source code version control system. The semester wo	ork scoring consists o	of points for the
	ency of the code, as well as points that take into account the quality of the source codes, their readability and reusability.	147	
B6B36PM2	Management of Software Projects	KZ	4
B6B36SMP	Analysis and Modeling of Software Requirements	Z,ZK	6
	topic of requirements engineering. Their gathering, analysis, documentation, management, Students also will gain knowled	lge on using the most	t widely spread
graphic notation - UMI	·		
B6BPROJ6	Semestral Project	Z	6
Individual or team wor	k in form of a project. Student selects the subject of their project from the list of topics relevant to the studied specialization a	nd provided by the sp	pecific
department/departmer	nts. The project's subject can be closely related to the future Bachelor thesis. Further instructions for the selection and resolu	tion of the projects ca	an be found on
the web pages of the	selected department. Within this course the project is also defended.		
B6B01PRA			
DODO II IXA	Statistics and Probability	Z,ZK	5
	Statistics and Probability troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application	1 ' 1	_
The students will be in the basic parts of prob	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next part is focused on classical probability, including conditional probability.	ons in practice. The co	ourse covers eory of random
The students will be in the basic parts of prob	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application	ons in practice. The co	ourse covers eory of random
The students will be in the basic parts of prob variables and their dist	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next part is focused on classical probability, including conditional probability.	ons in practice. The copart deals with the the variables, their independent	ourse covers eory of random
The students will be in the basic parts of prob variables and their dist	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics of random violations, examples of the most important types of discrete and continuous distributions, numerical characteristics of random violations.	ons in practice. The copart deals with the the variables, their independent	ourse covers eory of random
The students will be in the basic parts of prob variables and their dist and transformations. F	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing Software Testing	ons in practice. The copart deals with the the variables, their independent of the properties of the p	ourse covers eory of random endence, sums
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic statistical methods for estimations, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing Software Testing Introduction to Programming	ons in practice. The copart deals with the the variables, their independ on hypotheses. Z,ZK Z,ZK	ourse covers eory of random endence, sums 5 6
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic statistical methods for estimations, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing Introduction to Programming Introduction to Discrete Mathematics	ons in practice. The copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart of the copar	ourse covers eory of random endence, sums 5 6 5
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic statistical methods for estimations, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing Software Testing Introduction to Programming	ons in practice. The copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart of the copar	ourse covers eory of random endence, sums 5 6 5
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing introduction to Programming Introduction to Programming Introduction to Discrete Mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus.	ons in practice. The copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart of the copar	ourse covers eory of random endence, sums 5 6 5 t and graph
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing Introduction to Programming Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production	ons in practice. The copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart deals with the the variables, their independent of their independen	ourse covers eory of random endence, sums 5 6 5 t and graph
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing Introduction to Programming Introduction to Discrete Mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, very sufficient to the production of the production of multimedia content, with a focus on image processing, very sufficient to the production of the production of multimedia content, with a focus on image processing, very sufficient to the production of the production of the production of multimedia content, with a focus on image processing, very sufficient to the production of the pr	ons in practice. The copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the copart deals with the the variables, their independent of the variables. Z,ZK Z,ZK Z,ZK of combinatorics, set KZ ideo and audio, as w	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing. Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing. Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, veriging and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and pro	ons in practice. The copart deals with the the variables, their independent of the provided by the variables, their independent of their indepen	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several difference.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is them used in the description of statistical methods for estimating distribution parameters and testing software Testing. Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and process of instruments at the application level and at the level of simple code. All students will apply the knowledge gained	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the variables, their independent of thei	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while
The students will be in the basic parts of prob variables and their dist and transformations. FB6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differencomposition rules with	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production is students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, we sign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and process in a Web project. After completing the course, students will carry out their own independent project and after its submission of the project.	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differencemposition rules with B6B38ZPS	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing. Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and proent types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission and Basics of Computer Systems	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduction.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing. Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and procent types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission as students to the basic concepts of computer technology and computer networks. The following lectures are focused on dig	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduct and function of the process.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, we sign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and procent types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of the basic concepts of computer technology and computer networks. The following lectures are focused on dignessor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase processor and its instruction sets. Common and special architectures and specialized instruction sets, ways to increase processor and its instruction sets.	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure their limits will
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The correspondence of the probe introduced.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random variobabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and process of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of the Basics of Computer Systems es students to the basic concepts of computer technology and computer networks. The following lectures are focused on dig ocessor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process inputer architecture description, memories and their categorization in terms of functional principles and application use will be	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the provided by their independent of the	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure their limits will vledge. The
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The confollowing lectures are for	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and process of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of Basics of Computer Systems es students to the basic concepts of computer technology and computer networks. The following lectures are focused on dig decessor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process inputer architecture description, memories and their categorization in terms of functional principles and application use will be occused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resources.	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the variables, their independent of thei	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure their limits will vledge. The d virtualization.
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The confollowing lectures are for the problem.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the variables, their independent of thei	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure their limits will vledge. The d virtualization. (mass storage)
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differencomposition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The confollowing lectures are for the next lecture will desubsystem will be designed.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next pributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing	ons in practice. The copart deals with the the variables, their independent of the provided by their independent of the variables, their independent of thei	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while adicated to 6 nal structure their limits will vledge. The d virtualization. (mass storage)
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The cor following lectures are for the next lecture will desubsystem will be desistudents to further desirables.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, we sign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and procent types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of the basic students of the basic concepts of computer technology and computer networks. The following lectures are focused on dig scessor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process inputer architecture description, memories and their categorization in terms of functional principles and application use will be ocused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resourced in more detail, including disk partitioning, file systems, and acce	ons in practice. The copart deals with the the variables, their independent of the provided support of	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to 6 nal structure their limits will vledge. The d virtualization. (mass storage) ems motivating
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differ composition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The cor following lectures are following lectures are following lectures are following to further deed subsystem will be desistudents to further deed B6B36ZSO	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and process in types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission in Basics of Computer Systems es students to the basic concepts of computer technology and computer networks. The following lectures are focused on dig occasion and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process multies instruction acquainted with operating systems, multitasking, inter-process communication and synchronization, resouced in more detail, including disk partitioning, file systems, and access rights. Finally the basics of electronics and optoelectors appet their knowledge in this area throug	ons in practice. The copart deals with the the variables, their independent of the property of	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to 6 nal structure their limits will eldge. The d virtualization. (mass storage) ems motivating
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differencomposition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The confollowing lectures are following lectures are following lectures are following to further deep students to further deep S6B36ZSO Students are introduced.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and protein types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of the basic concepts of computer technology and computer networks. The following lectures are focused on dig secsor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process imputer architecture description, memories and their categorization in terms of functional principles and application use will be ocused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resourced in more detail, including disk partitioning, file systems, and access rights. Finally the b	ons in practice. The copart deals with the the variables, their independent of the property of the variables, their independent of their i	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to 6 hal structure their limits will elege. The divirtualization. (mass storage) ems motivating 5 owledge in the
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several differencomposition rules with B6B38ZPS The first topic introduce and function of the probe introduced. The corfollowing lectures are following lectures are following lectures are following to further decisions are introduced area of teamwork (e.g.	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production so students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and protent types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of Essistion set. Common and special architectures and specialized instruction sets, ways to increase process mputer architecture description, memories and their categorization in terms of functional principles and application use will be ocused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resourced in more detail, including disk partitioning, file systems, and access rights. Finally the basics of electronics and optoelective in more detail, including disk partitioning, file systems, and access rights. Finally the basics of electronics and optoelective in more detail, including disk partitioning, file systems, and access rights. Finally the basics	ons in practice. The copart deals with the the variables, their independs on the property of t	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to 6 nal structure their limits will vledge. The d virtualization. (mass storage) ems motivating 5 owledge in the skills.
The students will be in the basic parts of prob variables and their dist and transformations. F B6B36TS1 B0B36ZAL B6B01ZDM No advanced knowleg theory. Then we proce B6B39ZMT The course familiarize principles of graphic d section of the course of they use several difference of the composition rules with B6B38ZPS The first topic introduct and function of the probe introduced. The cor following lectures are for the next lecture will do subsystem will be desistudents to further decided B6B36ZSO Students are introduct area of teamwork (e.g. B6B39ZWA	troduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their application ability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and testing. Software Testing Introduction to Programming Introduction to Discrete Mathematics es of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding ed to a brief formal construction of predicate calculus. Foundations of Multimedia Production s students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vesign and its implementation in a web environment. The course is organized within the block teaching when, within four days divided into two lectures and two workshops each day. Students will acquire the practical principles in the acquisition and protein types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained in a Web project. After completing the course, students will carry out their own independent project and after its submission of the basic concepts of computer technology and computer networks. The following lectures are focused on dig secsor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase process imputer architecture description, memories and their categorization in terms of functional principles and application use will be ocused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resourced in more detail, including disk partitioning, file systems, and access rights. Finally the b	ons in practice. The copart deals with the the variables, their independent of the property of the variables, their independent of their indepen	ourse covers eory of random endence, sums 5 6 5 t and graph 3 rell as the pass each a content while edicated to 6 nal structure their limits will vledge. The d virtualization. (mass storage) ems motivating 5 owledge in the skills.

application. The subject ends with an oral and written exam.

Code of the group: 2021_BSITECTSZAJ

Name of the group: Exam in English

Requirement credits in the group:

Requirement courses in the group: In this group you have to complete 2 courses

Credits in the group: 0 Note on the group:

side (Javascript). The course continues with server-side dynamics programmed in PHP 7 language. The students will learn how to handle forms and how to create a simple web

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
B0B04B1K	English language B1 - classified assessment Markéta Havlí ková, Pavla Péterová, Erik Peter Stadnik, Michael Ynsua, Dana Saláková, Petra Juna Jennings Petra Juna Jennings (Gar.)	KZ	0	0C	Z,L	Р
B0B04B2Z	English language B2 - exam Markéta Havlí ková, Michael Ynsua, Dana Saláková, Petra Juna Jennings Petra Juna Jennings Petra Juna Jennings (Gar.)	Z,ZK	0	0C	Z,L	Р

Characteristics of the courses of this group of Study Plan: Code=2021_BSITECTSZAJ Name=Exam in English

B0B04B1K	English language B1 - classified assessment	KZ	0
verifying of the student	s skills of B1 level	•	
B0B04B2Z	English language B2 - exam	Z,ZK	0

I) The B2 English Exam is a compulsory subject for all Faculty of Electrical Engineering students at the Czech Technical University. According to the Study and Examination Rules and Regulations for Students at CTU (Part III, Article 4), a compulsory subject is one whose completion is a necessary condition in order to successfully complete the study programme. In addition, this requires the passing of an examination evaluated on the scale A, B, C, D, or E (SERR Part III, Article 6). II) According to the Common European Framework of Reference for Languages (CEFR), an international standard for describing language ability, the definition of an English language learner who has achieved the B2 (Upper-Intermediate) level is one who can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. III) Students who have successfully passed an approved international exam within the past five years may present their certificate to the Department of Languages, Faculty of Electrical Engineering. Upon approval, students are then exempt from both the Written Test and the Oral Part. For a list of approved international exams go the department website: http://jazyky.fel.cvut.cz/

Name of the block: Compulsory courses in the specialization

Minimal number of credits of the block: 20

The role of the block: PS

Code of the group: 2021_BSITPS3

Name of the group: Compulsory subjects - specialization Business Informatics Requirement credits in the group: In this group you have to gain 20 credits

Requirement courses in the group: In this group you have to complete 4 courses

Credits in the group: 20

Note on the group:

Specialization Business Informatics

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
B6B16MPR	Decision Making Methods Martin Dobiáš, Jaroslav Knápek Jaroslav Knápek (Gar.)	Z,ZK	5	2P+2S+2D	Z	PS
B6B16ISP	Business Process Management Pavel Náplava, Jan Ko í Jan Ko í Pavel Náplava (Gar.)	Z,ZK	5	2P+2S+2D	Z	PS
B0B36TPA	Creation of business applications Pavel Náplava, David Kadle ek David Kadle ek (Gar.)	KZ	5	2P+2C	Z	PS
B6B16ZDA	Basics of data analysis Pavel Náplava, Kate ina Greif Martin Dobiáš Martin Dobiáš (Gar.)	Z,ZK	5	2P+2S+4D	L	PS

Characteristics of the courses of this group of Study Plan: Code=2021_BSITPS3 Name=Compulsory subjects - specialization Business Informatics

B6B16MPR	Decision Making Methods	Z,ZK	5
B6B16ISP	Business Process Management	Z,ZK	5
B0B36TPA	Creation of business applications	KZ	5
B6B16ZDA	Basics of data analysis	Z,ZK	5

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 10

The role of the block: PV

Code of the group: 2021_BSITPVS3

Name of the group: Compulsory elective subjects - specialization Business Informatics

Requirement credits in the group: In this group you have to gain at least 10 credits (at most 26)

Requirement courses in the group: In this group you have to complete at least 2 courses (at most 5)

Credits in the group: 10

Note on the group:

Specialization Business Informatics

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
B6B16FIP	Corporate finance Ji í Vaší ek, Old ich Starý, Josef ernohous Ji í Vaší ek Ji í Vaší ek (Gar.)	Z,ZK	5	2P+2S+2D	L	PV
B6B39PDA	Principles of mobile applications Ivo Malý	Z,ZK	6	2P+2C	L	PV
В0В39КАЈ	Client applications in JavaScript Ond ej Žára Ond ej Žára Ond ej Žára (Gar.)	Z,ZK	5	2P+2C	L	PV
B6B16ZPD	Business Economics Martin Dobiáš, Ji í Vaší ek, Martin Horák, Blanka Ku erková Martin Dobiáš Martin Dobiáš (Gar.)	Z,ZK	5	2P+2S+2D	Z	PV
B6B39ZAN	Basic Android development Ivo Malý Ivo Malý Ivo Malý (Gar.)	KZ	5	2P+2C+4D	L	PV

Characteristics of the courses of this group of Study Plan: Code=2021_BSITPVS3 Name=Compulsory elective subjects - specialization Business Informatics

B6B16FIP	Corporate finance	Z,ZK	5		
B6B39PDA	Principles of mobile applications	Z,ZK	6		
Student who successfully passed the course get overview about properties and about limits of single mobile technologies. The course is focused on specific problems related to					
limitations and new cap	limitations and new capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is used. Course is not focused				
on introduction of basic programming techniques for mobile application development - it is expected that students already have this skills or will be gained by means of self-study.					
B0B39KAJ	Client applications in JavaScript	Z,ZK	5		
B6B16ZPD	Business Economics	Z,ZK	5		
B6B39ZAN	Basic Android development	KZ	5		

Name of the block: Elective courses Minimal number of credits of the block: 0

The role of the block: V

Code of the group: 2021_BSITVOL Name of the group: Elective subjects Requirement credits in the group: Requirement courses in the group:

Credits in the group: 0

Note on the group: #~Nabídku volitelných předmětů uspořádaných podle kateder najdete na webových stránkách

http://www.fel.cvut.cz/cz/education/volitelne-predmety.html\\

List of courses of this pass:

Code	Name of the course	Completion	Credits
B0B04B1K	English language B1 - classified assessment	KZ	0
·	verifying of the student's skills of B1 level		
B0B04B2Z	English language B2 - exam	Z,ZK	0
1			

I) The B2 English Exam is a compulsory subject for all Faculty of Electrical Engineering students at the Czech Technical University. According to the Study and Examination Rules and Regulations for Students at CTU (Part III, Article 4), a compulsory subject is one whose completion is a necessary condition in order to successfully complete the study programme. In addition, this requires the passing of an examination evaluated on the scale A, B, C, D, or E (SERR Part III, Article 6). II) According to the Common European Framework of Reference for Languages (CEFR), an international standard for describing language ability, the definition of an English language learner who has achieved the B2 (Upper-Intermediate) level is one who can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options. III) Students who have successfully passed an approved international exam within the past five years may present their certificate to the Department of Languages, Faculty of Electrical Engineering. Upon approval, students are then exempt from both the Written Test and the Oral Part. For a list of approved international exams go the department website: http://jazyky.fel.cvut.cz/

B0B36DBS Database Systems Z,ZK 6

The course is designed as a basic database course mainly aimed at the student ability to design a relational data model and to use the SQL language for data definition as well as for data querying and to choose the appropriate degree of transaction isolation. Students will also get acquainted with the most commonly used indexing techniques, database system architecture and their management. They will verify their knowledge during the elaboration of a continuously submitted seminar task.

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 also focus on the object concept of the Java language. The topics of the course includes exceptions, event handling, and building a graphical interface. Basic library methods, working with files and using generic types will be introduced. An important topic is models of multithreaded applications and their implementation. Practical exercises of practical skills and knowledge of Java is tested in the form of solving partial tasks and semester work, which will be submitted continuously through the source code version control system. The semester work scoring consists of points 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.

B0B36TPA	Creation of business applications	KZ	5
B0B36ZAL	Introduction to Programming	Z,ZK	6
B0B39KAJ	Client applications in JavaScript	Z,ZK	5
B0M32KSB	Cryptography and Network Security	Z,ZK	6
	curity course provides a complete source of information on the field of security of information systems and information technologies. Th	•	
society is created	, transferred, stored in electronic form so information security is very important part of it. Technical background for information security	y is provided by c	ryptology.
B6B01LAG	Linear Algebra	Z,ZK	7
B6B01MAA	Mathematics Analysis	Z,ZK	5
his course is an in	troduction to differential and integral calculus. It covers basic properties of functions, limits of functions, derivative and its applications	(graphing, Taylor	polynomi
	and definite/indefinite integral with its applications, sequences and series.		ı
B6B01PRA	Statistics and Probability	Z,ZK	5
	e introduced to the theory of probability and mathematical statistics, namely to the basic computing methods and their applications in	-	
	obability and mathematical statistics. The first part is focused on classical probability, including conditional probability. The next part de listributions, examples of the most important types of discrete and continuous distributions, numerical characteristics of random variabl		•
	sformations. Probabilistic knowledge is then used in the description of statistical methods for estimating distribution parameters and to	· ·	
B6B01ZDM	Introduction to Discrete Mathematics	Z,ZK	5
No advanced kno	wleges of mathematics are required at the beginning of this course. Using illustrative examples we build sufficient understanding of co	ombinatorics, set	and graph
	theory. Then we proceed to a brief formal construction of predicate calculus.		
B6B16FIP	Corporate finance	Z,ZK	5
B6B16INS	Information Systems	KZ	4
•	urse is to familiarise students with the information systems topic and information systems implementation principles. During the cours		
	isting types of systems and their usage in specific industry segments. Students are familiarised with the CRM, ERP, MRP and other types of systems and their usage in specific industry segments.		
	al part of the course is the introduction to key ideas of an information system selection, evaluation of information system benefits, way		-
-	I information system implementation based on the project management principles. The emphasis is on the initial customer analysis, or better to implement any existing information system or to develop a new one from scratch. These factors determine the information sys	_	-
	f the course information systems security, operation, support, maintenance, legislation impacts, and government information systems	-	
B6B16ISP	Business Process Management	Z,ZK	5
B6B16MPR	Decision Making Methods	Z,ZK	5
B6B16ZDA	Basics of data analysis	Z,ZK	5
B6B16ZPD	Business Economics	Z,ZK	5
B6B32PSI	Computer Networks	Z,ZK	5
B6B36DSA	Data Structures and Algorithms	Z,ZK	6
B6B36NSS	Design of Software Systems	Z,ZK	5
B6B36OMO	Object-oriented design and Modeling	Z,ZK	6
B6B36PCC	Programming in C/C++	Z,ZK	5
B6B36PM2	· · ·	KZ	4
B6B36SMP	Management of Software Projects	Z,ZK	6
	Analysis and Modeling of Software Requirements he topic of requirements engineering. Their gathering, analysis, documentation, management, Students also will gain knowledge on	•	_
This course covers	graphic notation - UML.	using the most w	idely spice
B6B36TS1	Software Testing	Z,ZK	5
B6B36ZSO	Introduction to Project Management	KZ	5
	uced to the basics of project management, which can be used not only in the field of IT projects. Students will also gain practical expe		
area of teamw	ork (e.g. planning, team organization) and basics of legal and economic aspects of the project. The course also includes an introducti	on to presentation	n skills.
B6B38ZPS	Basics of Computer Systems	Z,ZK	6
The first topic intro	duces students to the basic concepts of computer technology and computer networks. The following lectures are focused on digital to	echnology, interna	al structure
	processor and its instruction set. Common and special architectures and specialized instruction sets, ways to increase processor per		
	e computer architecture description, memories and their categorization in terms of functional principles and application use will be ba		-
_	e focused on getting acquainted with operating systems, multitasking, inter-process communication and synchronization, resource made with the computer networks - first in general (OSI model) and then more specifically with an introduction to TCP / IP protocols. Further than the computer networks - first in general (OSI model) and then more specifically with an introduction to TCP / IP protocols. Further than the computer networks - first in general (OSI model) and then more specifically with an introduction to TCP / IP protocols.	-	
	escribed in more detail, including disk partitioning, file systems, and access rights. Finally the basics of electronics and optoelectronic	,	ū
suboyotom wiii bo c	students to further deepen their knowledge in this area through self-study will be introduced.	o, typiodi probiom	o monvan
	Principles of mobile applications	Z,ZK	6
B6B39PDA	· · · · · · · · · · · · · · · · · · ·		
B6B39PDA Student who suc	cessfully passed the course get overview about properties and about limits of single mobile technologies. The course is focused on s	sused Course is	not focuse
Student who sud	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is	doca. Ocaroo io	self-study.
Student who sud imitations and new			
Student who sud imitations and new	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is	ned by means of s	5
Student who sud limitations and new on introduction of	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain	ned by means of	5 3
Student who sudimitations and new on introduction of B6B39ZAN B6B39ZMT The course familiary and the students of the students o	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Foundations of Multimedia Production arizes students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, videous principles of acquisition and processing of multimedia content, with a focus on image processing, videous principles of acquisition and processing of multimedia content, with a focus on image processing, videous principles of acquisition and processing of multimedia content, with a focus on image processing, videous principles of acquisition and processing of multimedia content, with a focus on image processing, videous principles of acquisition and processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content, with a focus on image processing of multimedia content.	KZ KZ o and audio, as w	3 ell as the
Student who sudimitations and new on introduction of B6B39ZAN B6B39ZMT The course family principles of grap	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain a Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as wurdents gradually p	3 ell as the bass each
Student who sudimitations and new on introduction of B6B39ZAN B6B39ZMT The course fami principles of grapsection of the course	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain a Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as wudents gradually pg of multimedia c	3 ell as the pass each ontent wh
Student who sudimitations and new on introduction of B6B39ZAN B6B39ZMT The course fami principles of grapsection of the course they use several	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as wudents gradually pg of multimedia cin the last day de	3 ell as the bass each ontent whi dicated to
Student who sud limitations and new on introduction on B6B39ZAN B6B39ZMT The course fami principles of grapsection of the course they use several composition.	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain a Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as wudents gradually pig of multimedia cin the last day deon will be assessed.	3 rell as the pass each ontent while dicated to red.
Student who sud limitations and new on introduction of B6B39ZAN B6B39ZMT. The course fami principles of grapsection of the course they use several composition.	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Foundations of Multimedia Production arizes students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vider hic design and its implementation in a web environment. The course is organized within the block teaching when, within four days, students will acquire the practical principles in the acquisition and processing different types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained with an rules within a Web project. After completing the course, students will carry out their own independent project and after its submission. Foundations of Web Applications	KZ KZ o and audio, as we udents gradually pour of multimedia coin the last day decon will be assessed Z,ZK	3 ell as the pass each content wh dicated to ed.
Student who sud limitations and new on introduction of B6B39ZAN B6B39ZMT. The course fami principles of grapsection of the course they use several composition B6B39ZWA. The subject is focus	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain a Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as we udents gradually pag of multimedia coin the last day decon will be assesse Z,ZK), and dynamics of	all as the pass each content who dicated to ed.
Student who sudimitations and new on introduction of B6B39ZAN B6B39ZMT. The course fami principles of grapsection of the course they use several composition B6B39ZWA. The subject is focus	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Basic Android development Foundations of Multimedia Production	KZ KZ o and audio, as we udents gradually pag of multimedia coin the last day decon will be assesse Z,ZK), and dynamics of	all as the pass each content which dicated to ed.
Student who sud limitations and new on introduction of B6B39ZAN B6B39ZMT. The course fami principles of grapsection of the course they use several composition B6B39ZWA. The subject is focus	Capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain a Basic Android development Basic Android development	KZ KZ o and audio, as we udents gradually pag of multimedia coin the last day decon will be assesse Z,ZK), and dynamics of	3 ell as the bass each content whi dicated to ed. 5 on the clier
Student who sud limitations and new on introduction of B6B39ZAN B6B39ZMT. The course fami principles of grapsection of the course they use several composition B6B39ZWA. The subject is focus side (Javascript)	Capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Foundations of Multimedia Production arrizes students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vider hic design and its implementation in a web environment. The course is organized within the block teaching when, within four days, students will acquire the practical principles in the acquisition and processing different types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained with an rules within a Web project. After completing the course, students will carry out their own independent project and after its submissions of Web Applications Foundations of Web Applications ssing on the creation and maintenance of web presentations. It covers the creation of data structures (HTML), graphical design (CSS The course continues with server-side dynamics programmed in PHP 7 language. The students will learn how to handle forms and happlication. The subject ends with an oral and written exam.	KZ KZ o and audio, as wadents gradually page of multimedia coin the last day decon will be assessed Z,ZK), and dynamics coow to create a sin	3 ell as the pass each ontent whi dicated to ed. 5 on the clier mple web
Student who sudimitations and new on introduction of B6B39ZMT The course fami principles of grapsection of the course they use several composition B6B39ZWA The subject is focuside (Javascript) B6BPROJ6 Individual or te	capabilities of mobile devices. Attention is paid to maximal utilization of environment characteristics in which the mobile application is basic programming techniques for mobile application development - it is expected that students already have this skills or will be gain Basic Android development Foundations of Multimedia Production arrizes students with the basic principles of acquisition and processing of multimedia content, with a focus on image processing, vider hic design and its implementation in a web environment. The course is organized within the block teaching when, within four days, students will acquire the practical principles in the acquisition and processing different types of instruments at the application level and at the level of simple code. All students will apply the knowledge gained with an rules within a Web project. After completing the course, students will carry out their own independent project and after its submissions. Foundations of Web Applications ssing on the creation and maintenance of web presentations. It covers the creation of data structures (HTML), graphical design (CSS The course continues with server-side dynamics programmed in PHP 7 language. The students will learn how to handle forms and application. The subject ends with an oral and written exam. Semestral Project	KZ KZ o and audio, as we defend gradually programmed by means of second audio, as we defend gradually programmed gradually programmed gradually programmed gradually programmed gradually provided by the KZ	3 ell as the bass each ontent whi dicated to ed. 5 on the clier inple web

BBAP20	Bachelor thesis	Z	20
BEZB	Safety in Electrical Engineering for a Bachelor's Degree		0
The purpose of the safety course is to give the students basic knowledge of electrical equipment and installation as to avoid danger arising from operation of it. This introductory course			
contains fundamentals of Safety Electrical Engineering. In this way the students receive qualification of instructed person that enables them to work on electrical equipment.			
BEZZ	Basic Health and Occupational Safety Regulations	Z	0
The guidelines were worked out based on The Training Scheme for Health and Occupational Safety designed for employees and students of the Czech Technical University in Prague,			
which was provided by the Rector's Office of the CTU. Safety is considered one of the basic duties of all employees and students. The knowledge of Health and Occupational Safety			
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 2025-06-02, time 23:47.