## Study plan

## Name of study plan: Electronics and Communications - Electronics

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: Electronics and Communications

Type of study: Follow-up master full-time

Required credits: 109 Elective courses credits: 11 Sum of credits in the plan: 120

Note on the plan:

Name of the block: Compulsory courses in the program

Minimal number of credits of the block: 109

The role of the block: P

Code of the group: 2018\_MEKEP1

Name of the group: Compulsory subjects of the programme

Requirement credits in the group: In this group you have to gain 84 credits

Requirement courses in the group: In this group you have to complete 14 courses

Credits in the group: 84

Note on the group: Specializace elektronika

Note on the gro	opedanzade e	iona orima				
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
BE2M17CADA	CAD in HF Technique Zbyn k Škvor Zbyn k Škvor (Gar.)	Z,ZK	6	2P+2C	L	Р
BE2M34ZETA	Custom Electronics Design Vladimír Janí ek Vladimír Janí ek (Gar.)	KZ	6	2P+2L	Z	Р
BE2M34NIS	Design of Integrated Circuits Vladimír Janí ek Vladimír Janí ek Ji í Jakovenko (Gar.)	Z,ZK	6	2P+2C	L	Р
BE2M31DSPA	Digital Signal Processing Petr Pollák Petr Pollák Petr Pollák (Gar.)	Z,ZK	6	2P+2C	Z	Р
BE2M34EZSA	Electronic Security Systems Miroslav Husák, Tomáš Teplý Miroslav Husák Miroslav Husák (Gar.)	Z,ZK	6	2P+2C	Z	Р
BE2M34SIS	Integrated System Structures Vladimír Janí ek, Ji í Jakovenko Ji í Jakovenko (Gar.)	Z,ZK	6	2P+2C	Z	Р
BE2M37MAM	Microprocessors Stanislav Vítek Stanislav Vítek Stanislav Vítek (Gar.)	Z,ZK	6	2P+2L	Z	Р
BE2M34MST	Microsystems Miroslav Husák, Alexandr Laposa, Adam Bou a Miroslav Husák Miroslav Husák (Gar.)	Z,ZK	6	2P+2L	L	Р
BE2M34NANA	Nanoelectronics and Nanotechnology Jan Voves Jan Voves (Gar.)	Z,ZK	6	2P+2C	L	Р
BE2M34PIOA	Planar Integrated Optics Vít zslav Je ábek, Václav Prajzler Václav Prajzler (Gar.)	Z,ZK	6	2P+2C	Z	Р
BE2MPROJ6	Project Jan Šístek, Pavel Máša, Ivan Pravda, Lubor Jirásek, Zden k Be vá , František Rund František Rund František Rund (Gar.)	Z	6	0p+6s		Р
BE2M34SST	Solid State Physics Jan Voves Jan Voves (Gar.)	Z,ZK	6	3P+1L	Z	Р
BE2M34NSV	VLSI System Design Pavel Hazdra Pavel Hazdra (Gar.)	Z,ZK	6	2P+2L	Z	Р
BE2M32BTSA	Wireless Technologies Zden k Be vá , Lukáš Vojt ch, Zbyn k Kocur, Pavel Mach <b>Ján Ku erák</b> Zden k Be vá (Gar.)	Z,ZK	6	2P + 2L	Z,L	Р

Characteristics of the courses of this group of Study Plan: Code=2018\_MEKEP1 Name=Compulsory subjects of the programme

BE2M17CADA	CAD in HF Technique	Z,ZK	6
Introduction into princip	es and techniques used in modern microwave circuit design		•

BE2M34ZETA **Custom Electronics Design** The course deals with the design methodology of advanced custom electronics. The aim is to convert theoretical knowledge of previous studies into specific proposals for practical applications. Student are getting familiar with the problems encountered in the professional electronic design and manufacturing. This course is based on real experience in development and production, showing the latest technological trends and component base. Design of Integrated Circuits Main tasks of integrated circuits designer; design abstraction levels - Y chart. Definitions of specification, feasibility study, criteria for technology and design kits selection. Integrated systems design and simulation methodologies. Main features of full custom design, gate array, standard cells, programmable array logic. Design aspects of RF and mobile low power systems. Verilog-A, Verilog-AMS, VHDL-A. Logic and physical synthesis. Frond End and Back End design. Floorplanning, place and route, layout, parasitic extraction, time analysis, testbenches design and verification. BE2M31DSPA Digital Signal Processing Z,ZK The subject gives overview about basic methods of digital signal processing and their applications (examples from speech and biological signal processing); disrete-time signals and systems, signal characteristics in time and frequency domain, Fourier transform, fast algorithms for DFT computation, introduction to digital filter design, digital filtering in time and frequency domain, decimation and interpolation and their usage in filter banks, basics of LPC analysis. Further details can be found at <a href=http://noel.feld.cvut.cz/vyu/be2m31dspa>http://noel.feld.cvut.cz/vyu/be2m31dspa</a&gt; BE2M34EZSA Electronic Security Systems Z,ZK 6 The subject describes the system design, electronic solutions, conception characteristics, reliability and its increasing of electronic security and safety systems. It reports solutions of electronic sensor systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical applications suitable for safety systems of houses, cars, industry companies. BE2M34SIS Integrated System Structures Student learn main design methodologies of analog, digital and optoelectronic integrated systems; Detailed description of the technological process for the IC production; CMOS technologies and its advanced sub-micron trends; IC chip topology, layout and design rules; Technology of micro-electro-mechanical systems MEMS. The aim is to make students acquainted with the properties of microprocessor systems, make students familiar with on-chip peripherals, connect external circuit to the processor bus, and with implementation of the memory or I/O space address extension. Next, taught the students to make simple program in the assembly language, C language and combination of both. After completion of this subject student should be able to design and implement simpler microprocessor system including connection of necessary peripherals and software BE2M34MST Microsystems The course deals with system integration applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation and application of integrated microelectronic devices based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its attributes. The course presents the modern action elements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applications in micromanipulation, microrobots, microdrives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screens, microgenerators of electrical energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technologies. Nanoelectronics and Nanotechnology The subject is oriented on the present nanotechnologies in the connection with their electronic, photonic and spintrinic applications. Quantum theory basics are used to explain the effects observed in nanostructures. Basic nanoelectronic structures are described with their possible applications. Modern computer methods and models, which are able to simulate the operation of nanoelectronic structures and which are the important tools for their design and optimalisation, are studied. BE2M34PIOA Planar Integrated Optics The subject describes theoretical and technological principles and design of planar integrated optics and optoelectronics as optical dividers, The students get acquainted with the principles of the light propagation in planar waveguide and with basic devices and structures of integrated optics and optoelectronics as coupling elements, optical microresonators, planar optical transmitters an receivers with SS-LD, WG-PD. In the course are integrated devices and structures for telecommunication for multiplexing and signal processing. There are optical elements for physical and chemical sensor application and basic important measurement and diagnostic methods. BE2MPROJ6 Project 6 Independent work in the form of a project. A student will choose a topic from a range of topics related to his or her branch of study, which will be specified by branch department or branch departments. The project will be defended within the framework of a subject. List of possible topics: http://www.fel.cvut.cz/en/education/semestral-projects.html BE2M34SST Solid State Physics Z,ZK 6 The subject is aimed on solid state physics including some parts of statistical physics. Z,ZKVLSI System Design BE2M34NSV 6 Introduction to basic building blocks, architecture and design methodologies of advanced VLSI systems. Structure and design of digital and analogue integrated circuit subsystems. Integrated system description and synthesis using cell libraries and IP cores. Synchronization, power consumption and parasitics reduction issues. Testing and reliability of integrated systems. In seminars and labs, the hardware description language VHDL will be explained and used for practical design, synthesis and testing of a system on chip. Z.ZK BE2M32BTSA Wireless Technologies 6 The lectures give overview of fundamental principles of wireless networks in various areas of their application. Students will understand architecture, principles and protocols used in

The lectures give overview of fundamental principles of wireless networks in various areas of their application. Students will understand architecture, principles and protocols used in different wireless technologies and learn how these technologies can be exploited in real world applications. The goal is to teach students how to solve problems related to deployment of wireless networks, their operation or development of wireless networks components.

Code of the group: 2018\_MEKEDIP Name of the group: Diploma Thesis

Requirement credits in the group: In this group you have to gain 25 credits Requirement courses in the group: In this group you have to complete 1 course

Credits in the group: 25 Note on the group:

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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
BDIP25	Diploma Thesis	Z	25	22s	L	Р

Characteristics of the courses of this group of Study Plan: Code=2018\_MEKEDIP Name=Diploma Thesis

BDIP25 Diploma Thesis

Independent final comprehensive work for the Master's degree study programme. A student will choose a topic from a range of topics related to his or her branch of study, which will be specified by branch department or branch departments. The diploma thesis will be defended in front of the board of examiners for the comprehensive final examination.

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

The role of the block: V

Code of the group: 2018\_MEKEVOL 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: ~Student can choose arbitrary subject of themagister's program (EEM - Electrical Engineering, Power

Engineering and Management, EK - Electronics and Communications, KYR - Cybernetics and Robotics, OI - Open Informatics, OES - Open Electronics Systems) which is not part of his curriculum. Student can choose with consideration of recommendation of the branch guarantee. You can find a selection of optional

courses organized by the departments on the web site http://www.fel.cvut.cz/cz/education/volitelne-predmety.html

Code of the group: 2018\_MEKEH

Name of the group: Humanities subjects

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

Credits in the group: 0 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
AE0M32KMP	Communications and Media Law	Z,ZK	4	2P + 2C	Z,L	V
BE0M16HSD	History of economy and social studies  Marcela Efmertová Marcela Efmertová (Gar.)	Z,ZK	4	2P+2S	Z,L	V
BE0M16HT2	History of science and technology 2  Marcela Efmertová	Z,ZK	4	2P+2S	L	V
BE0M16FI2	Philosophy II	Z,ZK	4	2P+2S	L	V
BE0M16MPS	Psychology	Z,ZK	4	2P+2S	L	V
BE0M16TE1	Theology	Z,ZK	4	2P+2S	L	V

## Characteristics of the courses of this group of Study Plan: Code=2018\_MEKEH Name=Humanities subjects

AE0M32KMP	Communications and Media Law	Z,ZK	4			
A complex course dedicated to interdisciplinary problems - the legal aspects of electronic communications (information and communications systems), as well as media from the						
viewpoint of European a	viewpoint of European and national law. It analyses the areas of informatics, electronic communications, information society services, copyright and general intellectual property right					
the protection of identity	, introduction to software law and the Internet as a global communication and information system.					
BE0M16HSD	History of economy and social studies	Z,ZK	4			
This subject deals with	This subject deals with the history of the European and Czech society in the 19th - 21th centuries. It follows the forming of the European and Czech political representation, its aims					
and achieved results as	well as the social, economical, technical and cultural development and coexistence of the various ethnical groups.					
BE0M16HT2	History of science and technology 2	Z,ZK	4			
This subject traces histo	brical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to stimulate s	tudents' interest in	n the history and			
traditions of the subject	traditions of the subject, while highlighting the developments in technical education and professional organizations, the process of shaping scientific life and the influence of technical					
engineers						
BE0M16FI2	Philosophy II	Z,ZK	4			
The course is oriented of	on the transdisciplinar aspects of philosophy informatics, physics, mathematics and hiology	'	•			

BE0M16FI2	Philosophy II	Z,ZK	4
The course is oriented	on the transdisciplinar aspects of philosophy, informatics, physics, mathematics and biology.		
BE0M16MPS	Psychology	Z,ZK	4
BE0M16TE1	Theology	Z,ZK	4

This subject provides to students the basic orientation in christian theology and requires no special previous education. After short philosophic lecture the basic theologic disciplines are gone through. The subject is determined not only to believer students who want to know the reliable theologic grounding but also above all to ones who want to get know Christianity - religion from which graws our civilization up.

## List of courses of this pass:

	Name of the course	Completion	Credit
AE0M32KMP	Communications and Media Law	Z,ZK	4
A complex course	e dedicated to interdisciplinary problems - the legal aspects of electronic communications (information and communications systems	s), as well as media	from the
iewpoint of Europea	an and national law. It analyses the areas of informatics, electronic communications, information society services, copyright and gene the protection of identity, introduction to software law and the Internet as a global communication and information system.	-	perty right
BDIP25	Diploma Thesis	Z	25
-	omprehensive work for the Master's degree study programme. A student will choose a topic from a range of topics related to his or l	_	_
•	y branch department or branch departments. The diploma thesis will be defended in front of the board of examiners for the compreh	-	
BE0M16FI2	Philosophy II	Z,ZK	4
	The course is oriented on the transdisciplinar aspects of philosophy, informatics, physics, mathematics and biology.	,	ı
BE0M16HSD	History of economy and social studies	Z,ZK	4
This subject deals	with the history of the European and Czech society in the 19th - 21th centuries. It follows the forming of the European and Czech po and achieved results as well as the social, economical, technical and cultural development and coexistence of the various ethnical	=	on, its aim
BE0M16HT2	History of science and technology 2	Z,ZK	4
	historical developments in electrical engineering branches in the world and in the Czech Lands. Its ultimate goal is to stimulate stude	'	history a
raditions of the sub	ject, while highlighting the developments in technical education and professional organizations, the process of shaping scientific life engineers	and the influence	of technic
BE0M16MPS	Psychology	Z,ZK	4
BE0M16TE1	Theology	Z,ZK	4
This subject provide	es to students the basic orientation in christian theology and requires no special previous education. After short philosophic lecture to be subject is determined not only to believer students who want to know the reliable theologic grounding but also above all to ones who religion from which graws our civilization up.	the basic theologic	discipline
BE2M17CADA	CAD in HF Technique Introduction into principles and techniques used in modern microwave circuit design.	Z,ZK	6
BE2M31DSPA	Digital Signal Processing	Z,ZK	6
	verview about basic methods of digital signal processing and their applications (examples from speech and biological signal proces		signals ar
_	frequency domain, decimation and interpolation and their usage in filter banks, basics of LPC analysis. Further details can be foun  href=http://noel.feld.cvut.cz/vyu/be2m31dspa .  Wireless Technologies verview of fundamental principles of wireless networks in various areas of their application. Students will understand architecture, prechnologies and learn how these technologies can be exploited in real world applications. The goal is to teach students how to solve p	Z,ZK inciples and protoc	
mereni wireless tec	of wireless networks, their operation or development of wireless networks components.	TODIETTIS TETATED TO	deployme
BE2M34EZSA	Electronic Security Systems	Z,ZK	6
IVIO-TL-COA		<u> </u>	6
The subject describ	es the system design, electronic solutions, conception characteristics, reliability and its increasing of electronic security and safety systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical approximation systems of houses, cars, industry companies.	systems. It reports	solutions
The subject describe electronic sensor selectronic se	ses the system design, electronic solutions, conception characteristics, reliability and its increasing of electronic security and safety systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical appropriate systems of houses, cars, industry companies.  Microsystems	systems. It reports oplications suitable Z,ZK	solutions for safety
BE2M34MST The course deals nicroelectronic devict the modern action nicrorobots, microelectronic deviction action nicrorobots in the modern action nicrorobots in the modern action nicrorobots is oriented.	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems of houses, cars, industry companies.  Microsystems  with system integration applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation ces based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its elements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applicatives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screen energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology  nted on the present nanotechnologies in the connection with their electronic, photonic and spintrinic applications. Quantum theory by	Z,ZK and application of attributes. The couractions in micromals, microgenerators chnologies.  Z,ZK asics are used to a	solutions for safety  6 integrated rse preser nipulation of electric  6 explain the
BE2M34MST The course deals nicroelectronic devicte modern action nicrorobots, microelectronic devicted modern action nicrorobots, microelectronic devicted modern action nicrorobots, microelectronic devicted modern action of the modern	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems of houses, cars, industry companies.  Microsystems  with system integration applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation ces based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its elements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applicatives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screen energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology  nanoelectronics and Nanotechnology  nted on the present nanotechnologies in the connection with their electronic, photonic and spintrinic applications. Quantum theory be nanostructures. Basic nanoelectronic structures are described with their possible applications. Modern computer methods and mode	zystems. It reports oplications suitable z,ZK and application of attributes. The courations in microgenerators chnologies.  z,ZK assics are used to dels, which are able	solutions for safety  6 integrated rse preser nipulation of electric  6 explain the
BE2M34MST The course deals incroelectronic deviction action hicrorobots, microdots BE2M34NANA The subject is ories iffects observed in	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical are systems of houses, cars, industry companies.  Microsystems  with system integration applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation ces based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its elements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applicatives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screen energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology  nanoelectronics and Nanotechnology  nanoetructures. Basic nanoelectronic structures are described with their electronic, photonic and spintrinic applications. Quantum theory be nanostructures. Basic nanoelectronic structures and which are the important tools for their design and optimalisation, are studied.	zystems. It reports oplications suitable z,ZK and application of attributes. The course tations in microgenerators chnologies.  z,ZK assics are used to dels, which are able d.	solutions of for safety of for
BE2M34MST The course deals nicroelectronic devicte modern action nicrorobots, microdots, microelectronic devicte modern action nicrorobots, microdots, microelectronic devicte modern action nicrorobots, microdots, microdo	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical applications applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation aces based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its elements and microactuators, whose operation is based on fundamental physical and biochemical principles in the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic and spintrinic applications. Quantum theory be nanostructures. Basic nanoelectronic structures are described with their possible applications. Modern computer methods and modern the operation of nanoelectronic structures and which are the important tools for their design and optimalisation, are studied being of Integrated Circuits  Design of Integrated Circuits  rated circuits designer; design abstraction levels - Y chart. Definitions of specification, feasibility study, criteria for technology and definition methodologies. Main features of full custom design, gate array, standard cells, programmable arra	Z,ZK and application of attributes. The course the cour	solutions of for safety of for
BE2M34NST The course deals incroelectronic deviction action incrorobots, microdiction because the modern action incrorobots, microdiction incrorobots, microdiction incrorobots, microdiction incrorobots, microdiction incrorobots, microdiction incrorobots, microdiction increase in increase incre	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical applications applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation costs based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its elements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applicatives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screen energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology.  Nanoelectronics and Nanotechnology  Inted on the present nanotechnologies in the connection with their electronic, photonic and spintrinic applications. Quantum theory be nanostructures. Basic nanoelectronic structures are described with their possible applications. Modern computer methods and modern the operation of nanoelectronic structures and which are the important tools for their design and optimalisation, are studied as immulation methodologies. Main features of full custom design, gate array, standard cells, programmable array logic. Design aspect a testbenches design and verification.  VLSI System Design  VLSI System Design	z,ZK and applications suitable  Z,ZK and application of attributes. The course cations in micromars, microgenerators chnologies.  Z,ZK assics are used to dels, which are abled.  Z,ZK assics af RF and mobile sitic extraction, tim	solutions of for safety of for
The subject describe electronic sensor selectronic sensor selectronic sensor selectronic deviction and selectronic devicti	systems and methods of security system design, usage of modern electronic components and microprocessors. It offers practical appropriates and methods of security system design, usage of modern electronic components and microprocessors. It offers practical appropriates are design of houses, cars, industry companies.  Microsystems  with system integration applied in the design of digital and analog systems. It demonstrates the new possibilities of implementation ces based on various physical and biochemical principles. It presents primarily MEMS technology that increases reliability with all its relements and microactuators, whose operation is based on fundamental physical and biochemical principles, including basic applierives, microsurgery, multimedia, medical, industrial control, automotive, etc. In the course are presented the principles of touch screen energy. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and basic microsystem technology. There are mentioned basic elements of the use of nanotechnology and nanoelectronic structures and which are electronic, photonic and spintrinic applications. Quantum theory be nanostructures. Basic nanoelectronic structures are described with their possible applications. Modern computer methods and modern the operation of nanoelectronic structures and which are the important tools for their design and optimalisation, are studied as simulation methodologies. Main features of full custom design, gate array, standard cells, programmable array logic. Design aspect, Verilog-AMS, VHDL-A. Logic and physical synthesis. Frond End and Back End design. Floorplanning, place and route, layout, para testbenches design and verification.  VLSI System Design ic building blocks, architecture and design methodologies of advanced VLSI systems. Structure and design of digital and analogue in the foundation of the programmable array logic. Design as pectors are presented to the programmable and programmable and programmable and programmable array	z,ZK and applications suitable  Z,ZK and application of attributes. The course training in micromars, microgenerators chnologies.  Z,ZK assics are used to dels, which are abled.  Z,ZK assics af RF and mobile sitic extraction, tim  Z,ZK attributes.	solutions of for safety of
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BE2M34SST	Solid State Physics	Z,ZK	6				
The subject is aimed on solid state physics including some parts of statistical physics.							
BE2M34ZETA	Custom Electronics Design	KZ	6				
The course deals	The course deals with the design methodology of advanced custom electronics. The aim is to convert theoretical knowledge of previous studies into specific proposals for practical						
applications. Studer	applications. Student are getting familiar with the problems encountered in the professional electronic design and manufacturing. This course is based on real experience in developmen						
	and production, showing the latest technological trends and component base.						
BE2M37MAM	Microprocessors	Z,ZK	6				
The aim is to make	The aim is to make students acquainted with the properties of microprocessor systems, make students familiar with on-chip peripherals, connect external circuit to the processor bus.						
and with implement	and with implementation of the memory or I/O space address extension. Next, taught the students to make simple program in the assembly language, C language and combination o						
both. After completion of this subject student should be able to design and implement simpler microprocessor system including connection of necessary peripherals and software							
	design.						
BE2MPROJ6	Project	Z	6				
Independent work in the form of a project. A student will choose a topic from a range of topics related to his or her branch of study, which will be specified by branch department or							
branch departments. The project will be defended within the framework of a subject. List of possible topics: http://www.fel.cvut.cz/en/education/semestral-projects.html							

For updated information see <a href="http://bilakniha.cvut.cz/en/f3.html">http://bilakniha.cvut.cz/en/f3.html</a> Generated: day 2025-11-04, time 08:36.