

***FACULTY OF MANAGEMENT SCIENCE
AND INFORMATICS***

ANNUAL REPORT 2007

UNIVERSITY OF ŽILINA

Edited by Faculty of Management Science and Informatics
University of Žilina
SLOVAKIA
Printed by EDIS - Žilina University publisher

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FACULTY OF MANAGEMENT SCIENCE AND INFORMATICS

1. Foreword

The *Faculty of Management Science and Informatics* was established at the University of Žilina in July 1990.

The Faculty primarily specialises in managing activities in extensive systems. These include problems of managing and optimising the transfer of objects, as well as the designing of integrated interactive information systems for decision making support including economic connections and technical background.

The Faculty is interested in control and information systems, management and transport with application in many areas of using.

The activities of the Faculty are determined by new trends in information and communication technologies. The priority of the Faculty is to provide continual links between research, education and the career prospects of graduates. Basic educational and scientific activities consist of:

- Design and realization of technical means for information and management systems
- Analysis and synthesis of regulation and automation systems
- Control and optimisation of goods and passenger transport
- Creation, control and optimisation databases
- Management, marketing, logistics, entrepreneurial skills, creation of transport and communication systems
- Data transmission and data processing
- Issues concerning multimedia information systems, graphic systems and simulation of components for communication networks, systems and mathematical modelling

Faculty provides educational programmes in accordance with University Law No: 131/2002 in following accredited programmes of study:

Full time 3–year **Bachelors degree** programme in:

- ***Informatics***
- ***Computer Engineering***
- ***Management***

The programme is a well-rounded higher education on the 1st degree.

Additional 2 years **Masters degree** programmes of study are in the following accredited fields:

- ***Information Systems***
- ***Information Management***
- ***Computer Engineering***
- ***Business Informatics***
- ***International logistic***

The PhD.- programme at the Faculty involves the following scientific disciplines:

- *Applied Informatics*
- *Management*
- *Control of Transportation Systems*

PhD-programme is the highest level of higher education. The aim of PhD-programme is to prepare the graduate student for independent, creative scientific-research work by giving the student comprehensive theoretical knowledge and mastery of the methods of scientific work as demonstrated in a given scientific project. The programme lasts three years (full time). The PhD.- programme requires 3 semesters of advanced study, satisfactory completion of a comprehensive examination, then, after 3rd semesters, submission of a written dissertation, based on independent original research that must be a significant contribution to the field of study. Oral examination that is a defence of the dissertation. The graduate is granted the scientific academic title „**Philosophiae Doctor** (abbr. **PhD.**)“, which is written in abbreviation after the candidate's name.

2. *Presidium of the Faculty:*

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3. Departments of the Faculty

The FMSI has eight Departments and one Sub-Campus. They are:

- Department of Mathematical Methods
- Department of Informatics
- Department of Macro and Microeconomics
- Department of Technical Cybernetics
- Department of Info Communication Networks
- Department of Transportation Networks
- Department of Management Theories
- Department of Software Technologies
- Sub-Campus in Prievidza

4. Programmes

Bachelors Degree Programme: **INFORMATICS**

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
1	COMPULSORY				
	5BF01	Algebra	2-2-0	6	DMM
	5BF11	Mathematical Analysis 1	3-2-0	8	DMM
	5BL33	Introduction to studies	2-0-2	3	DIN
	5BE01	Basics of Economic Theory	2-2-0	6	DMME
	5BI01	Basics of Informatics 1	2-1-1	6	DTN
	OPTIONAL				
	5BF09	Practice of Mathematics	0-2-0	1	DMM
	5BI11	Practice of Programming 1	0-0-2	1	DI
	5BL15	Foreign Language	0-2-0	3	FSc_DL
5BL09	Physical Education	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
2	COMPULSORY				
	5BA12	Graphs and Combinatory	2-2-0	7	DMM
	5BN10	Communication Technologies	2-0-2	5	DIN
	5BF12	Mathematical Analysis 2	3-2-0	8	DMM
	5BE02	Microeconomics	2-2-0	6	DMME
	5BI02	Basics of Informatics 2	2-1-1	6	DI
	OPTIONAL				
	5BI11	Practice of Programming 2	0-0-2	1	DI
	5BL15	Foreign Language	0-2-0	3	FSc_DL
	5BL09	Physical Education	0-0-2	1	IPE

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
3	COMPULSORY				
	5BI03	C-Language	2-0-2	6	DI
	5BH01	Logical Systems	2-0-2	6	DTC
	5BI23	Object Programming	2-0-2	5	DST
	5BA11	Probability and Statistics 1	2-1-1	6	DTN
	OPTIONAL				
	5BI33	Spreadsheets	2-0-2	3	DI
	5BL17	Foreign Language	0-2-0	3	FSc_DL
5BL11	Physical Education 3	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
4	COMPULSORY				
	5BH18	Digital Computers	3-0-1	6	DTC
	5BF08	Discrete Mathematics	2-0-2	5	DTN
	5BI24	Data Structures 1	2-0-2	6	DTN
	5BI06	Basics of Database Systems	2-0-2	6	DI
	OPTIONAL				
	5BI28	Unified Modelling Language	2-1-1	4	DST
	5BE14	Small and Medium Entrepreneurship	2-2-0	6	DMME
	5BA08	Numerical Methods	2-0-2	3	DMM
	5BL18	Foreign Language 4	0-2-0	3	FSc_DL
5BL12	Physical Education 4	0-0-2	1	IPE	

3rd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
5	COMPULSORY				
	5BA13	Modelling and Simulation	2-0-2	6	DTN
	5BS01	Operational Systems	2-0-2	6	DI
	5BS03	Software Engineering	2-0-4	6	DI
	OPTIONAL				
	5BI31	Database System - Access	2-0-2	4	DI
	5BS05	Identification of Systems	2-0-2	6	DTC
	5BS15	Implementation of UNIX - LINUX	2-0-2	6	DI
	5BH23	Microprocessors	2-0-2	6	DTC
	5BS07	Multimedia Information Systems	2-0-2	6	DTN
	5BL03	Law 1	2-2-0	4	DMME
	5BL35	Sociology	1-2-0	4	G
	5BH21	Technical Equipment of PC	0-0-2	3	DTC
	5BI29	Basics of Programming in WINDOWS	2-0-2	4	DST
5BL13	Physical Education 5	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
6	COMPULSORY				
	5BZ01	Bachelors Project	0-0-8	12	G
	5BL12	Foreign Language	0-0-0	3	FSc_DL
	OPTIONAL				
	5BS04	Information and Control Systems in Transport	2-0-1	3	DST
	5BI32	Compilers	2-0-2	6	DI
	5BS02	Management of Information Systems	2-0-2	6	DMT
	5BA20	Modern Approximate Methods	2-0-2	4	DMM
	5BI26	Object Programming in WINDOWS	1-0-1	2	DST
	5BL04	Law 2	2-2-0	4	DMME
	5BL06	Psychology	2-1-0	4	G
	5BI22	Open Source Software	1-0-3	4	DMM
5BL14	Physical Education 6	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department	
Autumn	COMPULSORY OPTIONAL					
	5BI07	Algorithms and Computational Complexity	2-0-0	3	DI	
	5BE09	Economy of Enterprise	2-1-0	5	DMME	
	5BE13	Marketing 1	2-2-0	6	DMT	
	5BF13	Mathematical Analysis 3	3-2-0	7	DMM	
	5BA07	Operational Research 2	2-2-0	5	DMM	
	5BN03	Computer Networks 1	2-0-4	2	DIN	
	5BI25	Assemblers	2-0-2	5	DTN	
	COMPULSORY OPTIONAL					
	Spring	5BH04	Digital Systems	2-0-2	6	DTC
		5BI10	JAVA – Language and Development Applications	2-0-2	6	DI
		5BI30	C++ Language	1-0-2	5	DST
		5BE08	Macroeconomics	2-2-0	5	DMME
		5BM10	Management	2-2-0	6	DMT
5BA06		Modelling and Optimisation	2-0-2	5	DTN	
5BN04		Computer Networks 2	2-0-4	10	DIN	
5BA14		Probability and Statistics 2	2-1-1	5	DTN	
5BN12	Broadband Networks	2-0-2	6	DIN		
5IA02	Theory of Information	2-0-2	5	DMM		

From Compulsory optional courses student has to choose so many courses, so that the recommended sum of credits within whole study should be 15

Bachelors Degree Programme: COMPUTER ENGINEERING

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
1	COMPULSORY				
	5BF01	Algebra	2-2-0	6	DMM
	5BF11	Mathematical Analysis 1	3-2-0	8	DMM
	5BF05	Basics of Physics	3-1-1	6	EF-DPh
	5BE01	Basics of Economic Theory	2-2-0	6	DMME
	5BI01	Basics of Informatics 1	2-1-1	6	DTN
	OPTIONAL				
	5BF09	Practice of Mathematics	0-2-0	1	DMM
	5BI11	Practice of Programming 1	0-0-2	1	DI
	5BL15	Foreign Language 1	0-2-0	3	FSc-DL
5BL09	Physical Education	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
2	COMPULSORY				
	5BF04	Electrical Circuits	2-2-0	5	DTC
	5BN10	Communication Technologies	2-0-2	5	DIN
	5BF12	Mathematical Analysis 2	3-2-0	8	DMM
	5BH08	Theory of Automatic Control 1	2-1-1	6	DTC
	5BI02	Basics of Informatics 2	2-1-1	6	DI
	OPTIONAL				
	5BI11	Practice of Programming 2	0-0-2	1	DI
	5BL15	Foreign Language 2	0-2-0	3	FSc-DL
	5BL09	Physical Education 2	0-0-2	1	IPE

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
3	COMPULSORY				
	5BI03	C-Language	2-0-2	6	DI
	5BH01	Logical Systems	2-0-2	6	DTC
	5BF07	Electronics	2-0-2	6	DTC
	5BA11	Probability and Statistics 1	2-1-1	6	DTN
	COMPULSORY OPTIONAL				
	5BF13	Mathematical Analysis 3	3-2-0	7	DMM
	5BN03	Computer Networks 1	2-0-4	2	DIN
	5BH17	Elements of Automatic Systems	2-0-2	6	DTC
	5BS11	UNIX – Development Environment	1-0-3	4	DMM
	OPTIONAL				
	5BI25	Assemblers	2-0-2	5	DTN
	5BL17	Foreign Language 3	0-2-0	3	FSc-DL
5BL11	Physical Education 3	0-0-2	1	IPE	

From the group of Compulsory optional courses student has to choose min one course

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
4	COMPULSORY				
	5BH18	Digital Computers	3-0-1	6	DTC
	5BH04	Digital Systems	2-0-2	6	DTC
	5BH02	Measurement	2-0-2	6	DTC
	5BL32	Legal and Ethic Aspects of Information Technologies	2-0-0	3	DMT
	COMPULSORY OPTIONAL				
	5BF10	Complex Variable and Integral Transformation	2-1-1	4	DMM
	5BN04	Computer Networks 2	2-0-4	10	DIN
	5BH22	Theory of Automatic Control 2	2-0-3	6	DTC
	OPTIONAL				
	5BI30	C++ Language	1-0-2	5	DST
	5BA08	Numerical Methods	2-0-2	3	DMM
	5BE04	Basics of Electronic Business	2-0-2	6	DIN
	5BL18	Foreign Language 4	0-2-0	3	FSc-DL
5BL12	Physical Education 4	0-0-2	1	IPE	

3rd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
5	COMPULSORY				
	5BH05	Electronic Systems	2-0-2	6	DTC
	5BH19	Construction and Technology of Electronic System Production	1-0-3	4	DTC
	5BS01	Operational Systems	2-0-2	6	DI
	COMPULSORY OPTIONAL				
	5BH13	Microcomputers and their Applications	1-0-3	6	DTC
	5BH23	Microprocessors	2-0-2	6	DTC
	5BI23	Object Programming	2-0-2	5	DST
	5BI29	Basic Programming in Windows	2-0-2	4	DST
	OPTIONAL				
	5BI07	Algorithms and Computational Complexity	2-0-0	3	DI
	5BI31	Database Systems – MS Access	2-0-2	4	DI
	5BS05	Identification of Systems	2-0-2	6	DTC
	5BS15	Implementation of UNIX - LINUX	2-0-2	6	DI
	5BS07	Multimedia Information Systems	2-0-2	6	DTN
	5BL03	Law 1	2-2-0	4	DMME
	5BL35	Sociology	1-2-0	4	G
5BH21	Technical Equipments of PC	0-0-2	3	DTC	
5BL13	Physical Education 5	0-0-2	1	IPE	

From the group of Compulsory optional courses student has to choose min one course

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
6	COMPULSORY				
	5BZ01	Bachelors Project	0-0-8	12	G
	5BL12	Foreign Language	0-0-0	3	FSc-DL
	5BH20	Computer Engineering	2-0-4	6	DTC

6	COMPULSORY OPTIONAL			
	5BI10	JAVA – Language and Development Applications	2-0-4	6
5BH14	Computer Process Control	2-0-3	7	DTC
OPTIONAL				
5BS04	Information and Control Systems in Transport	2-0-1	3	DST
5BI32	Compilers	2-0-2	6	DI
5BI26	Object Programming in WINDOWS	1-0-1	2	DST
5BL04	Law 2	2-2-0	4	DMME
5BL06	Psychology	2-1-0	4	G
5BN12	Broadband Networks	2-0-2	6	DIN
5BA10	Scheduling Theory	2-2-0	6	DMM
5BS10	Development of Applications for Internet and Intranet	2-0-2	4	DST
5BE14	Small and Medium Enterpreurship	2-2-0	6	DMT
5BL14	Physical Education 6	0-0-2	1	IPE

From the group of Compulsory optional courses student has to choose min one course

Bachelors Degree Programme: MANAGEMENT

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
1					
COMPULSORY					
	5BF01	Algebra	2-2-0	6	DMM
	5BF11	Mathematical Analysis 1	3-2-0	8	DMM
	5BL03	Law 1	2-2-0		DMME
	5BE01	Basics of Economic Theory	2-2-0	6	DMME
	5BI01	Basics of Informatics 1	2-1-1	6	DTN
OPTIONAL					
	5BF09	Practice of Mathematics	0-2-0	1	DMM
	5BI11	Practice of Programming 1	0-0-2	1	DI
	5BL15	Foreign Language 1	0-2-0	3	FSc-DL
	5BL09	Physical Education	0-0-2	1	IPE

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
2					
COMPULSORY					
	5BM10	Management	2-2-0	6	DTC
	5BE02	Microeconomics	2-2-0	6	DMME
	5BE16	Business Economy	3-2-0	8	DMT
	5BE04	Basics of E-Business	2-0-2	6	DIN
	5BI02	Basics of Informatics 2	2-1-1	6	DI
OPTIONAL					
	5BI11	Practice of Programming 2	0-0-2	1	DI
	5BL15	Foreign Language 2	0-2-0	3	FSc-DL
	5BL09	Physical Education 2	0-0-2	1	IPE

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
3	COMPULSORY				
	5BE05	Financial Accounting	2-2-0	6	DMME
	5BE13	Marketing 1	2-2-0	6	DMT
	5BM11	Project Management	2-1-1	6	DMT
	5BA11	Probability and Statistics 1	2-1-1	6	DTN
	OPTIONAL				
	5BI33	Spreadsheets	2-0-2	3	DI
	5IE05	Management Accounting	3-2-0	6	DMME
	5BL17	Foreign Language 3	0-2-0	3	FSc-DL
5BL11	Physical Education 3	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
4	COMPULSORY				
	5BE14	Small and Medium Entrepreneurship	2-2-0	6	DMT
	5BS02	Management of Information Systems	2-0-2	6	DMT
	5BE10	Business Logistics	3-1-0	5	DMT
	OPTIONAL				
	5BA08	Numerical Methods	2-0-2	3	DMM
	5BL18	Foreign Language 4	0-2-0	3	FSc-DL
5BL12	Physical Education 4	0-0-2	1	IPE	

3rd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
5	COMPULSORY				
	5BE07	Finance	3-2-0	5	DMME
	5BM07	Communication Management	2-2-0	6	DMT
	OPTIONAL				
	5BI31	Database Systems – MS Access	2-0-2	4	DI
	5BM09	Marketing Tools and Applications	2-0-2	4	DMT
	5BS07	Multimedia Information Systems	2-0-2	6	DTN
	5BH21	Technical Equipments of PC	0-0-2	3	DTC
5BL13	Physical Education 5	0-0-2	1	IPE	

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
6	COMPULSORY				
	5BZ01	Bachelors Project	0-0-8	12	G
	5BL12	Foreign Language	0-0-0	3	FSc-DL
	5BM14	Human Resource Management	2-0-4	6	DMT
	OPTIONAL				
	5BS04	Information and Control Systems in Transport	2-0-1	3	DST
	5BL04	Law 2	2-2-0	4	DMME
	5BP04	Management of Enterprise - Project	0-2-2	6	DMT
5BL14	Physical Education 6	0-0-2	1	IPE	

Minimum number of credits to conclude the form of study: 180

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Autumn	COMPULSORY OPTIONAL				
	5BE09	Economy of Enterprise	2-1-0	5	DMME
	5BL05	Quality in Services	2-2-0	4	DST
	5BA13	Modelling and Simulation	2-0-2	6	DTN
	5BL35	Sociology	1-2-0	4	DMT

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Spring	COMPULSORY OPTIONAL				
	5BA12	Graphs and Combinatory	2-2-0	7	DMM
	5BA06	Modelling and Optimisation	2-2-0	5	DTN
	5IN08	Communication Systems	2-0-2	5	DTN
	5BE08	Macroeconomics	2-2-0	5	DMME
	5BM06	Marketing Communication	2-2-0	5	DMT
	5BM02	Marketing of Services	2-2-0	4	DMT
	5BF12	Mathematical Analysis 2	3-2-0	8	DMM
5BL06	Psychology	2-1-0	4	G	

From Compulsory optional courses student has to choose so many courses, so that the minimum sum of credits within whole study should be 15

Masters Degree Programme: **INFORMATION SYSTEMS**

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
1	COMPULSORY				
	5II15	Data Structures 2	2-0-2	5	DTN
	5IS03	Architectures of Information systems	2-0-2	5	DIN
	5IN09	Optimisation of Networks	2-0-2	5	DTN
	5II07	Database Systems 2	2-0-2	5	DI
	COMPULSORY according to Professional Orientation				
	5IPD1	Project 1	0-2-4	6	DTN
	5IPA1	Project 1	0-2-4	6	DI
5IPN1	Project 1	0-2-4	6	IN	
2	COMPULSORY				
	5II08	Discrete Simulation	2-0-2	5	DTN
	5IA02	Theory of Information	2-0-2	5	DMM
	COMPULSORY according to Professional Orientation				
	5IPD2	Project 2	0-2-4	6	DTN
	5IPA2	Project 2	0-2-4	6	DI
	5IPN2	Project 2	0-2-4	6	IN

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
3	COMPULSORY				
	5II17	Cryptography and Safety	2-0-2	5	DMM
	5IN05	Networks Architecture	2-0-2	5	DIN
	5IP05	Internship	0-0-0	0	G
	COMPULSORY according to Professional Orientation				
	5IPD3	Project 3	0-2-4	6	DTN
	5IPA3	Project 3	0-2-4	6	DI
5IPN3	Project 3	0-2-4	6	IN	
Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
4	COMPULSORY				
	5IZ01	Diploma Thesis	0-0-20	30	G

Pools of additional compulsory optional courses from the kernel of the Programme of Study

Decision Support Systems

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Autumn	COMPULSORY OPTIONAL				
	5IE01	Theory of Enterprise	2-0-2	5	DMME
	5II01	Fuzzy Sets and Neural Networks	2-0-2	5	DTN
Spring	COMPULSORY OPTIONAL				
	5IN08	Communication Systems	2-1-1	5	DTN
	5IA06	Mathematical Programming	2-0-2	5	DTN
	5IS06	Geographic Information Systems	2-0-2	5	DTN

Applied Informatics

Semester	COMPULSORY OPTIONAL				
Autumn	5II13	Advanced Object Technologies	2-0-2	5	DI
	5II03	Database Languages	2-0-2	5	DI
	5IS02	Distributed Systems	2-0-2	5	DTC
	5IE01	Theory of Enterprise	2-0-2	5	DMME
Spring	COMPULSORY OPTIONAL				
	5II12	Data Mining	2-0-2	5	DI

Information Communication Networks

Semester	COMPULSORY OPTIONAL				
Autumn	5IP07	Networks Projecting	2-0-2	5	G-FEE
	5IN07	Signal Transmissions	2-0-2	5	G-FEE
	5IN03	Integration of Networks	2-0-2	5	DIN
Spring	COMPULSORY OPTIONAL				
	5IN10	Theory of Networks	2-0-2	5	DINS
	5IS04	Analysis of Processes	2-0-2	5	DIN

Masters Degree Programme: **BUSINESS INFORMATICS**

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
COMPULSORY					
1	5IPH1	Project 1	0-2-4	6	G
	5II07	Database Systems 2	2-0-2	5	DI
	5II13	Advanced Object Oriented Technologies	2-0-2	5	DI
	5BM11	Project Management	2-1-1	5	DMT
	5II23	Artificial Intelligence	2-0-2	5	DTN
Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
COMPULSORY					
2	5IPH2	Project 2	0-2-4	6	G
	5II24	Artificial Neural Networks	2-0-2	5	DMME
	5IE10	Accounting and Analysis	2-0-2	5	DTC

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
COMPULSORY					
3	5IPH3	Project 3	0-2-4	6	G
	5IS09	Expert Systems	2-0-2	6	G
	5II01	Fuzzy Sets and Neural Networks	2-0-2	5	DTN
Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
COMPULSORY					
4	5IZ01	Diploma Thesis	0-0-20	30	G

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
COMPULSORY OPTIONAL (One course from each group)					
1st group					
Autumn	5IE11	Prognostics	2-0-2	6	DMME
Spring	5IE08	Econometrics	2-0-2	6	DMME
2nd group					
Spring	5BI30	C++ Language	1-0-2	5	DST
Spring	5BI10	JAVA – Language and Development Applications	2-0-4	6	DI
3rd group					
Autumn	5BE07	Finance	3-2-0	5	DMME
Autumn	5IE09	Cost Calculation and Pricing	3-2-0	7	DMMEI

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Autumn	OPTIONAL				
	5IS03	Architecture of Information Systems	2-0-2	5	DIN
	5BS07	Multimedia Information Systems	2.0.2	6	DTN
	5IM19	Operational Management	4-0-0	4	DMT
	5IP09	Design of Management Systems	0-4-1	6	DMT
	5IM09	Strategic Management	2-0-2	6	DMT
	5IE01	Theory of Enterprise	2-0-2	5	DMME

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Spring	OPTIONAL				
	5II12	Data Mining	2-0-2	5	DI
	5IM16	Marketing Research	2.-1-0	3	DMT
	5IA06	Mathematical Programming	2-0-2	5	DTN
	5BS10	Development of Applications for INTERNET and INTRANET	2-0-2	4	DST
	5BE04	Basics of E-Business	2-0-2	6	DIN

Masters Degree Programme: INFORMATION MANAGEMENT

1st year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
1	COMPULSORY				
	5BS03	Software Engineering	2-0-4	6	DI
	5IM15	International Marketing	2-1-0	4	DMT
	5IM19	Operational Management	4-0-0	4	DMT
	5Ipm1	Project 1	0-2-4	6	G

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
2	COMPULSORY				
	5IE08	Econometrics	2-0-2	6	DMME
	5BI06	Basics of Database Systems	2-0-2	6	DI
	5IM14	Quality Management – Principles of TQM	2-1-0	4	DMT
	5IPM2	Project 2	0-2-4	6	G

2nd year of study

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
3	COMPULSORY				
	5IM09	Strategic Management	2-1-0	6	DMT
	5IM17	Organization Behaviour	2-0-2	3	DMT
	5IP09	Design of Management Systems	0-4-1	6	DMT
	5IP05	Internship	0-0-0	0	G
	5IPM3	Project 3	0-2-4	6	G

Sem.	Code	COURSE	HOURS PER WEEK	ECTS	Department
4	COMPULSORY				
	5IZ01	Diploma Thesis	0-0-20	30	G

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Autumn	COMPULSORY OPTIONAL				
	5IE07	International Business	2-2-0	4	DMT
	5IE01	Theory of Enterprise	2.0.2	5	DMME
	5IE11	Prognostic	2-0-2	6	DMME
	5IN09	Optimisation of Networks	2-0-2	5	DTN

Semester	Code	COURSE	HOURS PER WEEK	ECTS	Department
Spring	COMPULSORY OPTIONAL				
	5IM16	Marketing Research	2.-1-0	3	DMT
	5IN08	Communication Systems	2-0-2	5	DTN
	5BS10	Development of Applications for INTERNET and INTRANET	2-0-2	4	DST
	5IA06	Mathematical Programming	2-0-2	5	DTN

From the group of Compulsory Optional Courses student must choose courses to fulfil minimum number of credits 20. It is recommended to pass all courses

Abbreviations:

- DMM - Department of Mathematical Methods
- DI - Department of Informatics
- DTC - Department of Technical Cybernetics
- DIN - Department of Information Networks
- DTN - Department of Transportation Networks
- DMT - Department of Management Theories
- DMME - Department of Macro and Microeconomics
- DST - Department of Software Technology
- G - Guarantee for Programme of Study
- EF-DPh - Electrotechnical Faculty –Department of Physics
- FSc-DL - Faculty of Science – Department of Languages
- IPE - Institute of Physical Education

www.fri.uniza.sk link: Study

5. Scientific and Professional Orientation of the Faculty

The Faculty is involved in the following scientific fields:

- Analysis, synthesis and design of integrated information and control systems
- Creation of integrated systems for the support of decision-making, including its economical correlations and technical equipment requirements
- Management, marketing, logistics and enterprising in the general field of transportation and communication systems
- Problem-solving design in transportation and communication systems and relative tasks of control
- Control and optimisation of transportation of products and persons
- Control and optimisation of database creation, transmission and data processing
- Analysis, synthesis and design of multimedia information systems
- Analysis, synthesis and design of geographical information systems
- Design and realization of simulation components for communication networks and systems
- Design and realization of technical means for information and control systems

6. The scientific activities of the Faculty

In 2007 there were **20 International projects**, **17 Research projects from state agency VEGA and KEGA** and **50 Institutional projects** solved at the Faculty. They are:

International Projects:

1. 6RP TSA6-CT-2006-044599 EUROTRANS *Participation of SME in projects of the 7.FP EURTD – Transport.* - Assoc. Prof. Ing. Peter **Fabián**, PhD.
2. 6RP/FP6-506494 *Increasing Safety and Reliability of Secondary Roads for Sustainable Surface Transport /RIPCORD-ISEREST/.* - Prof. RNDr. Jaroslav **Janáček**, PhD.
3. 225456-CP-1-2005-1-DE SOCRATES *Blended Learning for very Large Groups of Students.* - Assoc. Prof. Ing. Peter **Fabián**, PhD
4. S/05/B/F/PP-161012 LEONARDO - *GI Indeed*, Professional education.
Assoc. Prof. Ing. Peter **Fabián**, PhD.
5. P-190-022/05 6FP TEN programme *CONNECT (Co-ordination and Stimulation of Innovative ITS (Intelligent transport system) Activities in Central and Eastern European, Countries)* TEN-T PROGRAMME, Domain Activities Plan Phase 04, PROJECT CO funded by the European Commission: DG TREN, 2004-2007.
Prof. Ing. **Matiaško, K.**, PhD.

6. 517 530 ZIP – *Innovation Policy of Zilina Region.* - Assoc. Prof. Ing. **Drozdová, M.**, PhD.
7. III A 14220100029 *Cross-border Co-operation of Fire Brigades and Rescue Teams Using Rescue Vehicles Monitoring and Navigation System in Emergency Situations in the Euro region of Beskydy* - Prof. Ing. **Matiaško, K.**, PhD.
8. JEP CD 26032 2005 TEMPUS – *Masters Degree Programme in Telecommunications and Informatics, Education* – Assoc. Prof. Ing. Peter **Fabián**, PhD.
9. 47579-IC-1-EUC-1 ERASMUS IP – *European Students Meeting, Education.*
- Assoc. Prof. Ing. **Slovák, J.**, PhD.
10. FP6 EURNEX *European Rail Research Network of Excellence* - Prof. Ing. **Skýva, L.**, DrSc.
11. COST 290 *Traffic and QoS Management in Wireless Multimedia Networks.*
- Prof. Ing. **Klimo, M.**, PhD.
12. Bielorus/Slov/ŽU/05 *Development of Decision Support Systems, Based on Fuzzy Values*
. - Assoc. Prof. Ing. **Levashenko, V.**, PhD.
13. ČR/SR/ŽU/05 *Models of Transport Processes and their Use in Information Systems Environment.* - Mgr. Ing. **Sadloň, Ľ.**, PhD.
14. Bil/Fín/SR/ŽU/06 *System Reliability Investigation by Decision Trees.*
Assoc. Prof. Ing. **Zaitseva, E.**, PhD.
15. ČR/SR/ŽU4/07 *Adaptable Replication System for Mobile Devices.*
Assoc. Prof. Ing. **Matiaško, K.**, PhD.
16. ČR/SR/ŽU2/07 *Methods for Optimal Structure Design of Public Service Systems.*
Prof. RNDr. **Janáček, J.**, PhD.
17. ČLR/SR/ŽU1/07 *Utilisation of Simulation Techniques for Optimisation of Transportation Processes at Production Facilities.*- Ing. **Adamko, N.**, PhD.
18. ČLR/SR/ŽU2/07 *Simulation Models of Multi-Modal Transportation Terminals.*
Assoc. Prof. Mgr. **Klima, V.**, PhD.
19. ČR/SR/ŽU3/07 *Up to Date Trends of Marketing and Management in Theory and Practice*
. - Assoc. Prof. Ing. **Strišš, J.**, PhD.
20. E3861 *EUREKA Jewel.* - Prof. Ing. **Skýva, L.**, DrSc.

Projects of State Scientific Grant Agency:

VEGA Projects

1. 1/2054/05 *Modelling, Prediction and Optimisation of Efficiency in Distributed Parallel Algorithms.* - Prof. Ing. **Hanuliak, I.**, PhD.
2. 1/2058/05 *Adoptive and Learning Algorithms of Automatic Control.*
Prof. Ing. **Alexík, M.**, PhD.
3. 1/2588/05 *Growth of the Competitive Advantage and Measurement of the Company Performance.* - Assoc. Prof. Ing. Josef **Vodák**, PhD.
4. 1/2605/05 *Management in Communication Systems II.* - Prof. Ing. Štefan **Hittmár**, PhD.
5. 1/2628/05 *Exploitation of Statistical Learning Elements to Modelling and Forecasting of Economic Time Series.* - Prof. Ing. Dušan **Marček**, PhD.
6. 1/3775/06 *Decision Support Tools for Design of Complex Distribution and Servicing Systems.* - Prof. RNDr. Jaroslav **Janáček**, PhD.
7. 1/3084/06 *Research of Structural-Complex Systems Reliability.*
Assoc. Prof. Ing. Elena **Zaitseva**, PhD.
8. 1/3818/06 *Modelling of Management and Marketing Communication in Sector of Services.* - Assoc. Prof. Ing. Jozef **Strišš**, PhD.
9. 1/4647/07 *Dynamic model of Human Potential Motivation.* - Assoc. Prof. Ing. **Blašková, M.**, PhD
10. 1/4061/07 *Error Rate Model for High - Speed Digital Network.* - Ing. **Ivaniga, P.**, PhD.
11. 1/4064/07 *Development of the New Signal Pre-processing for the Technology Process Control and Monitoring* - Assoc. Prof. Ing. **Miček, J.**, PhD.
12. 1/4057/07 *Agent Oriented Architecture of Service Systems Simulation Models.*
Assoc. Prof. Mgr. **Klima, V.**, PhD.

KEGA Projects

1. 3/2198/04 *Implementation of Learning Management System MOODLE into University Learning System* - Ing. Karol **Gronďák**, PhD.
2. 3/2253/04 *Creating of Methodism for Regional Management Education by e-Learning.* - Prof. Ing. Štefan **Hittmár**, PhD.
3. 3/3051/05 *Methods for Management Decision-Making Support.* Prof. Ing. Štefan **Hittmár**, PhD
4. 3/4147/06 *Bilingual Multimedia Programme for e-Learning in the Field of Forced Dynamic Control Principles.* - Prof. Ing. Mikuláš **Alexík**, PhD.
5. 3/5205/07 *Digital Libraries of e-Learning Metadata Objects and its Management.*
- Assoc. Prof. Ing. **Drozdová, M.**, PhD.

Institutional Projects:

1. *Methodology design for sorting schemes optimisation.* - **Ing. Peter Márton PhD.**
2. *Financial decision making under conditions of risks.* - **Ing. Zuzana Kozubíková**
3. *Research of the problems connected with the graph isomorphism.* –
Mgr. Peter Czimmermann, PhD.
4. *Fuzzy Approach to the Capacitated Facility Location Problem.* - **Mgr. Lýdia Gábrišová**
5. *Reinsurance chains optimising.* - **RNDr. Aleš Kozubík**
6. *Function verification of the DISAR-type AD converter.* - **Ing. Ondrej Karpiš, PhD.**
7. *YAWL Using for Modelling of Technological Procedure in the Railway Station.* –
Ing. Michal Žarnay, PhD.
8. *Modelling of Transport Process by Unary Code.* - **Mgr. Jana Uramová, PhD.**
9. *Review of Methodists for Risk Analysis.* - **Ing. Iveta Nedeljaková**
10. *Failure Mode and Effects Analysis (FMEA) and Failure Modes, Effects and Criticality Analysis (FMECA).* - **Ing. Katarína Riplová**
11. *The Methods of Enterprise Value Determination.* - **Ing. Anna Jacková, PhD.**
12. *Creativity - its blockades and possibilities of development.* - **Ing. Jana Dicová**
13. *Problem Systemization of Business Diagnostics.* - **Ing. Mária Ďurišová, PhD.**
14. *The value net.* - **Ing. Viliam Lendel**
15. *Strategy of enterprise.* - **Ing. Marián Hrubizna**
16. *Modelling and forecasting seasonal time series.* - **Ing. Zuzana Mečiarová**
17. *Customer relationship management.* - **Ing. Paulína Mareková, PhD.**
18. *E-learning technologies.* - **Mgr. Katarína Legišnová**
19. *Prosody Research for TTS.* - **Ing. Mária Čerňanská**
20. *Indication of Classification Fuzzy Axioms by Elimination of the Attributes.* –
Ing. Ján Boháčik
21. *Control Testing System in Education Quality Improving.* - **Ing. Jana Jacková**
22. *Publication of Research Results in the doctoral thesis at International Conference in Paris.* - **Ing. Jana Makyšová, PhD.**

23. *Realization of Real Time for Simulation Experiments.* - **Ing. Štefan Bocko**
24. *Methods for Faster Searching of the Optimal Connection in Transport.* –
Ing. Marek Tavač
25. *Spoke's Identification with Using of PCNN* - **Ing. Matúš Jurečka**
26. *Fixed charge transportation problem.* - **Ing. Peter Lošonský**
27. *Using of Heuristic Methods for Obtaining of Solution for Many-to-many Distribution Design Problem.* - **Ing. Michal Koháni, PhD.**
28. *Rules of moving vehicle in the cellular automaton described by Petri net* –
Ing. Peter Kostúr
29. *Morphology image Pre-processing for thinning algorithms.* - **Ing. Peter Tarábek**
30. *Academic dissertation research activities.* - **Mgr. Jakub Soviar**
31. *Contribution of the new supportive software to model development for ABASim architecture and concept of its future extending* - **Ing. Miroslav Holúbek**
32. *Algorithm Implementation for Job Shop Solution for using timetables.* –
Ing. Ivana Drotárová
33. *Analysis and Evaluation of the Knowledge Management.* - **Ing. Dana Stredáková**
34. *Teaching mathematics at technical universities using open source software.*
RNDr. Katarína Bachratá, PhD.
35. *The Implementation of the Data Preparing Unit for the Convolution Computing in the 2D picture in the FPGA Device.* - **Ing. Peter Ševčík**
36. *Multi periodical Approach to Financial problem* - **Ing. Elena Polohová**
37. *Publication of Research Results in the doctoral thesis at the Transcom Conference in 2007.* - **Ing. Jana Makyšová, PhD.**
38. *Customer relationship management.* - **Ing. Viliam Lendel**
39. *Decision- making process and its task in enterprise.* - **Ing. Marián Hrubizna**
40. *Project risk management.* - **Ing. Katarína Riplová**
41. *Counter trade.* - **Ing. Paulína Mareková, PhD.**
42. *Creativity in decision-making process of manager.* - **Ing. Jana Dicová**
43. *New Approaches in Solving of Economic Short-time Series.* - **Ing. Lucia Pančíková**

44. *The study of group centres and medians on special graphs.* - **RNDr. Rudolf Blaško, PhD.**
45. *The development of the new signal pre-processing for the technological process of control and monitoring* - **Ing. Oldřich Kovář, PhD.**
46. *The Empirical Methods of Decision making in Management.* - **Ing. Jana Magdolenová**
47. *The Steiner Tree Application for grid proposal.* - **Ing. Michal Hrčka, PhD.**
48. *Research of the influence results of selected taxes for business firms after acceptance Slovak Republic into EU.* - **Ing. Beata Holková**
49. *Cryptographic properties of S-boxes of operations over finite algebraic structures.* – **Ing. Tomáš Majer**
50. *Analysis of Choice Aspects in Regional Management.* - **Ing. Mária Šutarová**

7. *Scientific Board:*

Chairman: **Prof. Ing Karol M a t i a š k o, PhD.**

Members: Prof. Ing. Mikuláš **A l e x í k**, PhD.
Prof. Ing. Milan **D a d o**, PhD.
Assoc. Prof. Ing. Vladimír **J a m r i c h**, PhD.
Assoc. Prof. Zdeněk **H a v l i c e**, PhD.
Prof. RNDr. Jaroslav **J a n á č e k**, PhD.
Prof. Ing. Martin **K l i m o**, PhD.
Prof. Ing. Dušan **M a r č e k**, PhD.
Assoc. Prof. Ing. Juraj **M i č e k**, PhD.
Assoc. Prof. RNDr. Stanislav **P a l ú c h**, PhD.
Assoc. Prof. Ing. Jiří **S l a v í k**, PhD
Coll. Prof. Ing. Ladislav **Š i m á k**, PhD.
Prof. Ing. Petr **C e n e k**, Ph.D.
Prof. Ing. Ivan **H a n u l i a k**, PhD.
Prof. Ing. Štefan **H i t t m á r**, PhD.
Assoc. Prof. Mgr. Valent **K l i m a**, PhD.
Prof. Ing. Milan **K o l e s á r**, PhD.
Assoc. Prof. Ing. Vladimír **M l y n a r o v i č**, PhD.
Prof. RNDr. Beloslav **R i e č a n**, DrSc.
Assoc. Prof. Ing. Jozef **S t r i š š**, PhD.
Prof. Ing. Karel **Š o t e k**, PhD.

In the procedure to be appointed as a **Professor** in 2007 was successful

- 1 **Assoc.Prof.Ing. Karol M a t i a š k o , PhD.**
2. **Assoc.Prof.Ing. Martin K l i m o , PhD.**

Scientific Board of the Faculty, after successful defence of Doctoral thesis, has appointed in 2007 with title **PhD.** following graduates of PhD.-Programme:

1. Ing. Milan M a r č e k
2. Ing. Juraj H a n u l i a k
3. Ing. Michal L e k ý r
4. Ing. Michal H r č k a
5. Ing. Michal Ž a r n a y
6. RNDr. Alžbeta S z e n d r e y o v á
7. Mgr. Peter C z i m e r m a n n
8. Ing. Samuel A l e x í k
9. Ing Adam J a r o š
10. Ing. Michal K o h á n i
11. Ing. Štefan B a b o š
12. Ing. Peter H a n u l i a k
13. Ing. Peter P a l ú c h
14. Ing. Pavol S e l e p
15. Ing. Marián V r á b e l
16. Mgr. Jana U r a m o v á
17. Ing. Paulína M a r e k o v á
18. Ing. Jana M a k y š o v á

8. Academic Senate:

Chairman: RNDr. Štefan K o v a l í k

Secretary: Assoc.Ing. Ľudmila J á n o š í k o v á , PhD.

Chamber of Employees:

Assoc.Prof. Martina B l a š k o v á , PhD.

RNDr. Hynek B a c h r a t ý , PhD.

RNDr. Peter V a r š a PhD.

Ing. Jozef G a j d o š í k

Ing. Juraj D u b o v e c , PhD.

Mgr.Ing. Ľubomír S a d l o ň , PhD.

RNDr. Katarína B a c h r a t á , PhD.

Ing. Jozef J u r í č e k , PhD.

Assoc.Prof. Stanislav P a l ú c h , PhD.

Ing. Emil K r š á k , PhD.

Ing. Jozef M i č i c

Ing. Ján K a p i t u l í k

Chamber of Students:

Matej P u l c

Štefan B o c k o

Kristína Š t r b á k o v á

Tomáš D u n a j s k ý

Milan V a v r o

Oliver B l e y

Martin C z i p p e l

9. Official guests from foreign institutions accepted by Deans Office in 2007

1. Prof.Dr. Günter Lauckner, HTW Dresden, (D)
2. X u Zheng Li, TDJ Research Centre, Harbin, (CN).
3. Y u Jian Tao, TDJ Research Centre, Harbin, (CN).
4. L i Xin Xu, TDJ Research Centre, Harbin, (CN).
5. Dipl.-Ing. Daniel Kästner, HTW Dresden, (D)
6. Prof.Dr.-Ing.habil Günter Hertel, EIPOS Dresden, (D)
7. Dr. Micheal Beithe, EIPOS Dresden (D)
8. MSc. Esa Salmikangas, Polytechnic Jyväskylä (FIN)
9. Ing. Ekaterina Otsetova-Dudin, Higher College of Telecommunications and Posts, Sofia, (BG)
10. Ing. Ivan Ivanov, Higher College of Telecommunications and Posts, Sofia (BG)
11. Ing. Anna Otsetova , Higher College of Telecommunications and Posts, Sofia (BG)
12. Prof. Jiao Wenjun, Beijing University of Technology (CN).
13. Prof. Xiang Changle, Beijing University of Technology (CN)
14. Prof. Li Bo, Beijing University of Technology (CN)
15. Prof. Li Xirong, Beijing University of Technology (CN)
16. Prof. Li Panxing, Beijing University of Technology (CN)

17. Ms. Qu Hong, Vice-Dean of Graduate School, BIT, (CN)

19. Ms. Wang Ying, International Office, BIT (CN)

10. Abroad stays of the Faculty staff and PhD-Students

In the 1st quarter in 2007

	<i>Name</i>	<i>Institute, Country</i>	<i>From</i>	<i>To</i>
1	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia Antipolis, (F)	7.1.2007	12.1.2007
2	Assoc.Prof. Ing. T. Kováčiková, PhD.	CEN/CENELEC, (B)	16.1.2007	17.1.2007
3	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia Antipolis, (F)	21.1.2007	26.1.2007
4	Prof. Ing. K. Matiaško, PhD.	Deutsche Telekom, (D)	25.1.2007	27.1.2007
5	Assoc.Prof. Ing. J. Slovák, PhD.	Deutsche Telekom, (D)	25.1.2007	27.1.2007
6	Prof. Ing. M. Klimo, PhD.	Deutsche Telekom, (D)	25.1.2007	27.1.2007
7	Assoc.Prof. Ing. T. Kováčiková, PhD.	EK Kolín, (D)	31.1.2007	2.2.2007
8	Ing. M. Hrnčiar, PhD.	EK Kolín, (D)	31.1.2007	2.2.2007
9	Ing. Z. Bizoňová	INT EVRY, (F)	6.2.2007	24.3.2007
10	Assoc.Prof. Ing. M. Drozdová, PhD.	SAETO meeting, (E)	7.2.2007	11.2.2007
11	Prof. Ing. M. Klimo, PhD.	Univer. de Malaga, (E)	13.2.2007	18.2.2007
12	RNDr. K. Bachratá, PhD.	Univer. de Malaga, (E)	13.2.2007	18.2.2007
13	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia Antipolis, (F)	25.2.2007	9.3.2007
14	Ing. M. Zábovský, PhD.	Jyväs. University, (FIN)	3.3.2007	16.3.2007
15	Assoc.Prof. Ing. J. Slovák, PhD.	Telecom Lille, (F)	14.3.2007	17.3.2007
16	Ing. Beata Holková	Telecom Lille, (F)	14.3.2007	17.3.2007
17	Ing. Katarína Zábovská	Telecom Lille, (F)	14.3.2007	17.3.2007
18	Assoc.Prof. Ing. P. Fabián, PhD.	TU Delft, (NL)	14.3.2007	18.3.2007
19	Assoc.Prof. Ing. V. Levashenko, PhD.	Belarus State Univesity	17.3.2007	23.3.2007
20	Assoc.Prof. Ing. P. Fabián, PhD.	EC DG Education and Culture	18.3.2007	20.3.2007
21	Assoc.Prof. Ing. J. Slovák, PhD.	HfTL (D)	19.3.2007	22.3.2007
22	Prof. Ing. M. Klimo, PhD.	HfTL (D)	19.3.2007	22.3.2007
23	Assoc.Prof. Ing. P. Fabián, PhD.	HfTL (D).	19.3.2007	22.3.2007
24	Ing. Dana Stredáková	HfTL (D).	19.3.2007	22.3.2007
25	Prof. Ing. M. Klimo, PhD.	European Commission , (B)	26.3.2007	29.3.2007
26	Assoc.Prof. Ing. M. Drozdová, PhD.	Zagreb, (CR)	28.3.2007	31.3.2007
27.	Ing. Z. Bizoňová	INT EVRY, (F)	28.12.2006	1.2.2007

In the 2nd quarter in 2007

	<i>Name</i>	<i>Institute, Country</i>	<i>From</i>	<i>To</i>
1.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis, (F)	28.3.2007	4.4.2007
2.	Prof. Ing. M. Klimo, PhD.	Univ. Polit. de Valencia, (E)	12.4.2007	24.4.2007
3.	Assoc.Prof. Ing. T. Kováčiková, PhD.	IARIA, (F)	21.4.2007	29.4.2007
4.	Assoc.Prof. Ing. J. Král, PhD.	Univerzidade de Minho, (P)	2.5.2007	7.5.2007
5.	Assoc.Prof. Ing. P. Fabián, PhD.	Univerzidade de Minho, (P)	2.5.2007	7.5.2007
6.	RNDr. M. Brezániová, PhD.	Univerzidade de Minho, (P)	2.5.2007	7.5.2007
7.	Ing. Michal Zábovský, PhD.	Airport Viena, (A)	6.5.2007	6.5.2007
8.	Prof. Ing. D. Marček, PhD.	York University, (CND)	12.5.2007	20.5.2007
9.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis, (F)	16.5.2007	25.5.2007

10.	Assoc.Prof. Ing. K. Matiaško, PhD.	Coll. of Telec.and Post, (BG)	19.5.2007	26.5.2007
11.	Ing. Penka Martincová, PhD.	Coll. of Telec.and Post, (BG)	19.5.2007	28.5.2007
12.	Ing. Monika Vajsová	Coll. of Telec.and Post, (BG)	19.5.2007	26.5.2007
13.	Ing. P. Márton, PhD.	HTW Dresden, (D)	13.5.2007	19.5.2007
14.	Assoc.Prof. Ing. E. Zaitseva, PhD.	Belarus State University,	20.5.2007	27.5.2007
15.	RNDr. K. Bachratá, PhD.	University of Coimbra,(P)	21.5.2007	24.5.2007
16.	Mgr. Jana Uramová	University of Coimbra, (P)	21.5.2007	24.5.2007
17.	Assoc.Prof. Ing. T. Kováčiková, PhD.	DG Infor. Soc and Media,(B)	3.6.2007	15.6.2007
18.	Ing. Peter Márton, PhD.	TU Dresden, (D)	4.6.2007	2.8.2007
19.	Prof. Ing. Š. Hittmár, PhD.	Cargo ŽS Slov, (D)	11.6.2007	14.6.2007
20.	Assoc.Prof. Ing. J. Strišš, PhD.	Cargo ŽS Slov., (D)	11.6.2007	14.6.2007
21.	Assoc.Prof. Ing. P. Fabián, PhD.	KSZI Budapešť, (H)	13.6.2007	15.6.2007
22.	Assoc.Prof. Ing. E. Zaitseva, PhD.	Wroclaw University of Tech.	13.6.2007	17.6.2007
23.	Prof. Ing. M. Klimo, PhD.	European Comm. ISTC, (B)	14.6.2007	14.6.2007
24.	Prof. Dr. V. Kompiš, PhD.	Tech. Univer, (PL) .	18.6.2007	22.6.2007
25.	Prof. Dr. V. Kompiš, PhD.	Univer. of Cyprus	10.6.2007	17.6.2007
26.	Assoc.Prof. Ing. T. Kováčiková, PhD.	Infor. Society and Media, (B)	20.6.2007	22.6.2007
27.	Ing. Jana Jacková	University of Dundee, UK	20.6.2007	29.6.2007
28.	Prof. Ing. M. Klimo, PhD.	TU Wien, (A)	21.6.2007	21.6.2007
29.	RNDr. K. Bachratá, PhD.	TU Wien, (A)	21.6.2007	21.6.2007
30.	Ing. Michal Žarnay	Akademia Podlaska, (PL)	25.6.2007	30.6.2007
31.	Assoc.Prof. Ing. J. Slovák, PhD.	Coll. of Telec.and Post, (BG)	22.4.2007	27.4.2007
32.	Assoc.Prof. Ing. M. Drozdová, PhD.	Institut für Industrielle, (D)	2.5.2007	5.5.2007

In the 3rd quarter in 2007

	<i>Name</i>	<i>Institute, Country</i>	<i>From</i>	<i>To</i>
1	Assoc.Prof. Ing. E. Zaitseva, PhD.	Belarus State University Inf.	1.7.2007	7.7.2007
2	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI, (F)	1.7.2007	10.7.2007
3	Assoc.Prof. Ing. P. Fabián, PhD.	GISIG Janov, (I)	18.7.2007	26.7.2007
4	Assoc.Prof. Ing. T. Kováčiková, PhD.	Agios Nikolaus, (GR)	22.7.2007	30.7.2007
5	Prof. Ing. M. Klimo, PhD.	Europ. Com. Informat. Soc.	25.7.2007	26.7.2007
6	Assoc.Prof. Ing. V. Levashenko	Belarus State University Inf.	19.8.2007	26.8.2007
7	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI, (F)	25.8.2007	8.9.2007
8	Prof. Ing. Š. Hittmár, PhD.	OSŽD Warsaw, (PL)	29.8.2007	1.9.2007
9	Assoc.Prof. Ing. J. Strišš, PhD.	OSŽD Warsaw, (PL)	29.8.2007	1.9.2007
10	Assoc.Prof. Ing. M. Drozdová, PhD.	Coimbra, (P)	2.9.2007	8.9.2007
11	Ing. Z. Bizoňová	INT EVRY, (F)	5.9.2007	31.10.2007
12	Prof. Ing. M. Alexík, PhD.	TU Liubiana, Slovenia (SL)	8.9.2007	15.9.2007
13	Assoc.Prof. Ing. E. Zaitseva, PhD.	TU Warsaw, (PL)	9.9.2007	12.9.2007
14	Assoc.Prof. Ing. E. Zaitseva, PhD.	Belarus State University Inf.	12.9.2007	19.9.2007
15	Ing. J. Ružbarský	HTW Dresden (D)	16.9.2007	21.9.2007
16	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI, (F)	16.9.2007	23.9.2007
17	Assoc.Prof. Ing. J. Král, PhD.	Delft, (NL)	26.9.2007	29.9.2007
18	RNDr. M Brezániová, PhD.	Delft, (NL)	26.9.2007	29.9.2007
19	Assoc.Prof. Ing. P. Fabián, PhD.	Delft, (NL)	26.9.2007	29.9.2007
20	Mgr. J. Smieško, PhD.	TU Wien, (A)	30.9.2007	2.10.2007
21	Mgr. J. Uramová, PhD	TU Wien, (A)	30.9.2007	2.10.2007
22	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI, (F)	30.9.2007	6.10.2007

23	Prof. Ing. M. Klimo, PhD.	TU Wien, (A)	30.9.2007	2.10.2007
24	RNDr. K. Bachratá, PhD.	TU Wien, (A)	30.9.2007	2.10.2007

In the 4th quarter in 2007

	Name	Institute, Country	Freom	
1.	Assoc.Prof. Ing. Peter Fabián, PhD.	RWTH Aachen, (D)	8.10.2007	13.10.2007
2.	prof. RNDr. J. Janáček, PhD.	Univer. Politec. de Valencia	13.10.2007	16.10.2007
3.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis (F)	15.10.2007	19.10.2007
4.	Assoc.Prof. Ing. M. Klimo, PhD.	Europ. Commis. ISTC (B)	24.10.2007	25.10.2007
5.	Ing. Peter Márton, PhD.	Politechnika Warszawska (PL)	17.10.2007	18.10.2007
6.	Assoc.Prof. Ing. M. Drozdová, PhD.	Univerzita Zagreb (CR)	25.10.2007	27.10.2007
7.	Assoc.Prof. Ing. K. Matiaško, PhD.	Hoch. für Telekom. (D)	31.10.2007	3.11.2007
8.	Assoc.Prof. Ing. Martin Klimo, PhD.	Hoch. für Telekom. (D)	31.10.2007	3.11.2007
9.	Assoc.Prof. Ing. Juraj Slovák, PhD.	Hoch. für Telekom. (D)	31.10.2007	3.11.2007
10.	Ing. Peter Márton, PhD.	TU Berlín (D)	1.11.2007	3.11.2007
11.	Ing. Zuzana Bizoňová	INT Evry (F)	4.11.2007	30.11.2007
12.	Assoc.Prof. Ing. T. Kováčiková, PhD.	EK DG INFOSOC, ETSI (F)	5.11.2007	10.11.2007
13.	Assoc.Prof. Ing. Levashenko, PhD.	Belarus State Ec. Univer.	7.11.2007	12.11.2007
14.	Assoc.Prof. Ing. T. Kováčiková, PhD.	Européan Comision, (B).	11.11.2007	17.11.2007
15.	Assoc.Prof. Ing. E. Zaitseva, PhD.	Unit. Inst. Of Inf.Problems	13.11.2007	18.11.2007
16.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis (F)	20.11.2007	22.11.2007
17.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis (F)	26.11.2007	29.11.2007
18.	Assoc.Prof. Ing. M. Klimo, PhD.	European Commission ISTC	18.11.2007	22.11.2007
19.	Assoc.Prof. Ing. Juraj Slovák, PhD.	DAAD Bad Godesberg (D)	9.12.2007	11.12.2007
20.	Assoc.Prof. Ing. T. Kováčiková, PhD.	ETSI Sophia-Antipolis (F)	2.12.2007	15.12.2007
21.	Ing. Zuzana Bizoňová	INT Evry (F)	5.12.2007	21.12.2007
22.	Assoc.Prof. Ing. E. Zaitseva, PhD.	Belarusian State University	10.12.2007	16.12.2007
23.	Assoc.Prof. Ing. M. Klimo, PhD.	European Commission ISTC	12.12.2007	13.12.2007

11. Turnover of staff in 2007

Within the space of year 2007 the **Faculty has accepted** into pedagogical and scientific staff following members:

1. Ing. Peter P a l ú c h, PhD. - Dep. of Information Networks
2. Ing. Matúš J u r e č k a - Dep. of Technical Cybernetics
3. Ing. Michal K u b í n i, PhD. - Dep. of Transportation Networks

In the same period following members **left the Faculty**:

1. Prof Ing. Ladislav S k ý v a, DrSc - Dep. of Technical Cybernetics
2. Ing. Michal H r č k a - Dep. of Informatics
3. Ing. Martin P o l á č e k - Dep. of Technical Cybernetics
4. Mgr. Ing. Štefan B a b o š, PhD. - Dep. of Informatics
5. Ing. Emil J a m r i c h - Dep. of Technical Cybernetics
6. Ing. Vladimír C h i l l a - Dep. of Management Theories

12. Human resource management

As far as the required qualification structure of the pedagogical staff at the FMSI is concerned, the situation seen within the University's context is shown in following table. It shows current number of employees at the Faculty and its development in according to categories within the period 2003-2007.

CATEGORY/YEAR	2003	2004	2005	2006	2007
Professors	10	10	10	10	9
Guest Professors			1	1	2
Assoc. Prof.	10	8	9	11	15
Senior Lecturers PhD.	19	25	24	27	35
Senior Lecturers	61	53	46	42	26
Assistants	3	1	1	2	1
Lectors			1	7	6
Research staff	7	17	13	13	9
Tech. Admin. Staff	49	53	52	49	49
Total	159	167	157	162	152

13. Significant Publications in 2007

- PALÚCH, S., PEŠKO, Š.: *Quantitative Methods in Logistics*, Edis-Žilina, ISBN 80-8070-636-0
- KAVIČKA, A., KLIMA, V., ADAMKO, N.: *Analysis and Optimisation of Railway Nodes Using Simulation Techniques*. In: Computers in Railways X. Computer System Design and Operation in the Railway and Other Transit Systems. WIT press, Ashurst Lodge, Ashurst, Sothampton, UK, 2006, ISBN 1-84564-177-9
- DADO, M.-DROZDOVÁ, M.-MATIAŠKO, K.-VAJSOVÁ, M.: *Integrating e-learning system into university education*. in Journal of Check Society of System Integration – System Integration, volume 13, No. 4, December 2006. publ.: Czech Society of System Integration, Publishing House OECONOMICA, VŠE, Praha. p. 32-38. ISSN 1210-9479.
- MARTINCOVÁ, P., GRONDŽÁK, K., ZÁBOVSKÝ, M.: *Programming in Linux Kernel*, printed by EDIS-Žilina University publisher
- VODÁK, J., KUCHARČÍKOVÁ, A.: *Effective Employees Education*. Grada Publishing, Praha 2007, ISBN 978-80-247-1904-7, 212 p.
- BLAŠKOVÁ, M.: *High-educated Human Potential Management and Development*. Monograph, (chapters 1, 2, 3, 4, 5, 6, 8). (10,00 AH - 121 pp.). Publishing house of Technical University in Zvolen. ISBN 80-228-1701-5
- HITTMÁR, Š.: *The Model of Slovak Railway System Strategy*. In: Proceeding of XXXIV. International Scientific Conference North Business and Economics Association 2007. USA, New Britain: Central Connecticut State University. 2007. pp. 332-336

- HRNČIAR, M.: *Service Level Agreement – quality guarantee tool of delivering service*, Journal KVALITA 2/2007, pages.12 - 14, ISSN 1335-9231
- B. DOBRUCKÝ, R. HOLČEK, J. BUDAY, M. ALEXÍK: *Using Genetic Algorithm for Optimal Control of Power Converter*. In: Proceedings of the 11th World Multi-Conference on Systematic, Cybernetics and Informatics, July 8 – 11, 2007, Orlando, Florida USA. Volume II. pp. 132-135. ISBN-10: 1-934272-16-7.

14. Programme ERASMUS and other international activities of the Faculty

There are following bilateral agreements signed in 2006 for the exchange of students and pedagogical staffs in the frame of the programme ERASMUS / SOCRATES with the following institutes and schools:

- Technische Universität Dresden, (D)
- Technische Universität Braunschweig, (D)
- Hochschule für Telekommunikation Leipzig (D)
- Hochschule Darmstadt (FH), (D)
- Hochschule für Technik und Wirtschaft, Dresden, (D)
- Institut National de Télécommunication, Evry, (F)
- Université de Poitiers, (F)
- University of Science and Technology, Telecom Lille, (F)
- Université de Technology de Troyes, (F)
- Linköping University, (S)
- University of Vaasa, (FIN)
- Polytechnic Jyväskylä, School of Information Technology, (FIN)
- Seinäjoki University of Applied Sciences, (FIN)
- University of Molde, (N)
- Universidad Politecnica de Valencia, Facultad d'Informatica, (E)
- Universidad Politecnica de Valencia, Escuela Technica Superior deTelecomunicacion, (E)
- Széchenyi István University, Győr, (H)
- Technical University of Sofia, (BG)
- College of Telecommunications and Posts, Sofia, (BG)
- University of Porto (P)

In the year 2007 took part on the study stay at the Faculty one student from FRANCE, three students from BULGARIA and two from PORTUGAL.

From the Faculty **11** students followed the programme of study at the partner's universities and Institutions in the frame of programmes ERASMUS.

In the frame of Student Training Agreement with Institute national des Telecommunications Evry **eight** students took part on two months internship at the Faculty.

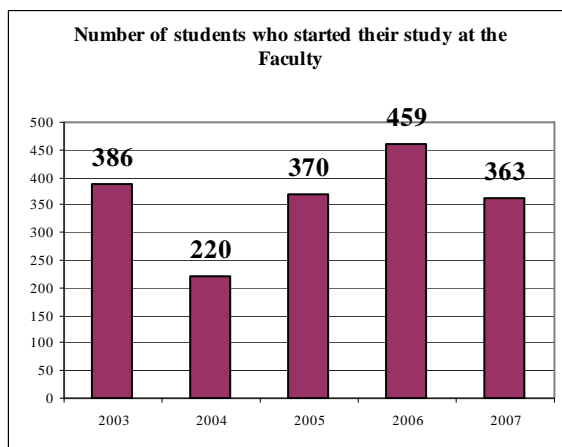
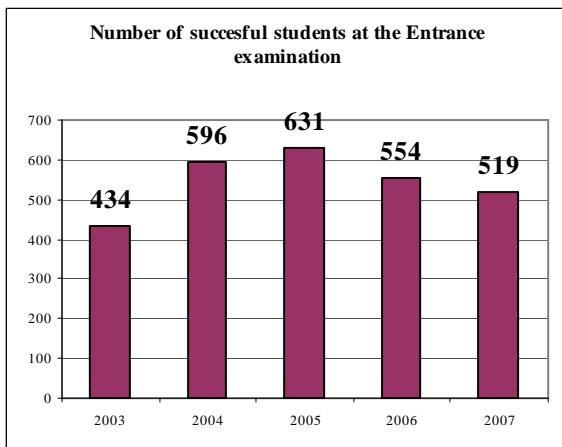
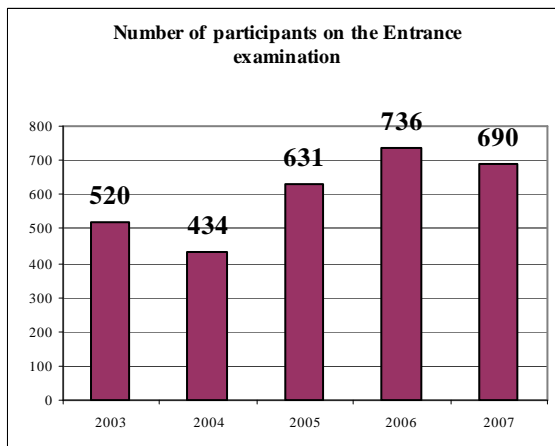
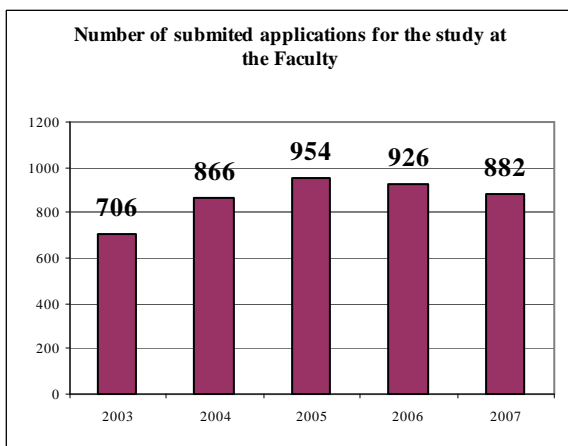
On the base of Bilateral Agreement with Chinese Southwest Jiaotong University in Chengdu five students are following the bachelors programme of Informatics at the Faculty

On the base of Bilateral Agreement with Chinese research institute TDJ Harbin three members of staff took part on the three months study stay at the Faculty.

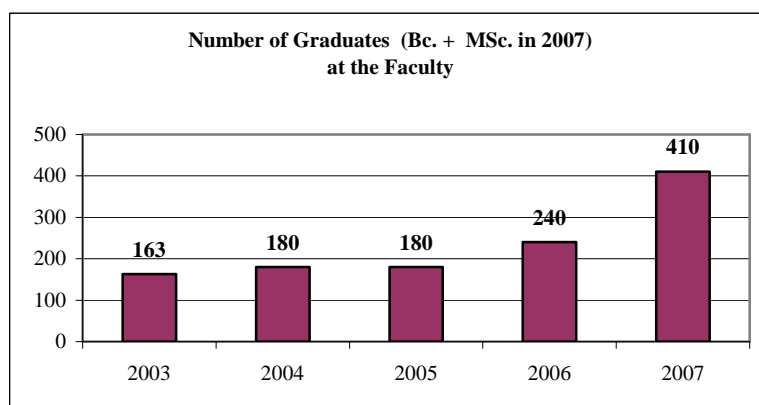
15 Students

In November 2007, there were **1401** students for masters and bachelors degree programme and **64** PhD - students at the Faculty. An overview of the candidates for the study, students and graduates at the Faculty in the last five years is illustrated in following graphs:

In June 2007 the admission exams for **690** candidates in the Faculty took place. From this number **519** were successful and **363** students were enrolled. They started in September 2007 their programmes of study at the Faculty



The number of graduates at the Faculty of Management Science and Informatics in 2007 was **410**. The survey of graduates from the last years is on the following graph:



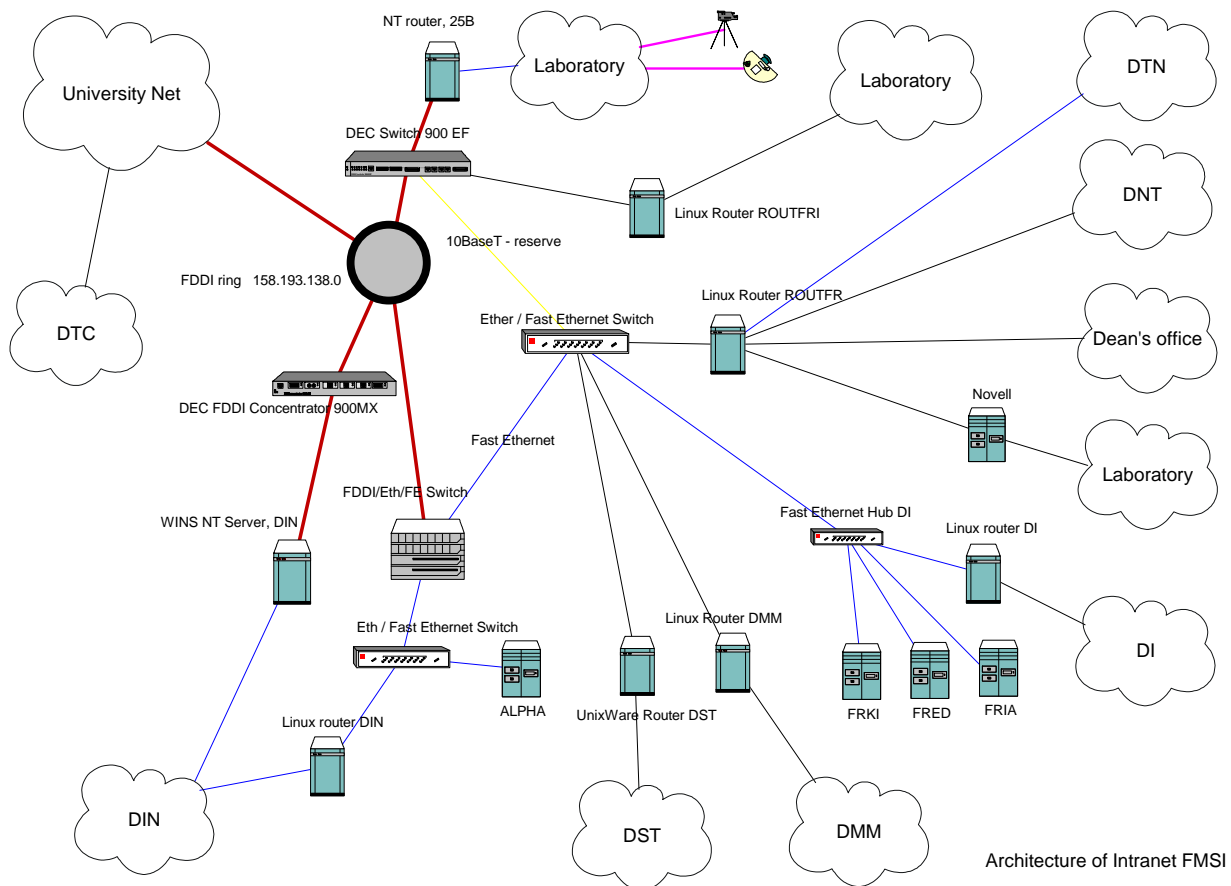
16. Intranet of Faculty

It was in 1992 when the Intranet of FMSI was created and in the meantime was continuously improving. It came into existence from the needs to process and to make accessible lot of information to students and to pedagogical staff, as well. The intranet of FMSI is a part of University Intranet, which allows access to SANET (Slovak Academic Network).

Conception of Intranet FMSI is based on the fact, that every Department is in possession of the own network, which is connected through ETERNET (10BaseT, 100BaseT or Gigabit Ethernet) to the faculty network. Apart from there are a special segments of this network - research laboratories for multimedia, parallel distributed systems, clusters, database systems, operating systems, e-business, e-learning etc.

There are following information systems at the Intranet of FMSI in service: Information about study at the Faculty, news, messages, events, economics, personal data, research data and information, e-learning and distant learning subsystems, study results and assessments

Architecture of INTRANET:



Abbreviations of Departments:

Department of Mathematical Methods	-	DMM
Department of Informatics	-	DI
Department of Macro and Micro economy	-	DMME
Department of Technical Cybernetics	-	DTC
Department of Info Communication Networks	-	DIN
Department of Transportation Networks	-	DTN
Department of Management Theories	-	DMT
Department of Software Technologies	-	DST

Department of Mathematical Methods

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Teaching Staff: RNDr. Rudolf Blaško, PhD.
Mgr. Peter Czimmermann
Mgr. Lýdia Gábrišová
Mgr. Michal Kaukič, PhD.
RNDr. Alžbeta Kludinyová
Prof. RNDr. Rudolf Kodnár, DrSc.
Prof. Dr. Ing. Vladimír Kompiš, PhD.
RNDr. Aleš Kozubík
Ing. Tomáš Majer
Ing. Zuzana Mičová
Mgr. Emilia Mravíková
Assoc.Prof. RNDr. Stanislav Palúch, PhD.
Assoc.Prof. RNDr. Štefan Peško, PhD.
RNDr. Ida Stankovianská

PhD students

Administrative Department: Ľubica Micháľková

Tel.:+421-41-513 42 51

II. EQUIPMENT

Computer Laboratory

III. PhD.-Programme

Theme	Student	Supervisor
1. Mathematical Models of the Crisis Situation	A. Kozubík	L. Novák
2. Railway Transport Graficon Optimisation	M. Novák	S. Palúch
3. Crew Scheduling	K. Zábovská	S. Palúch
4. Met strategies in Job-shop	P. Mičunek	S. Palúch

VI. RESEARCH PROJECTS.

PALÚCH,S.: Optimisation of Urban and Regional Public Personal Transport, MVTs Project of APVV SK-CZ-09006.

V. COOPERATION

V.1 Cooperation with Institutes and Enterprises in Slovakia

1. Institute of Transportation Research Žilina.
2. University of Economics, Bratislava.
3. Technical University of Košice.
4. Jesenius Faculty of Medicine, Comenius University, Martin
5. Faculty of Mathematics and Physics, Comenius University, Bratislava

V.2 Cooperation with Foreign Institutes and Enterprises

1. University of Economics - Prague, CZ
2. University of Pardubice, CZ

V.2.1 Foreign Visitors to the Department

1. Prof. RNDr. Jan Černý, Dr.Sc, Dr.hc., University of Economics - Prague, CZ
2. Ing. Anna Černá, PhD., University of Economics - Prague, CZ

V.2.2 Visits of Staff Members to Foreign Institutions

- Assoc. prof. RNDr. Stanislav Palúch, PhD., Assoc. prof. RNDr. Štefan Peško, PhD., Ing. Tomáš Majer – Faculty of Management, Jindřichuv Hradec, University of Economics - Prague, CZ

V.3 Membership in Slovak Organizations and Societies

- PEŠKO, Š.: Association of Slovak Mathematics and Physicists
- PEŠKO, Š.: Slovak Society for Operation Research
- PALÚCH, S.: Slovak Society for Operation Research
- PALÚCH, S.: Slovak Information Society
- REBO, J.: Association of Slovak Mathematics and Physicists
- REBO, J.: Slovak Society for Operation Research
- KOZUBÍK, A. : Slovak Society of Actuaries
- KOZUBÍK, A. : Slovak Statistic and Demographic Society
- KOMPIŠ, V.: Central European Association for Computational Mechanics

V.5 Contracts with Slovak and Foreign Institutions

Faculty of Management, Jindřichuv Hradec, University of Economics - Prague, CZ – common project of international collaboration APVV SK-CZ-09006.

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	D	Development of extensions in Python for Gimp	D. Minarovič	M. Kaukič
2.	D	Transfer matrix method	P. Gejdoš	R.Kodnár
3.	B	Primarily testing	T. Barčiak	P.Czimmermann
4.	B	The most regular perfect matching in bipartite graphs	J. Danko	P.Czimmermann
5.	B	Generating the free-scale networks	M. Beňo	P.Czimmermann
6.	B	The graph isomorphism testing	J. Boka	P.Czimmermann
7.	D	Quadratic programming solver for Numeric spreadsheet	J. Viceník	Kaukič M.
8.	B	Python scripting for 3D modeller Blender	P. Odlevák	M. Kaukič
9.	D	Bus driver roistering problem	M.Krišandová	T. Majer
10.	B	Automatic sending of reports of measured data	M. Ďurian	T. Majer
11.	B	Ticket portal	R. Bartoň	T. Majer
12.	D	Operating system security	Ľ. Moščovič	T. Majer
13.	B	Virtual private network	P. Pastorek	T. Majer
14.	D	Bus Line System Design	M. Vojtek	S. Palúch
15.	B	Slovak Text Viewer Independent of Diacritics Coding	T. Mihok	S. Palúch
16.	B	Heuristics for Graph Colouring	Z. Wagnerová	S. Palúch
17.	D	Modification of Shifting Bottleneck Heuristics	D. Galis	S. Palúch
18.	D	Buying Travelling Salesman Problem	P. Kothaj	Š. Peško
19.	D	The Black and White Travelling Salesman Problem	M. Billík	Š. Peško
20.	D	Uniform Monthly Roistering Problem for Bus Drivers	S. Turčok	Š. Peško

VII. OTHER ACTIVITIES

Mr. Palúch S.:

- Member of Academic Board of Faculty of Management Science and Informatics
- Member of Academic Board of Institute of Forensic Engineering, University of Žilina
- Member of Editorial Staff "Tatramountains" (Mathematical Journal)
- Member of Editorial Staff "Horizonty dopravy" (Journal of Transportation)

VIII. PUBLICATIONS

VIII.1 Journals and Proceedings

- KOZUBÍK, A.: *Copula Functions and Independent Insurance Risks*, Journal of Information, Control and Management Systems Vol.3, No. 2, 2005 Faculty of Management Science and Informatics, University of Žilina, pp.109--118, ISSN 1336—1716.
- ČERNÁ, A., ČERNÝ J., PEŠKO, Š., CZIMMERMANN, P.: *Network Reduction Problem*, In: Journal of Information, Control and Management Systems, Vol.5, (2007) No.2/1, pp 139-145, ISSN 1336-1716
- JASEČKOVÁ, G., KAUKIČ, M.: *Understanding and Computing Limits by Means of Infinitesimal Quantities*, In: Journal of Information, Control and Management Systems, Vol.5, (2007) No.2/2, pp 303-307, ISSN 1336-1716

- CZIMMERMANN, P.: *G-factorisation of Iterated Line Graphs $Li(G)$* , In: Journal of Information, Control and Management Systems, Vol.5, (2007) No.2/2, pp 285-289, ISSN 1336-1716
- KOZUBÍK, A.: *Optimality of the Stop-loss Reinsurance*, Crisis Management, 1/2007 Faculty OF Special Engineering, University OF Zilina, pp.58--62, ISSN 1396—0019.
- KOMPIŠ, V., KOMPIŠ, M. KAUKIČ, M.: *Method of continuous dipoles for modelling of materials reinforced by short micro-fibbers*, Engineering Analysis with Boundary Elements 31, 2007, pp. 416-424, ELSEVIER, ISSN 0955-7997
- CZIMMERMANN, P.: *G-factorisation of Iterated Line Graphs $Li(G)$* , In: Journal of Information, Control and Management Systems, Vol.5, (2007) No.2/2, pp 285-289, ISSN 1336-1716
- MAJER, T.: *No linearity of S-Boxes of Multiplicative Inverse of Elements in Galois Field*, In: Journal of Information, Control and Management Systems, Volume 5, No. 1, 2007, pp. 61-66, ISSN 1336-1716

III.2 Conferences

1. PALÚCH, S., MAJER, T. : *Contribution to Urban and Regional Regular Personal Transport*, Proceedings of the III -rd International Conference „University as the Facilitator of Development of Society and Region, pp. 245-248, European Polytechnic Institute, s.r.o., 2007, ISBN 80-7314-107-8
2. PALÚCH, S., DUBOVEC, J., HLAČINA, T.: *„Low Capacity Buses in Regional Transport“*, Proceedings of the III -rd International Conference „University as the Facilitator of Development of Society and “, pp. 225-228, European Polytechnic Institute, s.r.o., 2007, ISBN 80-7314-107-8
3. KOZUBÍK, A.: *Applying the extreme value theory in finance*, III. International Conference 2007, , Kunovice, pp.245-450, ISBN 978-80-7314-111-0
4. KOZUBÍK, A.: *Using of MAXIM Programme in Educational Process of Mathematical Analysis*, Proceeding 5., Brno,13.9. 2007, pp. 175-184, ISBN 978-7231-274-0
5. KOZUBÍK, A., KOZUBÍKOVÁ, Z.: *Mathematics for managers*, Proc. of 5-th Conference mathematics and physics at technical universities, University of Defence, Brno,13.9. 2007, pp. 185-194, ISBN 978-7231-274-0
6. KAUKIČ. M.: *Teaching complex variable using Open Source software*, Proc. of 5-th Conference a mathematics and physics at technical universities, University of Defence, Brno,13.9. 2007, pp. 158-163, ISBN 978-7231-274-0
7. PEŠKO, Š.: *Solving Sudoku in Spreadsheets*, Proc. of 5-th Conference a mathematics and physics at technical universities University of Defence, Brno,13.9. 2007, pp. 247-256, ISBN 978-7231-274-0

8. CZIMMERMANN, P.: *Connections Between the Graph Isomorphism and the Number of Walks in Graphs*, In: 6th International Conference APLIMAT, Part II - Algebra and its Applications, February 2007, pp.89-96, ISBN 987-80-969562-8-9
9. KAUKIČ, M.: *Possibilities and perspectives of OSS in education and research at Universities*, In: 6th International Conference APLIMAT, Part IV - Open Source Software in Research and Education, February 2007, pp.31-40, ISBN 987-80-969562-7-2
10. PEŠKO, Š.: *Using Numeric in Education and Research*, In: 6-th International Conference APLIMAT, Part IV - Open Source Software in Research and Education, February 2007, pp.41-51, ISBN 987-80-969562-7-2

VIII.3 Books

PALÚCH, S., PEŠKO, Š.: *Quantitative Methods in Logistics*, Edis – Žilina, ISBN 80-8070-636-0

VIII.4 Parts of Books

VIII. Textbooks

KAUKIČ, M.: *Fundamentals of Pylab Programming*, FEI TU Košice, ISBN 80-8073-635-9

Department of Informatics

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Ing. Ján Boháčik
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II. EQUIPMENT

Laboratories:

Laboratory	Capacity	HW
FRA 201	20 places	21 OPSYS Celeron 2.8 GHz, HDD 80GB
Server	Purpose	
frdb1	Linux – teaching	
frdb2	Linux – databases, teaching	
fra208d	Linux - databases, teaching	
fra203a	WIN2000 server	
e-learning	Linux – e-learning applications	
elearn	Linux – e-learning applications	

III. PhD.-Programme

Theme	Student	Supervisor
1. Query processing optimisation	M. Vajsová	K. Matiaško
2. Methods and algorithms for the searching in very large databases	M. Chochlík	K. Matiaško
3. Value analysis and value engineering exploitation	A. Kanáliková	M. Drozdová
4. Information searching on the basis of semantic data sources	M. Benedikovič	V. Levashenko
5. Fuzzy rules for database data mining	J. Boháčik	V. Levashenko
6. Methods of data preparing for data mining process	Š. Kovalík	V. Levashenko
7. Generalization of Patterns in Identification of Process with polynomial Neural Networks	L. Zjavka	P. Fábian
8. Data mining information technologies and Methods	B. Sedliak	D. Marček
9. Using of Expert Systems for Risk Management	M. Václavková	J. Reitšpis
10. Algorithmic Solving of Selected Management Processes	I. Nedeljaková	Š. Hittmár
11. Process Control in Distributed Databases	J. Janech	K. Matiaško
12. Database Object and Temporal Transformation	P. Hrkút - KST	K. Matiaško
13. Knowledge Searching in Semantic defined Environment	M. Taváč - KST	K. Matiaško
14. Parallel Methods for Supply Problem Solving Using Ant Colony	S. Piecka – ext.	M. Lucká

IV. RESEARCH PROJECTS

State Grant projects:

- Adaptable Replication System for Mobile Devices - MVTS (**K. Matiaško**)
- Reliability Research of Complex Structured Systems – VEGA (**E. Zaitseva**)
- Reliability System Research Using Decision Tree - MVTS (**E. Zaitseva**)
- Design of Decision Systems Using Fuzzy Values – MVTS (**V. Levashenko**)

V. COOPERATION

V.1. Cooperation with Institutes and Enterprises in Slovakia

- Slovak Technical University, Faculty of Electrical Engineering and Informatics, Bratislava
- Technical University, Faculty of Electrical Engineering and Informatics, Košice
- Slovak Gas Enterprise (SPP)
- Slovak Telecom
- Slovak Railways
- Ipesoft Žilina
- Elanor Žilina
- KROS Žilina
- Váhostav Žilina
- MASM Žilina
- Datalock Žilina
- VARIAS Žilina
- Softip, Banská Bystrica

V.2. Cooperation with Foreign Institutes and Enterprises

- State Economic University, Minsk, Belarus
- Groupe ESC Bordeaux, F
- Technical University, Faculty of Electrical Engineering and Informatics, Ostrava, CZ
- University of Pardubice, Faculty of Transport, Pardubice, CZ
- University of Ostrava, Faculty of Natural Sciences, Ostrava, CZ
- Rutherford Appleton Laboratory, Oxford, Didcot, UK
- Scheidt und Bachman, D
- Siemens Österreich, A
- Alcatel, A
- ITD Genova, I
- M3L, Hengelo, NL
- College of Telecommunications and Posts, BG
- United Institute of Informatics Problems of the National Academy of Sciences of Belarus
Minsk, Belarus

V.2.1. Foreign Visitors to the Department

- Jouni Houtari, [University of Jyväskylä](#), Finland
- Mária Lucká, University of Wien, A
- Katja Dudin, Ivan Ivanov, College of Telecommunications and Posts, Bulgaria

V.2.2. Visits of Staff Members to Foreign Institutions

- College of Telecommunications and Posts, Bulgaria – P. Martincová, K. Matiaško, M. Vajsová
- University of Jyväskylä, Finland - M. Záborský
- United Institute of Informatics Problems of the National Academy of Sciences of Belarus
Minsk, Belarus – E.Zaitseva, V.Levashenko
- Belarussian Economic University, Minsk, Belarus – E.Zaitseva, V.Levashenko

- Belarussian State University Informatics and Radioelectronics, Minsk, Belarus – E.Zaitseva, V.Levashenko

V.3. Membership in Slovak Organizations and Societies

- Assoc.Prof. Ing. Karol Matiaško, PhD.
 - Slovak Society for System Integration (SSSI) - President
 - Academic Board of Faculty of Management science and Informatics of University of Zilina - President
 - Academic Board of University of Zilina
 - Academic Board of Faculty of Electrical Engineering and Informatics of University of Ostrava,
 - Slovak Informatics Society
 - Advice Council of Ministry of Transport and Communications Advice Council of Ministry of Education for Informatics
 - Advice Council of Ministry of Transport and Communications for Informatics
 - Slovak Informatics Society (ACM) - Chairman of University Zilina group
 - Advice Council of Mayor of Prievidza
 - Group for Informatics in Accreditation Board of Government

V.4 Membership in International Organizations and Societies

- Prof. Ing. Karol **Matiaško**, PhD. – European science foundation – PESC - Member of steering committee
- Assoc. Prof. Ing. Elena **Zaitseva**, PhD. - Member of International Association for Pattern recognition (IAPR)
- Assoc. Prof. Ing. Vitaly **Levashenko**, PhD. - Member of International Association for Pattern recognition (IAPR), membership no. 4_95

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	D	Complex expert economic system for the building values	M. Smida	Š. Kovalík
2.	B	Teaching system - atlas of mushrooms	M. Englárt	Š. Kovalík
3.	D	Electronic elevator revision book	P. Chovanec	Š. Kovalík
4.	D	Development of applications for OS Symbian platform S60	A. Ševčík	P. Varša
5.	B	The comparison of time complexity of selected sorting algorithms	L. Guldanová	P. Varša
6.	B	The comparison of time complexity of several parallel sorting algorithms	V. Bellanová	P. Varša
7.	D	Evaluation of time complexity of chosen algorithms computed on a grid	M. Štefuš	P. Varša
8.	B	Electronic product catalogue of the firm NES Nová Dubnica s.r.o.	M. Celec	P. Varša
9.	B	Online project manager	J. Lenko	M. Benedikovič
10.	B	Mobiles - information and advertisement web-portal	J. Falát	M. Benedikovič
11.	D	Integration of data sources on the semantic base	M. Líška	M. Benedikovič
12.	B	Web portal speciation activity	M. Kivader	M. Benedikovič
13.	B	Information system - Accommodation	P. Milan	M. Benedikovič
14.	D	Information system for delivery company	I. Slivka	Kovalík Š.
15.	B	Billing of services based on customer s profile and time of service usage	J. Lacko	R. Šnirc
16.	B	Design and implement module-based internet portal for company registration and category	F. Bereň	J. Hrubjak
17.	D	Technologies for Developing Distributed Applications	P. Vaľko	P. Martincová
18.	D	XML reports	L. Bátoriová	M. Vajsová
19.	D	The recording of the using CCD camera followed by the image processing	J. Vlk	N. Tarjányi
20.	D	Support system for central processing of travel orders in the environment of distributed company	P. Takáč	Š. Mičko
21.	D	Design of an electronic health record application for the use in the Slovakian health service	J. Václavek	Š. Mičko
22.	D	System of evidence and evaluation of employees time data by SAP Enterprise Portal	M. Gladiš	Š. Mičko
23.	B	Collecting statistical data from DBS Oracle	J. Beňadik	Š. Baboš
24.	D	Supplementary services of the ADMOSS Call Centre	M. Ursík	P. Zuščák
25.	D	Grid simulation	M. Hanák	P. Martincová
26.	D	Framework for distributed processing of large time-consuming tasks	P. Valjašek	P. Martincová
27.	B	Virtual Memory Simulator	M. Juríček	P. Martincová
28.	D	Information system module - Technical-economic planning	T. Mikula	M. Bučo

No.	C.	Theme	Student	Supervisor
29.	D	Aspect oriented programming in Java	A. Ješenko	Martincová P.
30.	D	Task Scheduling in the Grid	M. Bellák	Martincová P.
31.	D	Replication System for Mobile Devices	P.Kopčanský	M. Zábovský
32.	D	Data Storage for Intelligent Traffic System	D. Martikáň	M. Zábovský
33.	D	CMS system based on ALAX	I. Urminček	M. Zábovský
34.	D	Wireless Networks Security	P.Čierny	M. Zábovský
35.	B	Information System for Mobile Devices	M. Trnovský	M. Zábovský
36.	D	Storage economy system with customer administration module and billing module	P. Vámoš	M. Velický
37.	D	Information system for Thesis	P. Vámoš	M. Velický
38.	B	LDAP Information System	M. Eliaš	M. Vajsová
39.	B	Examine reports	P. Mikula	M. Vajsová
40.	D	RFID technology and introducing of electronic production code EPC	J. Panák	M. Vajsová
41.	D	Global standards in B2B e-business	M. Goliaš	M. Štaffen
42.	D	Database of veterinary preparations and medicaments in Slovakia	A. Poliak	M. Štaffen
43.	D	Table Processors in Economic Practice	O. Hugáň	M. Štaffen
44.	B	Simulator of network fault management system	M.Podstavek	M. Podstavek
	D	Application for localization, update and presentation of a geographic database in Internet	A. Holúbek	M. Pienčak
45.	B	Community web knowledge management system	M. Múdry	M. Matúška
46.	B	The basics of informatics - design and realization of the didactic application with the focus on explanation process	M. Valášek	M. Matuška
47.	D	Active multimedia didactic means in shape of information system.	R. Ďurina	M. Faktor
48.	B	Active multimedia didactic means in shape of information system for purpose of cultural and aesthetic elements	P. Lacek	M. Faktor
49.	B	Overview of the Web Services technology and of the SOAP protocol	O. Chocholáček	M. Faktor
50.	B	Booking system of component part window forging	B. Hrabovčín	M. Chochlík
51.	D	Information system for communication in restaurants facilities	M.Polerecký	M. Bielik
52.	B	Application for a train slot-machine	E. Bartoš	L. Zjavka
53.	D	Increase effectiveness in commercial trough GDSN (Global Data Synchronization Network)	J. Čavojský	L. Meško
54.	D	Visual middle layer generation tool for applications based on the PLT-Platform	M. Uram	L. Jančo
55.	D	Bachelor's project and thesis administration module for LMS MOODLE	M. Ferko	K. Rudolf
56.	B	Education material sharing module for LMS MOODLE	J. Rajnoha	K. Grondžák

No.	C.	Theme	Student	Supervisor
57.	B	Software package management tool for GNU/Linux operating system	L. Gálik	K. Grondžák
58.	D	Table Processors in Economic Practice	J. Janech	K. Grondžák
59.	B	Computer Support for Teaching Statistics	N. Moresová	J. Jacková
60.	B	Information system of education organization (ISVI)	E. Vančová	J. Jacková
61.	B	Information system for managing personal data of applicants in hiring department	M. Oboňa	J. Popluhár
62.	D	User's software for continual measuring by digital position meter	B. Sliacky	J. Ondruš
63.	B	Web page for support of learning	R. Petráš	J. Mecko
64.	B	Complex web booking system of accommodation facilities	M. Halaj	J. Kopecký
65.	B	Web page for support to learn programming	A. Lieskovský	J. Kopecký
66.	B	Web page for support of learning	M. Krnáč	J. Kopecký
67.	B	Universal generator of optimal search tree	Ľ. Valihora	J. Kopecký
68.	B	Information system for on-line DVD rental	M. Urban	J. Kopecký
69.	B	Universal generator of optimal search tree	M. Urban	J. Kopecký
70.	B	Information system for on-line DVD rental	M. Habalčík	J. Kopecký
71.	D	Electronic Support of Education in an Enterprise Environment	K. Václavík	J. Jacková
72.	B	Computer Support for Teaching Graph Theory and Basic Course of Programming	J. Glončák	J. Jacková
73.	B	Interactive Support System for Online Education of Basic Programming Skills Course	B. Boďa	J. Jacková
74.	B	Hypertext Support for Education of Advanced Programming Skills	M. Pajdič	J. Jacková
75.	B	Geodetic computing program GeoDEM XLS, made in application MS OFFICE - Excel	M. Chlapečka	J. Dudoň
76.	D	Alarm event storage of monitoring system.	P. Paľa	J. Cisárik
77.	D	Report Web Client - configuration, processing and visualization of data from OSS Report Server	M. Šnobel	J. Bobek
78.	B	Teaching support of subject "Table Processing"	M. Gutten	I. Nedeljaková
79.	B	Intranet web application for Sub campus Prievidza ŽU facility	L. Richter	I. Nedeljaková
80.	B	Dynamic web application for secondary school	P. Kuva	I. Nedeljaková
81.	B	Web application of domicile	J. Oboňa	I. Nedeljaková
82.	B	Creating of material norms of products	P. Gašpierik	I. Nedeljaková
83.	B	Database application for workshop company with business actives support	T. Mičáň	I. Nedeljaková
84.	B	Dynamic web application for company in sphere of services	Ľ. Herchel	I. Nedeljaková
85.	B	Web application for Sub campus Prievidza FRI ŽU facility	M. Fojtík	I. Nedeljaková

No.	C.	Theme	Student	Supervisor
86.	B	Application for supporting of business activities of firm WIRD II	L. Blahová	I. Nedeljaková
87.	D	Internal enterprise portal and system for administration of its information	P. Čensčák	F. Kállay
88.	D	Supporting system for managing and evaluating of projects in an IT company	T. Borovský	F. Kállay
89.	B	Support system for evidence and evaluation of transport vehicles	M. Candrák	F. Kállay
90.	B	Database of delays in production	M. Pham	B. Sedliak
91.	B	Evidence of survey of customer s demands	J. Fábrik	B. Sedliak
92.	B	Dynamic Web page for exchange messages between customer an company	P. Debnár	B. Sedliak
93.	B	Web application for online browsing in catalogs	J. Kuruc	B. Sedliak
94.	B	Message centre for development team	L. Pittner	B. Sedliak
95.	B	Message centre for development team	M. Furinda	B. Sedliak
96.	B	Evidence and monitoring of orders	J. Rendeková	B. Sedliak
97.	B	Statistic evaluation of survey of demands and orders	M. Sigetová	B. Sedliak
98.	B	Computer aided tool for mathematics education at secondary grammar school	L. Kozáková	A. Kanáliková
99.	B	Software support of analysis of reliability and solvency of the borrower	M. Trúchla	A. Kanáliková
100.	B	Electronic teaching aids for bookkeeping education at secondary school	M. Murínová	A. Kanáliková
101.	D	Integration of Parking systems	B. Jacko	K. Matiaško
102.	B	Review system	M. Solánský	K. Matiaško
103.	B	Design and implementation of electronic evidence of company post	A. Furták	K. Matiaško
104.	D	Parking information system	V. Michaleje	K. Matiaško
105.	D	Car monitoring Information system	M. Pánis	K. Matiaško
106.	D	Knowledge discovery in the databases using decision trees	L. Beláková	K. Matiaško
107.	D	Intelligent parking system	M. Ševčík	K. Matiaško
108.	B	Electronic Journal	P. Petrovič	K. Matiaško
109.	D	Signature model for Textual databases	J. Štafen	K. Matiaško
110.	B	Building information system	S. Huťka	K. Matiaško

VII. OTHER ACTIVITIES

- MATIAŠKO K.: Program committee member of conference DATAKON 2007, Brno
- KOVALÍK Š.: Program committee member of conference DATAKON 2007, Brno
- MATIAŠKO K.: Professional Guarantee of International Conference System Integration 2007, Štrbské Pleso, Vysoké Tatry, Slovakia
- MARTINCOVÁ P.: Editor in chef of Journal of Information, Control and Management Systems, published by Faculty of Management and Informatics.

- ZAITSEVA E.: Program committee member of the Int. Conf. on Risk, Quality and Reliability (RQR 2007), September 20-21, Ostrava
- ZAITSEVA E.: Program committee member of the 7th Int. Conf. on Reliability, Maintainability, and Safety (ICRMS'2007), August 22-26, 2007, Beijing, China

VIII. PUBLICATIONS

VIII.1 Journals and proceedings

- DADO, M.-DROZDOVÁ, M.-MATIAŠKO, K.-VAJSOVÁ, M.: *Integrating e-learning system into university education*. in Journal of Check Society of System Integration – System Integration, volume 13, No. 4, December 2006. publ.: Czech Society of System Integration, Publishing House OECONOMICA, VŠE, Praha. p. 32-38. ISSN 1210-9479.
- ZAITSEVA, E.-POTTOSIN Y.: *Estimation of failure probability of a no recoverable system using logic algebra technique*. in Journal of Informatics, No 2(14), April-June 2007. publ.: United Institute of Informatics Problems of the National Academy of Sciences of Belarus, Minsk, 2007. pp. 77-85. ISSN 1816-0301
- MATIAŠKO, K.-BOHÁČIK, J.-LEVASHENKO, V.-KOVALÍK, Š.: *Learning Fuzzy Rules from Fuzzy Decision Trees*. in Journal of Information, Control and Management Systems, Volume 4, No. 2/1, 2006. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by HQ Studio, Žilina, 2006. p. 143-154. ISSN 1336-1716.
- ZAITSEVA, E.-MATIAŠKO, K.: *Failure Analysis of Multi-State System*. in Journal of Information, Control and Management Systems, Volume 4, No. 2/2, 2006. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by HQ Studio, Žilina, 2006. p. 213-221. ISSN 1336-1716.
- NEDELJAKOVÁ, I.: *E-learning, modern form of teaching distance education*. In proceedings of the International Seminary - Regional Management and E-learning. Faculty of Economics and Administration University of Pardubice, Population Protection Institute Lázně Bohdaneč 2006, Czech Republic. Printed by Faculty of Economics and Administration, University of Pardubice, 2006. pp. 91-96. ISBN 80-7194-917-5.
- BOHÁČIK, J.: *An Analysis of Algorithms for Making Fuzzy Rules*. in Proceedings of Finalists Papers – ACM CZ Student Research Competition – 4th Student Research Competition in Informatics and Information Technologies, Praha, November 2006. Microsoft s.r.o., ČR. publ.: Czech Technical University in Prague, Publ. House CVUT. p. 9-16. ISBN 80-01-03595-6.
- NESLUŠAN, M.-TUREK, S.-FAKTOR, M.: *Dynamic aspects of the grinding process*. in Science report, Project PL-0007, Modern Metrology in Quality Management Systems. Kielce University of Technology, 2006. publ.: Publishing House of Polytechnic Swietokrzyskiej, Kielce 2006. p. 199-208. ISBN 978-83-88906-66-4.
- CHOCHLÍK, M.: *Flexible, Policy-based Reference Counting*. in Journal of Information, Control and Management Systems, Volume 5, No. 2/1, 2007. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by Edis, University Publishing House, Žilina, 2007. p. 183-193. ISSN 1336-1716.
- KANÁLIKOVÁ, A.: *Value Analysis Technique for E-commerce Services*. in Journal of Information, Control and Management Systems, Volume 5, No. 2/1, 2007. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by Edis, University Publishing House, Žilina, 2007. p. 207-212. ISSN 1336-1716.
- MARTINCOVÁ, P.: *Performance of Simulated GRID Scheduling Algorithms*. in Journal of Information, Control and Management Systems, Volume 5, No. 2/1, 2007. publ.: University of

Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by Edis, University Publishing House, Žilina, 2007. p. 261-270. ISSN 1336-1716.

- NEDELJAKOVÁ, I.: *Review of Risk Assessment Methods*. in Journal of Information, Control and Management Systems, Volume 5, No. 2/1, 2007. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by Edis, University Publishing House, Žilina, 2007. p. 277-284. ISSN 1336-1716.
- BOHÁČIK, J.: *Induction by fuzzy attribute elimination*. in Journal of Information, Control and Management Systems, Volume 5, No. 2/2, 2007. publ.: University of Žilina, Faculty of Management Science and Informatics, Univerzitná 8215/1, 010 26 Žilina, Slovakia. Printed by Edis, University Publishing House, Žilina, 2007. p. 291-301. ISSN 1336-1716.

VIII.2 Conferences

- VÁCLAVÍK, K.-JACKOVÁ, J.: *Sakai – an Interesting Alternative to Moodle*. in Proceedings of Technologies for e-Learning 2007 Workshop. Printed by: ČVUT FEL, Department of Computers, Praha, 2007. p.61-68. ISBN 978-80-01-03756-0.
- BOHÁČIK, J.-MATIAŠKO, K.-LEVASHENKO, V.: *Software for Making and Using Fuzzy Rules*. in Journal of Electrical Engineering No 7/S, Volume 57, November 2006. publ.: Faculty of Electrical Engineering and Information Technology of the Slovak University of Technology, Bratislava, Institute of Electrical Engineering of the Slovak Academy of Sciences, Bratislava. p. 85-88. ISSN 1335-3632. Also in– ISCAM 2006 – International Conference in Applied Mathematics for undergraduate and graduate students, Bratislava, April, 2006. p. 7.
- ZAITSEVA, E.-PUURONEN, S.: *Investigation of Influence of Some System Component States' Changes to System Reliability*. in Proceedings of the 6th International Conference RELIABILITY and STATISTICS in TRANSPORTATION and COMMUNICATION (RelStat'06) October 2006, Riga, Latvia. publ.: Transport and Telecommunication Institute, Lomonosova iela 1, LV-10119, Riga, Latvia, <http://RelStat.tsi.lv>. p. 226-238. ISBN 9984-9865-9-4.
- ZAITSEVA, E.-POTTOSIN Y: *Evaluation Reliability Methods for Multi-State Systems*. – Proceedings of the III International conference INFORMATION SYSTEMS AND TECHNOLOGIES (IST'2006), In two parts, Part 1, Minsk, November 2006. Belarus State University. publ.: The Academy of Public Administration under the aegis of the President of the Republic, 2006. p. 86-91. ISBN 985-457-734-1 (part. 1). ISBN 985-457-735-X. (In Russian)
- BOHÁČIK, J.: *Fuzzy classification rules induction*. – Proceedings of the III International conference INFORMATION SYSTEMS AND TECHNOLOGIES (IST'2006), In two parts, Part 2, Minsk, November 2006. Belarus State University. publ.: The Academy of Public Administration under the aegis of the President of the Republic, 2006. p. 8-13. ISBN 985-457-736-8 (part. 2). ISBN 985-457-735-X.
- LEVASHENKO, V, -KOVALÍK, Š. –KOZLOVA, I. *Usage Multiple-Valued Logic in Decision Making Support Systems*. – Proceedings of the III International conference INFORMATION SYSTEMS AND TECHNOLOGIES (IST'2006), In two parts, Part 2, Minsk, November 2006. Belarus State University. publ.: The Academy of Public Administration under the aegis of the President of the Republic, 2006. p. 34-39. ISBN 985-457-736-8 (part. 2). ISBN 985-457-735-X. (In Russian)
- LEVASHENKO, V.-MARTINCOVÁ, P.-MATIAŠKO, K.: *Using Ordered FDT in Distributed Environment*. in Proceedings of the 20th International Conference on Systems for Automation of Engineering and Research – SAER-2006, September 2006, Varna - St. St. Constantine and Elena resort, Bulgaria. publ.: Publishing House of the Technical University of Sofia. p. 69-74. ISBN-10: 954-438-575-4, ISBN-13: 978-954-438-575-0.

- ZAITSEVA, E.-MATIAŠKO, K.-PUURONEN, S.: Reliability of Multi-State System against changes of some system component states. in Proceedings of Safety and Reliability for Managing Risk – ESREL 2006, September 2006, Estoril, Portugal. publ.: Taylor & Francis Group, London, 2006. p. 1745-1752. ISBN 0-415-41620-5.
- ZAITSEVA, E.-LEVASHENKO, V.-MATIAŠKO, K.-GOVJADINOVA, N.N.: *Influence of States Number of Multi-State System to Reliability Measures*. in Proceedings of the Ninth International Conference - Pattern Recognition and Information Processing - PRIP'2007 – Volume II. United Institute of Informatics Problems of National Academy of Sciences of Belarus, May 2007, Minsk, Belarus. publ.: United Institute of Informatics Problems of National Academy of Sciences of Belarus, 2007. p. 262-266. ISBN 978-985-6744-28-3. ISBN 978-985-6744-30-6 (Vol. II).
- ZAITSEVA, E.- LEVASHENKO, V.: *Investigation Multi-State System Reliability by Structure Function*. In Proceedings of International Conference on Dependability of Computer Systems DepCoS – RELCOMEX 2007. Institute of Computer Engineering, Control and Robotics Wroclaw University of Technology, June 2007, Szklarska Poreba, Poland. publ.: IEEE Computer Society, printed in the United States of America by The Printing House, 2007. p. 81-88. ISBN 0-7695-2850-3.
- LEVASHENKO, V.-ZAITSEVA, E.-PUURONEN, S.: *Fuzzy Classifier Based on Fuzzy Decision Tree*. in Proceedings EUROCON 2007 – The International Conference on „Computer as a Tool“, Warsaw, Poland, September 2007. publ.: IEEE, 2007. p. 823-827. ISBN 1-4244-0813-X. IEEE Catalogue Number: 07EX1617C.
- ZAITSEVA, E.- KOVALÍK, Š.-LEVASHENKO, V.-MATIAŠKO, K.: *Dynamic Reliability Indices for Series and Parallel Multi-State System*. in Proceedings EUROCON 2007 – The International Conference on „Computer as a Tool“, Warsaw, Poland, September 2007. publ.: IEEE, 2007. p. 511-518. ISBN 1-4244-0813-X. IEEE Catalogue Number: 07EX1617C.
- ZAITSEVA, E.-BRIŠ, R.: *Structure Function of System in Dynamic Reliability Analysis*. in Proceedings of the Risk, Quality and Reliability Conference 2007 (RQR 2007). publ.: VŠB – Technical University of Ostrava, Ostrava, 2007. p. 217-222. ISBN 978-80-248-1575-6.
- ZAITSEVA, E.-PUURONEN, S.: *Estimation of multi-state system reliability depending on changes of some system component efficiencies*. in ESREL 2007 Safety and Reliability Conference, Stavanger, Norway, June 2007. publ.: Taylor & Francis Group, London, 2007. p. 253-261. ISBN 978-0-415-44786-7.
- FAKTOR, M.: *Model for Photon and Spin of Electron in Atom*. in Proceedings of the 16th IASTED Int. Conference on Applied Simulation and Modelling. International Association of Science and Technology for Development, august 2007, Palma de Mallorca, Spain. publ.: ACTA Press, 2007. p. 457-462. ISBN/CD: 978-0-88986-688-1.
- ZAITSEVA, E.-POTTOSIN YU.-LEVASHENKO, V.: *Structure function in investigation of logical network reliability*. in Proceedings of the Sixth International Conference – Computer-Aided Design of Discrete Devices - CAD DD'07, Volume 2. United Institute of Informatics Problems of the National Academy of Sciences of Belarus, Minsk, November 2007. publ.: United Institute of Informatics Problems of the National Academy of Sciences of Belarus, 2007. p. 65-72. ISBN 978-985-6744-35-1(V.2).
- MATIAŠKO, K.-ZÁBOVSKÁ, K.-ZÁBOVSKÝ M.-VAJSOVÁ, M.: *Data Integration for Complex Systems*. in Proceedings of the International Conference on Information Technologies (InfoTech-2007), Volume 2, Systems for Automation of Engineering and Research. Technical University of Sofia, September 2007, Bulgaria. publ.: Publishing House „KING“ for the SAER Forum Group (Technical University-Sofia), 2007. p. 11-18. ISBN: 978-954-9518-42-9.
- GRONDŽÁK, K.-KORTIŠ, P.: *Microwaves in non-destructive testing of metals and dielectrics*. DEFEKTOSKOPIE 2006. Czech society of non-destructive testing, 2006, Tabor, Czech Republic. Publ.: Czech Technical University in Brno in cooperation with Czech society of non-destructive testing. pp. 75-82. ISBN 80-214-3290-X.

- ĎURINA, R.-FAKTOR, M.: *Alternative Approach to Creation of E-Lern Applications by Direct Usage of Simulation Over Explained SW Environments*. in Proceedings European conference – INFOTECH 2007 – Modern Information a Communication Technologies in Education, Part 1, Olomouc 2007. Department of Technical and Information Education of Pedagogical Faculty Palacky University in Olomouc, Institute of Informatics at Moravian University in Olomouc. publ.: Votobia Olomouc, 2007. str. 298-301. ISBN 978-80-7220-301-7.
- JACKOVÁ, J.: *Is the Outer Motivation for Use of e-Learning by Teachers Sufficient?* in Proceedings of eLearn 2007. Printed by: EDIS, University of Žilina, 2007. p. 101-104. ISBN 978-80-8070-645-6.
- JACKOVÁ, J.: *Validity and Reliability of Tests in Web-PSI Courses*. in Proceedings 7th International Conference Virtual University VU'06. publ.: STU Bratislava, December 2006. p. 229-232. ISBN 80-227-2542-0.
- JACKOVÁ, J.: *E-learning at Faculty of Management Science and Informatics, University of Žilina*. in Proceedings of Scientific Workshop. Department of Engineering Pedagogy and Psychology MtF STU, Information Society for Education and Schooling ZSVTS Bratislava, 2005. p. 18-26.
- ZAITSEVA, E.-MATIAŠKO, K.: *Direct partial logic derivatives with respect to variables vector for reliability analysis*. In Proceedings of 6th International Conference APLIMAT 2007, Part III, Session: Modelling and Simulation. Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava, February 2007. publ.: Department of Mathematics, Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava. p. 233-239. ISBN 978-80-969562-6-5.
- FAKTOR, M.: *Spin model and connection between BE and FD statistics*. In Proceedings 6th International Conference APLIMAT 2007, Part III, Session: Modelling and Simulation. Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava, February 2007. publ.: Department of Mathematics, Faculty of Mechanical Engineering, Slovak University of Technology in Bratislava. p. 123-129. ISBN 978-80-969562-6-5. Also in Book of abstracts - 6th International Conference APLIMAT 2007. p. 45 . ISBN 978-80-969562-9-6.
- BABOŠ, Š.-HANULIAK, I.: *Parallel Implementation of Ant Colony Optimisation Algorithms*. in Proceedings 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. Institute of Informatics Slovak Academy of Sciences, Faculty of Electrical Engineering and Informatics Technical University of Košice, November 2006, Bratislava. publ.: VEDA – the publishing house of the Slovak Academy of Sciences. p. 68-75. ISBN 978-80-969202-6-6. Also in Book of abstracts 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. p. 16.
- GRONDŽÁK, K.-MARTINCOVÁ, P.-BABOŠ, Š.-CHOCHLÍK, M.: *Distributed Solving of Combinatorial Problems*. in Proceedings 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. Institute of Informatics Slovak Academy of Sciences, p. 82-87. ISBN 978-80-969202-6-6. Also in Book of abstracts 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. p. 18.
- CHOCHLÍK, M.: *Support for object-oriented parallel programs for grids and clusters*. . in Proceedings 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. Institute of Informatics Slovak Academy of Sciences, Faculty of Electrical Engineering and Informatics Technical University of Košice, November 2006, Bratislava. publ.: VEDA – the publishing house of the Slovak Academy of Sciences. p. 88-95. ISBN 978-80-969202-6-6. Also in Book of abstracts 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. p. 19.
- MARTINCOVÁ, P.-GRONDŽÁK, K.: *Effective Distributed Query Processing on the Grid*. in Proceedings 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. Institute of Informatics Slovak Academy of Sciences, Faculty of Electrical Engineering and Informatics Technical University of Košice, November 2006, Bratislava. publ.: VEDA – the

- publishing house of the Slovak Academy of Sciences. p. 129-135. ISBN 978-80-969202-6-6. Also in Book of abstracts 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. p. 25.
- VARŠA, P.: *Parallel Grid Implementation for Laplacean Equation Computation by Gauss-Seidel Method*. in Proceedings 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. Institute of Informatics Slovak Academy of Sciences, Faculty of Electrical Engineering and Informatics Technical University of Košice, November 2006, Bratislava. publ.: VEDA – the publishing house of the Slovak Academy of Sciences. p. 217-223. ISBN 978-80-969202-6-6. Also in Book of abstracts 2nd International Workshop on Grid Computing for Complex Problems – GCCP 2006. p. 39.
 - JACKOVÁ, J.: What Do We Have Pedagogical Patterns *for?*. in Proceedings of DidInfo 2007 Conference. Printed by: University of Matej Bel, Faculty of Natural Sciences, Banská Bystrica, 2007. 4 pages. ISBN 978-80-8083-367-1. [CD ROM]. Also in Book of abstracts of DidInfo 2007. p. 37.
 - ZJAVKA, L.: *Teaching with unsupervised learning*. In Proceedings International Conference – DIVAI 2007. University of Konštantín filozof in Nitra, Faculty of Natural Science, Nitra, may 2007. publ.: FPV UKF v Nitre, 2007. p. 242-249. ISBN 978-80-8094-123-9. Also in Book of abstracts of DIVAI 2007. p.39.
 - KANÁLIKOVÁ, A.: *Value management and e-learning*. in composite book of conference international Distance education in applied informatics – DIVAI 2007. University of Constantine philosopher University in Nitra, Faculty Science natural, Informatics department, Nitra, may 2007, public : FPV UKF in Nitra, 2007. pgs. 119-124. ISBN 978-80-8094-123-9. Also in Book of abstracts of DIVAI 2007. p.24.
 - SEDLIAK, B.-STOROZHEV, D.: *Standardization of Processes Data Mining and Development of the Analytical Platform on the Basis of Standard PMML (Predicted Model Mark-up Language)*. in Proceedings 7-th European conference of young research and science workers TRANSCOM 2007 – Section 3 – Information and communication technologies. University of Žilina, Žilina June 2007. publ.: University of Žilina – printed by EDIS-Žilina University publisher. p. 217-220. ISBN 978-80-8070-693-7.
 - ZJAVKA, L.: *Polynomial Neural Network*. in Proceedings 7-th European conference of young research and science workers TRANSCOM 2007 – Section 3 – Information and communication technologies. University of Žilina, Žilina June 2007. publ.: University of Žilina – printed by EDIS-Žilina University publisher. p. 277-280. ISBN 978-80-8070-693-7.
 - TABAČEK, M.-NESLUŠAN, M.-FAKTOR, M.: *Influence of deformation after heat treatment on turning hardened roll bearing steel*. in Proceedings of the 6-th International Conference – No conventional technologies 2007 – NT'07 – VTS University of Žilina and Faculty of Mechanical Engineering, Department of technology Engineering, June, 2007, Strečno. publ.: University of Žilina printed by EDIS-Žilina University publisher. – ŽU, 2007. str. 202-211. CD – ISBN 978-80-8070-714-9.
 - JACKOVÁ, J.: *Structure of Teaching the Syllabus – An Important Factor to Improve Course Effectiveness*. in Proceedings 7-th European conference of young research and science workers TRANSCOM 2007 – Section 9 – Social sciences. University of Žilina, June 2007. publ.: University of Žilina – printed by EDIS-Žilina University publisher. p. 39-42. ISBN 978-80-8070-697-5.
 - JACKOVÁ, J.: Pedagogical Patterns in Teaching Informatics. in Proceedings of DIDZA 2007 didactics conference. Printed by: EDIS, University of Žilina 2007. 5 pages. [CD ROM]. ISBN 978-80-8070-688-3.
 - JACKOVÁ, J.: Learning Objectives in the Context of Informatics Study Programmes at Technical Faculties. in SCHOLA 2007 – Engineering Pedagogy, Proceedings of 8 International Scientific Conference. Printed by: AlumniPress, Trnava, 2007. 7 pages. ISBN 978-80-8096-038-4.

- SEDLIAK, B.: Experience with education teams. in Proceedings 3-th international conference – Informatics in school and praxis. Pedagogic faculty of Catholic university of Ružomberok, Department of Computer Science, Ružomberok, September 2007. publ.: Pedagogic faculty, Ružomberok, 2007. p. 158-160. ISBN 978-80-8084-222-2.
- DADO, M.-DROZDOVÁ, M.-MATIAŠKO, K.-VAJSOVÁ, M.: *E-Learning experiences at the University of Žilina*. in SCIENCE DAYS 2006 (Netzbasieretes Lernen im Umfeld der Telekommunikation), September 2006. publ.: Deutsche Telekom – Fachhochschule Leipzig. p. 72-80.

VIII.3 Books

- DADO, M.-ZAHRADNÍK, J. et al.: *Technologies and Services of Intelligent Transportation Systems*. Scientific monograph. publ.: University of Žilina, printed by EDIS-Žilina University publisher, Žilina, 2007, 378 pages. ISBN 978-80-8070-691-3.
- MARTINCOVÁ, P., GRONDŽÁK, K., ZÁBOVSKÝ, M.: *Programming in Linux Kernel*, printed by EDIS-Žilina University publisher
- GRONDŽÁK, K., CHOCHLÍK, M., BABOŠ, Š.: *Programming in Windows Kernel*, Edis

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PhD.-Programme

Theme	Student	Supervisor
Recurrent Neural Networks for Delayed Economic Processes	M. Srnka	D. Marček
Cloud Methods and Granular modelling in Management Prediction Systems	Z. Mečiarová	D. Marček
The Entropy Reduction in Management decision systems using the Prediction Algorithms	M. Fraňo	D. Marček
Employee Appraisal Model as Tool of the Management Decision	L. Nižník	A. Kucharčíková

RESEARCH PROJECTS

State Grant Projects – VEGA

- *Specific Modelling and Forecasting Methods of Economic and Financial Processes*
Prof. Ing. Dušan Marček, PhD

Faculty Grant Projects

- KUCHARČÍKOVÁ, A.: *Education as form on investment to human capital in Slovak enterprises*

V. COOPERATION

V.1 Co-operation with Institutes and Enterprises in Slovakia

- Faculty of Economy UMB, Banská Bystrica,
- Economical University of Bratislava
- Adviser of Entrepreneur, Žilina
- Slovak Chamber of Commerce, Žilina
- Information Centre of Entrepreneurs, Žilina
- Slovak Statistic Office
- Institute of Transport Research Žilina,
- SAEF - Slovak American Enterprise Fund

V.2 Co-operation with Foreign Institutes and Enterprises

- VŠB-TU Ostrava, Institute of Computer Science Opava, CZ
- VŠE Praha, CZ
- Institute of Computer Science Opava, CZ
- ČVUT Praha, CZ
- Academy of Sciences, CZ
- European Polytechnic Institute, Kunovice, CZ
- OPF, SLU Karviná, CZ

V.2.2 Visits of Staff Members to Foreign Institutions

- Dušan Marček: York University, INFOBRIGHT, Inc., Toronto, Canada, May 14-16, 2007

V.3 Membership in Slovak Organisations and Societies

- Prof. Ing. Dušan **Marček**, PhD. : Studies of FMSaI University of Zilina, editorial board member
- Prof. Ing. Dušan **Marček**, PhD.: University Library in Zilina, member of the information board
- Prof. Ing. Dušan **Marček**, PhD. : University of Žilina, Faculty of MSaI, member of the Faculty board for Grant projects evaluating
- Assoc.Prof.. Ing. Alžbeta **Kucharčíková**, PhD.: member of The Management Trainers Association
- Ing. Katarína **Zábovská**: Slovak Association for System Integration

V.4 Membership in International Organisations and Societies

- Prof. Ing. Dušan **Marček**, PhD.: Member of EUSFLAT- European Society for Fuzzy Logic and Technology
- Prof. Ing. Dušan **Marček**, PhD.: Managing and modelling of financial risks – member of Conference Committee.
- Prof. Ing. Dušan **Marček**, PhD.: MDAI 2004 – Chair of the Section Clustering

V.5 Contracts with Slovak and Foreign Institutions

- Softip SEVER a.s., Žilina

- Slovak Railways Bratislava
- DOOS s.r.o. Žilina
- Crystal a.s. Lednické Rovne
- Varias a.s. Žilina
- ELAS s.r.o., Prievidza
- BIC s.r.o., Prievidza

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	B	The creation of processed map on selected firm, Zenit s.r.o.	P. Karaba	J. Dubovec
2.	B	The changes in the national budget of Slovak Republic after the fiscal decentralization	S. Jančiová	B. Holková
3.	B	Marketing of the financial services in banking	I. Kurhajcová	Z. Kozubíková
4.	D	Economic appraisal methods of investment efficiency and their application in the project	M. Šutovský	Z. Kozubíková
5.	D	Autoregressive Conditional heteroscedasticity in Time Series.	M. Lieskovská	L. Pančíková
6.	D	Time series modelling using statistical (econometric) methods and machine learning	B. Kočvara	M. Marček
7.	B	Monitoring of using and binding factors of production	M. Prišticová	M. Ďurišová
8.	D	Econometric modelling of macroeconomic indicators in Žilina region conditions	V. Kosorínová	L. Pančíková
9.	D	GARCH methodology in modelling of financial data	M. Šafr	L. Pančíková
10.	D	Short time series forecasting in spectral domain using software application R	M. Srnka	L. Pančíková
11.	B	Importance of statistical methods in management of firm	Z. Pipíšková	L. Pančíková
12.	D	Forecasting of firm outputs in decision process of transport company	E. Bačová	L. Pančíková
13.	D	Modelling of seasonality in time domain in firm conditions	K. Krilek	L. Pančíková
14.	B	Analysis of Financial Statements and Utilize its results in Financial Control	M. Blanárová	A. Jacková.
15.	D	Consumers decision to purchase common usage goods	M. Hanusová	J. Dubovec
16.	B	The creation of processed map on selected firm HBP a.s.	M. Mikuš	J. Dubovec
17.	D	Legal entity solvency solution for particular and significant cases expert practice of Slovak republic	Z. Šaligová	I. Sedláková
18.	D	Application of methodical practices determining level of financial injury	M. Krnčanová	I. Sedláková
19.	D	The value of trademark from investor s and common customer s view from information access to the public	L. Barabášová	I. Sedláková
20.	D	Monitoring of expenses in company Rettenmeier Tatra Timber, s.r.o.	M. Leitner	Ďurišová M.

21.	D	Implementation methods of measuring production effort corporation TKC, s.r.o.	P. Cimra	Ďurišová M.
22.	D	Characterization and quantification of timing diggerences, adjusting items, etc.	L. Šlichtíková	C. Srnka
23.	D	The analysis of the costs in company Slovalco a.s.	L. Belička	C. Srnka
24.	B	Depreciation of fixed assets	A. Moleková	C. Srnka
25.	B	Financial investments	M. Plevka	C. Srnka
26.	B	Corporate tax load after the tax reform in Slovak Republic	J. Šimová	B. Holková
27.	B	Analysis of Financial Statements and Utilize its Results in Financial Control	J. Koščová	A. Jacková
28.	B	Management of problematic assets in firm	T. Srnková	A. Jacková
29.	D	Simulate a model for more effective use of possessions in the village	M. Dobiš	A. Jacková
30.	D	Position of the people with disabilities on force market in Žilina region	B. Špáni	A. Kucharčíková
31.	D	The possibilities of versatility of high school graduates at labour force market in the district of Michalovce	L. Hreňo	A. Kucharčíková
32.	D	Job recommendation for graduates of high schools on the labour force market in Žilina county	M. Vaško	A. Kucharčíková
33.	D	Occupation possibilities for high school graduates in district of Trnava	M. Kubiček	A. Kucharčíková
34.	D	Productivity of production inputs in the factory	M. Špaček	A. Kucharčíková

VII. OTHER ACTIVITIES OF DEPARTMENT

- MARČEK D.: Member of Scientific Board of Faculty of Management Sciences and Informatics, University of Žilina, Žilina
- DUBOVEC J.: Member of Academic Senate of Faculty of Management Sciences and Informatics, University of Žilina, Žilina

VIII. PUBLICATIONS

VIII.1. Books

ĎURIŠOVÁ, M., JACKOVÁ, A.: *Business Finance*. University textbook. EDIS – Publishing of University of Žilina, Žilina, 2007. ISBN 978-80-8070-661-6

VODÁK, J., KUCHARČÍKOVÁ, A.: *Effective Employees Education*. Grada Publishing, Praha 2007, ISBN 978-80-247-1904-7, 212 p.

VIII.2. Reviews published in Journals and Conferences

BEHÁŇOVÁ, M.: *Awareness Support about Information Safety*. In: Proceeding of papers of 4. international scientific conference „Human Potential Management in Enterprise“, Žilina, 16.-17. May 2007, University of Žilina, pp. 89-92, ISBN 978-80-8070-672-2

DUBOVEC, J.: *Walk or Go by Bus of Urban Mass Transportation?* In: Proceeding of conference "Passenger transport development on principles of sustainable mobility and accessibility" University of Pardubice, 2006, pp. 30-33, ISBN 80-7194-904-3

DUBOVEC, J.: *Enterprise Communication on the Basis of Multicriterion Result Evaluation*. In: VEDA 2006, proceeding of scientific papers, Faculty of Management Science and Informatics, University of Žilina, ISBN 978-80-8070-663-0

DUBOVEC, J.: *Logistic in Railway Transport*. In: Proceeding of International conference „Management in Railway Transport 2006“, University of Žilina, pp.20-24, ISBN 80-8070-613-1

DUBOVEC, J.: *New Aspects of Quality Control in Services*. In: Proceeding of International scientific conference „Management in Railway Transport 2007“, Faculty of Management Science and Informatics, University of Žilina, 2007, pp. 17-20. ISBN 978-80-8070-780-4

DUBOVEC, J., ĎAĎO, J.: *The Explanation as Part of Communication Mix*. In. Proceeding of III. international conference “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.47-52, ISBN 978-80-7314-111-0

DUBOVEC, J., HLAČINA, T.: *New Trends in Microeconomics Theory*. In: Communications – scientific papers of University of Žilina, No.2/2007, pp. 61-63, ISSN 1335-4 205

DUBOVEC, J., HLAČINA, T., MICHÁLEK, P.: *Research Results of Inner-encumbrance of Towns and Villages in Czech Republic*. In. Proceeding of international conference "University as a Facilitator of Society and Region Development", January 2007, pp. 193-198, EPI Kunovice Czech Republic, ISBN 80-7314-107-8

DUBOVEC, J., HLAČINA, T., MICHÁLEK, P.: *American Mortgage - No purpose Loan*. In: Proceeding of III. international conference “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.191-94, ISBN 978-80-7314-111-0

DUBOVEC, J., MATOUŠEK, P.: *Public Finance and External Influence-Impact on Business Environment*. In: Proceeding of III. international conference “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.191-94, ISBN 978-80-7314-111-0

DUBOVEC, J., MATUŠÍKOVÁ, I.: *Regional Management and Creative Business Ideas*. In: Proceeding of III. international conference “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.93-96, ISBN 978-80-7314-111-0

DUBOVEC, J., MATUŠÍKOVÁ, I.: *Foreign Investments and Country Development*. In: III. International conference "How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia", May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.191-94, ISBN 978-80-7314-111-0

ĎURIŠOVÁ, M.: *Model of Diagnostic Process of Business Costs*. In: E + M Economy and management, scientific economic journal 3/2007. Technical University of Liberec, pp. 75-88. ISSN 1212-3609

ĎURIŠOVÁ, Mária: *Enterprise Diagnostics as Part of Company Management*. Economics. Scientific journal 2007/78. Vilnius Univerzity. ISSN 1392-1258

ĎURIŠOVÁ, M.: *Enterprise Diagnostic – Discipline of Business Management*. In: Proceeding of scientific papers VEDA 2006. University of Žilina, Faculty of Management Science and Informatics, 2006, pp. 3-9. ISBN 978-80-8070-663-0 CD

ĎURIŠOVÁ, M.: *Allocation of Direct Foreign Investments in Slovak and Czech Republic*. Proceeding of scientific papers "How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia", May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp.173-177 ISBN 978-80-7314-111-0

JACKOVÁ, A.: *Outsoaring and Its Utilization in Transport Enterprise*. In: VEDA 2006, Proceeding of scientific papers of VEDA 2006. University of Žilina, pp. 9-11, ISBN 978-80-8070-663-0

JACKOVÁ, A.: *Financial Resources of Small and Medium Business in Slovak Republic*. In: "How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia ", Proceeding of III. International conference 2007, 11. May 2007, Kunovice, Czech Republic, pp. 187-190, ISBN 978-80-7314-111-0

KOZUBÍK, A. KOZUBÍKOVÁ, Z.: *Mathematics in the Managers Education*. In: Proceeding of 5th international scientific conference "About mathematics and physics at technical universities" (Brno, 12. -14.9. 2007), Association of Czech Mathematicians and Physicists in Brno, pp. 185-194, ISBN 978-80-7231-274-0

KOZUBÍKOVÁ, Z.: *The Business Activity in the Truck Transport after Entering of Slovakia*. In: Proceeding of 3. international scientific conference „University as a Facilitator of Society and Region Development" European Polytechnical Institute Kunovice, pp. 275-278, ISBN 80-7314-107

KOZUBÍKOVÁ, Z.: *Financial Decision Making under Conditions of Risk*. In: Scientific journal „Crisis management“, Faculty of Special Engineering, University of Žilina, No. 1/2007, Žilina, pp. 63-67, ISSN 1336-0019

KOZUBÍKOVÁ, Z.: *The Selected Problems in the Risk Identifying*. In: *Proceeding of 3. international scientific conference "How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia"*, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp. 253-257, ISBN 978-80-7314-111-0

KUCHARČÍKOVÁ, A.: *Approaches to Education Quality Rise at the Universities*. In: Proceeding of international scientific conference „University as a Facilitator of Society and Region Development“, European Polytechnic Institute Kunovice, 26. January.2007, Kunovice, Czech Republic, pp. 121-124 ISBN 80-7314-107-8

KUCHARČÍKOVÁ, A.: *Role of Management at Increase of Business Performance..* In: Proceeding of international scientific conference „Human Potential Management in Enterprise“, University of Žilina, Technical University of Zvolen, University of Economics Bratislava, Zvolen 17. - 18. May 2006, pp. 38-42, ISBN 80-228-1585-3

KUCHARČÍKOVÁ, A.: *Management Approaches at Increase of Competitiveness of Enterprises*. In: Proceeding of international scientific conference „Marketing and Trade“, EDUCA –MaO, KMOSL Zvolen, 14.-16.11.2006, pp. 120-125, ISBN 80-8093-009-0

KUCHARČÍKOVÁ, A.: *Increase Possibilities of Quality of Education Programs Realized by Enterprises*. In: Proceeding of scientific papers of VEDA 2006, Faculty of Management Science and Informatics, University of Žilina, pp. 12-18, ISBN 978-80-8070-663-0 – CD

KUCHARČÍKOVÁ, A., ŠUJANSKÝ, J.: *Position of Participants and Lecturers in Business Education Process as Important Factor of Business Performance Increase*. In: Proceeding of international scientific conference of Faculty of Business and Management, Brno University of Technology, Brno, Czech Republic, 12-14.9.2007 – CD

KUCHARČÍKOVÁ, A., ŠUJANSKÝ, J.: *Capital Incentives and Their Influence on Region Development*. In: Proceeding of international scientific conference “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, May 2007, European Polytechnic Institute Kunovice, Czech Republic, pp. 179-185, ISBN 978-80-7314-111-0

MARČEK, D.: *Application of Dynamic Models and an SV Machine to Inflation Modelling*. In: Managing and Modelling of Financial Risk. Book of proceedings, Ostrava, Sept. 6-7, 2006, VŠB Technical University of Ostrava, Economic faculty, pp.167-172, ISBN 80-248-1159-6

MARČEK, D.: *Fuzzy Time Series Modelling by SCL Learning*. Technical Computing Prague 2006, 14th Annual Conference Proceedings. Congress centre ČVUT, Prague, October 26, 2006, ISBN 80-7080-616-8 (CD rom)

MARČEK, D.: *Forecasts Generating for ARCH-GARCH Processes Using The MATLAB Procedures*. Technical Computing Prague 2006, 14th Annual Conference Proceedings. Congress centre ČVUT, Prague, October 26, 2006, ISBN 80-7080-616-8 (CD rom)

MARČEK, D.: *Econometric and RBF Neural Network Modelling of Economic Time Series*. ICSC 2007 - Fifth International Conference on Soft Computing Applied in Computer and Economic Environment, European Polytechnic Institute Kunovice, Uherské Hradiště REDUTA, 26.1.2007, pp. 17-22, ISBN 80-7314-108-6

MARČEK, D.: *Developing Forecasting Model for Stock Price Using Fuzzy Sets*. ICSC 2007 - Fifth International Conference on Soft Computing Applied in Computer and Economic Environment, European Polytechnic Institute Kunovice, pp. 13-16, ISBN 80-7314-108

MARČEK, D.: *Application of Dynamic Models and an SV Machine to Inflation Modelling*. Quantitative Methods in Economics (Multiple Criteria Decision Making XIII), Proceedings of the International Conference, December 6-8, 2006, Bratislava, Slovak Republic, pp. 101-108, ISBN 80-8078-129-X

MARČEK, D.: *Wages Forecasting Using Box-Jenkins Methodology*. In: TCP 2007 – proceeding of papers of 15. conference. 2007, ISBN 978-80-7080-658-6

MARČEK, D.: *Wages Forecasting Using SV Regression Approach*. In: TCP 2007 - proceeding of papers of 15. conference. 2007, ISBN 978-80-7080-658-6

MARČEK, D., MEČIAROVÁ, Z., MARČEK, M.: *Fuzzy Time Series Modelling By SCL Learning*. Econ'06, Technical University of Ostrava, Faculty of Economics, Volume 13, 2006, pp. 126-133, ISSN 0862-7908

MARČEK, M., MARČEK, D.: *RBF Neural Network Implementation of Fuzzy Systems: Application to Time Series Modelling*. In: Aijun An et al Eds.: RSFDGrC 2007 – Rough Sets, Fuzzy Sets, Data Mining and Granular Computing, LNAI 4482, Springer-Verlag Berlin, Heidelberg, (2007), pp. 500–507, indexed in the SCI-Expanded, ISSN 0302-9743

MARČEK, M., MARČEK, D.: *Granular RBF Neural Network Implementation of Fuzzy Systems: Application to Time Series Modelling*. In: Journal of Mult.-Valued Logic & Soft Computing. Vol. 00, pp. 1-14, Old City Publishing, Inc., Philadelphia 2007, ISSN 1542-3980 (reprint)

MEČIAROVÁ, Z.: *Modelling and Forecasting Seasonal Time Series*. In: Journal of Information, Control and Management Systems, Faculty of Management Science and Informatics, University of Žilina, Vol. 5, No. 1, 2007, pp 73-79, ISSN 1336-1716

MEČIAROVÁ, Z.: *Modelling of Export of Czech Republic by Exponential Smoothing*. In: University as a Facilitator of Society and Region Development, III. International conference 2007, 26. January Kunovice, Czech Republic, pp. 217-220, ISBN 80-7314-107-8

MEČIAROVÁ, Z.: *Modelling and Forecasting of Seasonal Time Series by Box-Jenkins Methodology*. In: Transcom 2007, 7-th European Conference of Young Research and Science Workers, 25-27 June 2007, Žilina, pp. 173-176, ISBN 978-80-8070-693-7

MEČIAROVÁ, Z.: *Normal Cloud Models and Cloud Generator*. In: Journal of Information Control and Management Systems, Faculty of Management Science and Informatics, University of Žilina. 2007, Volume 5, 2/1 pp. 271-276. ISSN 1336 – 1716

PANČÍKOVÁ, L.: *Econometric Modelling of Investments in Regional Conditions*. In: “How to Carry Business Successfully in Frontier Areas of South-Eastern Moravia“, Proceeding of III. International conference 2007, 11. May 2007, Kunovice, Czech Republic, pp. 207-210, ISBN 978-80-7314-111-0

PANČÍKOVÁ, L.: *Application of Prognostic Methods in Transport*. In: Journal of Information Control and Management Systems, Faculty of Management Science and Informatics, University of Žilina. 2007, Volume 5, 2/2 pp. 309-317. ISSN 1336 – 1716

STANÍKOVÁ, Z.: *Development of Marketing Activities in Railway Passenger Transport*. In: Proceeding of international scientific conference Marketing and trade 2006, Technical University in Zvolen, pp. 264-267, ISBN 80-8093-009-0

STANÍKOVÁ, Z.: *Possibility of Communication with Customers in Railway Passenger Transport*. In: e-journal Business economy and management 3/2006, University of Žilina, pp. 33-35, ISSN 1336-5878

STANÍKOVÁ, Z.: *Internet – Important Means of Marketing Communication in Railway Passenger Transport*. In: Proceeding of international scientific conference Marketing and Trade 2007, Technical University in Zvolen, pp. 286-289, ISBN 978-80-8093-026-4

STANÍKOVÁ, Z., DUBOVEC, J.: *Alternative Approach to Theory of Utility*. In: e-journal Business economy and management 3/2006, University of Žilina, pp. 36-40, ISSN 1336-5878

ZÁBOVSKÁ, K.: *Creation of Valid Shifts for Public Transportation Drivers*. In: Journal of Information Control and Management Systems, Faculty of Management Science and Informatics, University of Zilina. 2007, Volume 5, 2/2 pp. 411-417. ISSN 1336 - 1716

MATIAŠKO, K., ZÁBOVSKÁ, K., ZÁBOVSKÝ, M.: *Providing Payment Services in the Intelligent Transportation System*. In: Proceeding of scientific papers Science Veda 2006, Faculty of Management Science and Informatics, University of Žilina, pp. 80-87, ISBN 978-80-8070-663-0

Department of Technical Cybernetics

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Assoc. Prof. Ing. Vladimír Jamrich, PhD.
Ing. Adam Jaroš
Ing. Jozef Juríček, PhD.
Ing. Ján Kapitulík
Ing. Oldřich Kovář, PhD.
Assoc. Prof. Ing. Juraj Miček, PhD.
Ing. Julius Mlich
Ing. Ján Repka
Assoc. Prof. Ing. Juraj Slovák, PhD.

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Ing. Matúš Jurečka
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II. EQUIPMENT

II.1 Teaching and Research Laboratories.

- Laboratory of Digital Control.
- Laboratory of Digital Signal Processing
- Laboratory of Automatic Control (in the Sub campus Prievidza)

- Laboratory of Electronics (in the Sub campus Prievidza)
- Laboratory of Electronics
- Laboratory of Design of the Customers Integrated Circuits (XILINX)
- Laboratory of Digital Computer
- Laboratory of Automatic Control
- Laboratory of HPC and Grid computing
- Laboratory of Communication systems
- Laboratory of Technical equipments of automatic control

II.2 Special Measuring Instruments and Computers.

Analogy models for real time simulation experiments of digital control algorithms.

- Models SISO (Single input and single output).

second and third - order systems with variable damping ratio , proportional or integrate performance.

- Models MIMO (Multiple input, multiple output- 2 input and output)

There is 6 SISO models: second order system with variable damping ratio
second order system with variable time constant
first order system with variable time constant
first order system.

The model It can by use as a MIMO plant or SISO plant first to sixth - order. The gain of the plants (step response) it can be continuously or step change (0.1, 1, 2, 5).

There is also possibility to change magnitude of disturbance and step switch of output disturbance.

- Models SISO with non-linear gain, transport delay and no minimal phase.

The same model as in the point a), with possibility to switch non-linear gain or transport delay. or step response with no minimal phase.

- Analogy model of heat exchanger station.
- Analogy model of Helicopter

All models could be connected with PC's (8x) with Ad and DA converters or with some PLC (Bernecker&Reiner, Octagon etc.)

8x workstation on the base of the PC, A/D and D/A converters, starter kit TMS 320x54, evolution kit MSP 430xxx, 8x evolution development kit ATMEL AVR

10x evolution kit ARM7+DI

5x workstation on the base of the PC (K6-233 Mhz)

1x workstation on the base PC (1,3 GHz, 19" monitor)

Foundation ISE 7.1. fy XILINX, System Generator for Simulink, Model Sim ISE EMBEDDED DEVELOPMENT KIT

Programming board for circuits GAL 16V8, GAL20V8, CPLD 9500, FPGA 4000

Programming board 2S100 fy INSIGHT (FPGA SPARTAN II)

Programming board DIGILAB XLA5 fy DIGILENT (FPGA SPARTAN II)

Programming board V2LC1000 fy INSIGHT (FPGA VIRTEX II)

Programming board ANADIGM (FPAA)

Programming board FPGA SPARTAN 3

ML YO3 VIRTEX-4 FX Evaluation Platform

7x Measurement System (Digital Oscilloscope, Logical Analyst, Waveform Generator)

III. PhD.-Programme

Theme	Student	Supervisor
1. Quantization noise in automatic control system	J. Kapitulík	J. Miček
2. Low lost Algorithms for speech synthesis	P. Lajčiak	J. Miček
3. Parallel iterative Algorithms	P. Hanuliak	K. Matiaško
4. Complexity of distributed Parallel Algorithms	Š. Baboš	I. Hanuliak
5. Classification of the Signals with Neuron Nets Implemented in FPGA	P. Ševčík	V. Jamrich
6. Decomposition models of parallel Algorithms	P. Matuška	I. Hanuliak
7. Adaptive and learning Algorithms for Automatic Control	Š. Bocko	M. Alexík
8. Parallization of data processing in distributed systems	M. Babišová	I. Hanuliak
9. Recognizing of Speech with Use of Artificial Neuron	M. Jurečka	J. Miček
10. Questions Optimisation in OODBS	M. Mikula	V. Jamrich
11. Object Recognition for Use in Transportation Control Systems	J. Mlich	V. Jamrich
12. Voice Communication in the Intelligent Car	V. Mateička	M. Alexík
13. Methods and Algorithms of Processing of Multidimensional and Multichannel signals	L. Čechovič	J. Miček

IV. RESEARCH PROJECTS

- VEGA 1/2054/05: „Modelling prediction and performance optimisation of distributed parallel algorithms.“ Principal investigator: prof. Ing. Ivan Hanuliak, PhD.
- VEGA 1/2058/05: „Adaptive and Learning algorithms for automatic Control.“ Principal investigator: prof. Ing. Mikuláš Alexík, PhD.
- VEGA 1/4064/07, „The development of the new signal pre-processing for the technological process control and monitoring“. Principal investigator: doc. Ing. Juraj Miček, PhD.

V. COOPERATION

V.1. Cooperation with Institutes and Enterprises in Slovakia

- Slovak Technical University, Bratislava - Fac.of Electr. Eng. & Informatics, Fac. of Mechanical Eng., Faculty of Chemical Engineering
- Dopravné systémy Scheidt & Bachmann s.r.o. Žilina.
- SAE Control s.r.o. Žilina, URAP Automatizacia Žilina.
- HMH s.r.o. Bratislava
- Varias a.s, Žilina
- ETC. s.r.o. Žilina, VUVT Eng., a.s. Žilina,
- ENERGO DATA, s.r.o. Žilina
- ENO. a.s. Zemianské Kostol'any
- FPT TUAD Púchov
- ZS-VTS Bratislava
- Ekonomická univerzita Bratislava

- UMB Banská Bystrica
- UPJŠ Košice
- TU Košice
- ABB a.s., pobočka Žilina

V.2. Cooperation with Foreign Institutes and Enterprises.

- UTIA -Institute of Information Theory and Automation, Academy of Sciences of the Czech Rep.
- Universities-Plzen, Liberec, Praha, Brno, CZECH REP
- ARGE Simulation , Vienna University of Technology, AUSTRIA
- Dutch Benelux Simulation Society, Technische Universiteit Delft, NEDERLAND
(Cooperation in preparing EUROSIM Congres and in the EUROSIM Society)
SCS Europe (Society for computer Simulation), University of Ghent, BELGIUM.
(Preparing an European Simulation Multiconference).
- Chinese Association for System Simulation, Beijing, CHINA,
- Asian Simulation Conference, Shanghai, CHINA
- EPCC (Edinburgh Parallel Computing Centre), UK
- University of Balamund,– BioMedSim , Conference LEBANON
- TU – VŠB, Faculty of mechanical Engineering strojní, Ostrava, CZ, project 72/114
- CINECA, Bologne, ITALY
- VÚT Brno, Institute of Computing Engineering and Informatics , CZECH REP.
- EUROSIM Federation of European Simulation Societes
- IFAC International Federation of Automatic Control
- Thomas Bata University in Zlin, Fakulty of Applied Informatics
- Elsevier
-

V.2.1 Foreign Visitors to the Department

V.2.2. Visits of Staff Members to Foreign Institutions

1. Assoc.Prof.Ing. Juraj Slovák, PhD - Koleč po Telekomunikacii I Pošti, Sofia, BULGARIA
2. Assoc.Prof.Ing. Juraj Slovák, PhD – Telecom Lille, FRANCE
3. Assoc.Prof.Ing. Juraj Slovák, PhD - Hochschule für Telekommunikation, Leipzig, GERMANY

V.3 Membership in Slovak Organizations and Societies

- **M. Alexík:** Cybernetics and Informatics, ISSN: 1336-4774 editorial board member
- **M. Alexík:** SOK – Slovak Committee for doctoral study in the field 38-01-9 „Automatisation and Control“
- **M. Alexík:** EDIS – Žilina, University Publisher-additional board member
- **M. Alexík:** Slovak Society for Aplied cybernetics and Informatics - ZSVTS, Bratislava Vice chairman.
- **M. Alexík:** Slovak Society for cybernetics and Informatics by Slovak Academy of sciences, Bratislava - Board member.

- **M. Alexík:** The Slovak Simulation Society by ZSVTS Bratislava - Chairman.
- **M. Alexík:** AT&P Journal, editorial board member, ISSN 1335-2237
- **M. Alexík:** Academy of Education, Bratislava - Žilina - Vice chairman.
- **M. Alexík:** President of Committee for State Exams in the Field “Automatization” on the Faculty of Electrical Engineering and Informatics, TU Košice
- **I. Hanuliak:** Member of GCCCP (Grid computing of complex problems)
- **I. Hanuliak:** Member of Scientific Board “Transcom”
- **I. Hanuliak:** Member of Scientific Committee “Slovak Grid”
- **I. Hanuliak:** Member of Scientific Board “HPC and Grid computing”
- **A. Jaroš:** Czech & Slovak Simulation Societe – member
- **A. Jaroš:** Slovak Society for cybernetics and Informatics by Slovak Academy of Science, Bratislava
- **A. Jaroš:** The Slovak Simulation Society by ZSVTS Bratislava – member
- **Š. Bocko:** Czech & Slovak Simulation Society – member
- **Š. Bocko:** Slovak Society for cybernetics and Informatics by Slovak Academy of Science, Bratislava
- **S. Alexík:** The Slovak Simulation Society by ZSVTS Bratislava – member

V.4 Membership in International Organizations and Societies

- **M. Alexík:** Simulation Practice and Theory, SCI Journal (Elsevier)ISSN 1569-190x, - Editorial Board member
- **M. Alexík:** EUROSIM Federation of European Simulation Societies- Board member
- **M. Alexík:** ECCAI European Coordination Committee for Artificial Intelligence- National Board member
- **M. Alexík:** The Society for Computer Simulation International, member
- **M. Alexík:** Committee for PhD-Program on the Faculty of Technology, VUT Brno, CZ
- **M. Alexík:** Scientific Council at the Faculty of Applied Informatics, Tomas Bata University in Zlín, Czech Republic
- **M. Alexík:** IFAC Technical Committee: System and Signals – Modelling, Identification and Signal Processing, member
- **M. Alexík:** Journal „Cybernetics and Informatics“ISSN 1336-4774, Editorial Board Member
- **J. Juríček:** Theoretical and Experimental Problems of Material Engineering – member
- **I. Hanuliak:** Editorial board member, The Open cybernetics and Systemic Journal, United Kingdom

V.5 Contracts with Slovak and Foreign Institutions

- **I. Hanuliak a kol. :** Slovak Grid, MŠ IP 2005-2006

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	D	Simulation experiment with learning control algorithm	M. Moravanský	M. Alexík
2.	D	Non-linear parameters identification model of the "Eye-hand" and Eye-leg"	M. Katrík	M. Alexík
3.	D	The discrete version of laboratory model of continuous controlled processes	G. Arpáš	M. Alexík
4.	D	Computer Based Training for synthesis of control algorithms	A. Ťahúňová	M. Alexík
5.	D	Simulation experiments with selfuning PID on the base EXACT	P. Furuglyás	M. Alexík
6.	D	Conception and realization of a schematic status visualization as add-on module within the field	M. Podpleský	L. Skýva
7.	D	Recognition of similar characters using Neural Networks	V. Antalík	L. Skýva
8.	D	Design appropriate models, functions, methods and structures for the multiplayer neural network	B. Mišejková	L. Skýva
9.	D	Design networks for the recognition characters according specific criteria	P. Škoda	L. Skýva
10.	B	Compares of available GRID system architectures	L. Križan	I. Hanuliak
11.	B	Electronically adjustable parabolic solar collector	Z. Michač	T. Farkaš
12.	D	Design and implementation of digital control system of scanning DEDIX module	M. Zlevský	P. Ščepko
13.	D	Design of electronic control system of rail-manipulator model	P. Roman	O. Kovář
14.	D	Design of electronic control system of the elevator model	J. Kršák	O. Kovář
15.	B	Design of electronic clock with stopwatch and alarm clock	D. Ďurica	O. Kovář
16.	B	LAN/WAN - Communicator (server)	J. Bištuť	O. Karpiš
17.	B	Program for simulation of sequential logical circuits	K. Kostolányi	O. Karpiš
18.	B	LAN/WAN - Communicator (client)	R. Hučko	O. Karpiš
19.	B	Program for searching irredundant and minimum forms	P. Mikula	O. Karpiš
20.	B	Picture system for PC	J. Krajčovic	Mlich J.
21.	B	Construction of local area network in enterprise environment	M. Bujna	Mlich J.
22.	B	Semiconductor memories for PC	R. Lacek	Mlich J.
23.	B	Effect of multicora microprocessors on PC performance	P. Decký	Mlich J.
24.	B	PC communication interfaces	E. Oravec	Mlich J.
25.	B	Connecting personal computer to the internet	M. Galdun	Mlich
26.	D	Control system for the Flash information board based on the RGB LED	M. Magáth	M. Sokol
27.	D	Development and implementation of controlling system.	R. Ostertag	M. Šamaj

28.	D	Information system for road transport safety utilizing PDA computer	J. Benikovský	M. Brežňan
29.	B	RF wireless network upgrade with sensor module	M. Čičmanec	L. Čehovič
30.	B	Sound transmission over RF modules	T. Soták	L. Čechovič
31.	B	Security of RF wireless transmission	M. Psotka	L. Čechovič
32.	B	The desing of the remote switching device	M. Rýchlik	O. Kovář
33.	B	Design of electronic calculator	M. Privarčák	O. Kovář
34.	D	System of automatic positioning	Z. Král	K. Bóna
35.	B	Graphic cards for PC	M. Marko	J. Mlich
36.	B	Multicore processors	I. Petráš	J. Mlich
37.	B	BIOS upgrade with Plug&Play technology	M. Mrázek	J. Mlich
38.	B	RAID - Disk Arrays every time and everywhere?	M. Čmarada	J. Mlich
39.	B	Display hardware for PC	E. Jedináková	J. Mlich
40.	B	Example upgrade BIOS of chop Flash ROM	M. Mančuška	J. Mlich
41.	B	Student information portal in the studies of computer engineering	P. Štefanides	J. Kapitulík
42.	B	Editorial system of student information portal in the study of computer engineering	P. Husárik	J. Kapitulík
43.	D	Synchronization and data exchange in heterogeneous database environment	P. Anđel	B. Velčický
44.	B	Implementation of the Communication Interface for Programmable Logic Controller	A. Sitár	A. Jaroš
45.	B	Micro controller programmer	P. Beliančín	O. Kovář
46.	B	Stepper motors module for processor emulator kit	A. Sedlák	P. Gubiš
47.	B	Analogy-to-digital converter module for processor emulator kit	E. Matejčíková	P. Gubiš
48.	B	PLL for Processor emulator kit	J. Krčmáriková	P. Gubiš
49.	B	SRAM memory module for processor emulator kit	M. Barančok	P. Gubiš
50.	B	Control of LCD display unit	P. Bulka	J. Miček
51.	B	Controller of brush less DC motor with electronic commutation	M. Zuzula	J. Miček
52.	B	Control of mobile robot in category "Minisumo"	M. Vlk	J. Miček
53.	B	Control of mobile robot in category "Line follower"	M. Stareček	J. Miček
54.	B	Controller of display BO12832A	P. Goga	J. Miček
55.	B	Control of mobile robot in category "Minisumo"	M. Lauko	J. Miček
56.	D	Piano education system	J. Hruška	J. Miček
57.	D	Appliance for conversion of Serial bus RS232 to bus CAN	M. Gála	J. Miček
58.	B	Mobile robot controller system - category line follower	M. Holák	J. Miček
59.	B	Control of mobile robot in category "Micromouse"	M. Hodoň	J. Miček
60.	D	Electronic chronometer	P. Tvarovský	J. Miček
61.	D	System for processing measure data from vibration scanner	P. Pikna	J. Miček
62.	D	Recognition system of limited set of words	A. Zavadský	J. Miček
63.	B	System for measure distance	Ľ. Skurčák	J. Miček
64.	D	Linus drivers for ETC M520 series oscilloscopes.	R. Bihári	P. Gubiš

VIII. PUBLICATIONS

VIII.1 Journals

- ALEXÍK M, LUČIVJANSKÝ M.: *Real time verification of learning algorithm based on sliding mode and neural networks control.*In:AT&P Journal Plus No. 7. p.p. 59-63. Published HMM s.r.o. Tavariková osada 39, 841 02 Bratislava 42. ISSN 1336-5010.
- HANULIAK I., HANULIAK P.: *Performance evaluation of iterative parallel algorithms,* *Cybernetics*, Volume 36, No 11/12,2007, United Kingdom
- HANULIAK I., HANULIAK P.: *HPC computing – integration factor of informatics, cybernetics and artificial intelligence,* In Proc: Relations of Informatics, Cybernetics and Artificial Intelligence, 13-19 September 2007, p.p. 9-14, Poprad (invited paper)
- HANULIAK I.: *To modelling of complex systems,* University of Tomas Bata, Zlin, Czech republic, May 2007 (invited paper)
- HANULIAK I.: *To modelling of complexity in parallel algorithms in Grid,* In Proc.: Grid technologies 2007, UPJŠ Košice, May (invited paper)
- KOVÁŘ O., MIČEK J.: *Embedded communication system implemented in FPGA.* Journal of Information , Control and Management Systems, Volume 5, No.2/1 p.p. 225-231, University of Žilina, ISSN 1336-176.
- ŠEVČÍK P., KOVÁŘ O.: *The Design and Implementation of the Convolution Computing Unit into FPGA.* Journal of Information, Control and Management Systems, Volume 5, No.2/2, 2007 p.p. 225-231, University of Žilina, ISSN 1336-176.
- JAROŠ A.: *Hybrid Simulation Environment for Verification Adaptive Extended RLS Algorithm in Real Time.* TRANSCOM 2007, 7th European conference of young research and scientific workers, Žilina June 25-27.2007, pp.111-114, Printed by EDIS-Žilina University publisher, ISBN 978-80-8070-693-7
- ŠEVČÍK P.: *Implementation of the Data Preparing Unit for the Convolution Computing in the FPGA Device.* TRANSCOM 2007, 7th European conference of young research and scientific workers, Žilina June 25.-27.,2007, pp. 225-228, Printed by EDIS Žilina University publisher, ISBN 978-80-8070-693-7
- ČECHOVIČ L.: *Brain Computer Interface – Introduction to Brainwaves Signal Processing* TRANSCOM 2007, 7TH European conference of young research and scientific workers, Žilina June 25.-27.2007, pp.27-30., Printed by EDIS – Žilina University publisher, ISBN 978-80-8070-693-7.
- BOCKO Š.: *Realization of Real Time for Simulation Experiments.* In: Proceedings of 41th Spring International Conference MOSIS 07, April 24-26, 2007 Rožnov p. R., Czech Republic. Print: Reprints, Ostrava, pp. 147-152, ISBN 978-8086840-30-7.
- JUREČKA M.: *Speaker Identification Using Pulse Coupled Neural Network,* Journal of Information, Control and Management Systems, Faculty of Management Science and Informatics, University of Žilina, volume 5, NO.2/1, 2007, p.p. 201-206, ISSN 1336-1716.

• **VIII.2 Conferences**

1. ALEXÍK M., ALEXÍK S.: *Real Time Simulation Experiments with Self Tuning PSD Control Algorithm*. In: Proceedings of 41st Spring International Conference MOSIS'07, April 24-26, 2007, Rožnov p. R., Czech Republic. Print: Repronis, Ostrava, Nádražní ul. 53. pp. 153-162, ISBN 978-8086840-30-7.
2. ALEXÍK M.: *Real Time Simulation Experiments with Self-Tuning Control Algorithm*
In: Proceedings of the 6th EUROSIM Congress on Modelling and Simulation, EUROSIM 2007, 9-13 September, 2007, Ljubljana, SLOVENIA. CD production: Racman d.o.o., Ljubljana, Vol.2: CD, Publisher: ARGESIM – ARGE Simulation News, Div. Mathematical Modelling and Simulation, Vienna University of Technology, Vienna, Austria, contribution 318.pdf, ISBN-10: 3-901608-32-X.
3. B. DOBRUCKÝ, R. HOLČEK, J. BUDAY, M. ALEXÍK: *Using Genetic Algorithm for Optimal Control of Power Converter*. In: Proceedings of the 11th World Multi-Conference on Systematics, Cybernetics and Informatics, July 8 – 11, 2007, Orlando, Florida USA. Volume II. pp. 132-135. ISBN-10: 1-934272-16-7.
4. ALEXÍK M.: *Real Time Simulation Experiments with Self Tuning Control Algorithm*
In: Proceedings of the 6th EUROSIM Congress on Modelling and Simulation, EUROSIM 2007, 9-13 September, 2007, Ljubljana, SLOVENIA. Printing: Tiskarna Pleško d.o.o., Ljubljana, Vol.1: Book of Abstract pp. 337, ISBN-13: 978-3-901608-32-2.
5. ALEXÍK M.: *Real Time Simulation of Various Learning Strategies for Servomechanism Time Sub optimal Control*. In: Proceedings of the Ninth International Conference on Informatics, INFORMATICS'2007, June 21-22, 2007, Bratislava, Slovakia. Published by>Slovak Society for Applied Cybernetics and Informatics Bratislava, Koceľová 15, 81594, Bratislava, Slovak Republic, str. 62-69. ISBN 978-80-969243-7-0.
6. ALEXÍK M., ALEXÍK S.: *Hybrid Simulation Environments for Verifications of Control Algorithm*.
In: Collection of scientific contributions, EDIS Žilina University Publisher, Pp. 155-168. ISBN 978-80-8070-663-0.
7. ALEXÍK M., LUČIVJANSKÝ M.: *Real Time Simulation of Learning Algorithms for Time Sub optimal Control*. In: Collection of scientific contributions EDIS, Žilina University Publisher pp 155-168. ISBN 978-80-8070-663-0. 8.
8. ALEXÍK M, MIČEK J.: *Scientific Activities of Department of Technical Cybernetics Research Activity Review*, Proceedings of Conference CONNECTIONS AMONG CYBERNETICS, INFORMATICS AND ARTIFICIAL INTELIGENCE, meeting of the Departments of Cybernetics, Informatics and Automation from Czech and Slovakia. 16th. – 19th. September, 2007, Aqacity – Poprad, Slovak Republic. Print: EQUILIBRIA, s.r.o., str. 29-37, ISBN 978-808073-863-1.

- 9 . HANULIAK I., HANULIAK P.: *HPC computing – integration factor of informatics, cybernetics and artificial intelligence*. meeting of the Departments of Cybernetics, Informatics and Automation from Czech and Slovakia. 16th. – 19th. September, 2007, Aquacity – Poprad, Slovak Republic.,Print:: EQUILIBRIA, s.r.o., ISBN 978-80-8073-863-1.
10. HANULIAK I.: *HPC and Grid technologies at Slovak universities*, UPJS Kosice, May 2007
11. HANULIAK I.: *Complex systems and algorithms*, University of Zilina, October 2007
12. MIČEK J., KOVÁŘ O.: *Integral and Assistance System – INIAS*. Infotrans 2007, Pardubice, , ISBN 978-80-7194-989-3.

VIII.3 Books

VIII.4 Parts of Books

ALEXÍK M., JAROŠ A., REPKA J.: In: DADO M.– ZÁHRADNÍK J. and col.: “*Technology and services of intelligent transport* (in Slovak), EDIS, Žilina, University Publisher, July 2007, pp. 321-364

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Ing. Pavol Segeč, PhD.
Mbgr. Juraj Šmieško, PhD.
Ing. Ondrej Škvarek
Mgr. Jana Uramová, PhD

Researchers: Ing. Mária Čerňanská

PhD students Ing. Zuzana Bizoňová
Ing. Juraj Boroň
Ing Michal Bruncko
Ing. Pavol Selep
Mgr. Katarína Pilátová
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II. EQUIPMENT

II.1 Teaching and Research Laboratories.

- B 03 Laboratory of Communication Technology
- B301 Laboratory of Networking
- B302 Laboratory of Applications Development
- B303 Cisco Networking Academy Laboratory

III. PhD.-Programme

Theme	Student	Supervisor
1. Selected issues of speech synthesis	P. Selep	M. Klimo
2. Dejittering buffer	M. Vrábel	M. Klimo
3. Degradation factors of VoIP quality	P. Palúch	M. Klimo
4. Model driven e-learning platform integration	Z.Bizoňová	M. Drozdová
5. E-learning object design and evaluation for content creation	K. Pilátová	M. Drozdová

RESEARCH AND EDUCATION PROJECTS -

- *The European Learning Network – HELEN*, IT/04/B/F/NT-154056, LEONARDO, Klimo Martin, Assoc.Prof., Ing., PhD.
- *SAETO - Self-Assesment for Educational and Training Organisations*, LI/05/B/F/PP-164.510, Leonardo da Vinci, Drozdová Matilda, Assoc.Prof.Ing., CSc
- projects STF ETSI, LoE 302, 311, 331, Kováčiková Tatiana, Assoc.Prof.Ing.PhD.
- *Courses for institution Building in Croatia eGovernment (eGovCRO)*, IB_JEP-40042-2005, Tempus, Drozdová Matilda, Assoc.Prof.,Ing.,PhD.,
- *Speech communication in next generation networks*, 1/2039/05, VEGA, Klimo Martin, Assoc.Prof. Ing. PhD.
- *Error model for High-Speed Digital Networks*, 1/4061/07, VEGA, Ivaniga Petr, Ing.,PhD.
- *Digital Library of e-learning metadata objects and its management*, 3/5205/07, KEGA, Drozdová Matilda, Assoc.Prof.Ing.PhD.
- *Quality of Service in Future Mobile Systems*, COST 290, MVTS, Klimo Martin, Assoc.Prof., Ing., PhD

V. COOPERATION

V.1 Cooperation with Institutes and Enterprises in Slovakia

- Cisco Slovakia
- Siemens Programs and Systems Engineering
- Slovak Telecom

V.2 Cooperation with Foreign Institutes and Enterprises

- INT Evry, FRANCE
- ENST Paris, FRANCE
- University of Technology Dresden, GERMANY
- University of Poitiers, FRANCE
- ETSI Sophia Antipolis, FRANCE
- Université de Nice – Sophia Antipolis, FRANCE

V.4 Membership in International Organizations and Societies

Martin Klimo – IEEE, ACM, ETSI STQ

Tatiana Kováčiková – ETSI TISPAN, EC – FP7 IST projects reviewer

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	D	Synthesis of the speech signals using shifted bases	B. Rosival	K. Bachratá
2.	D	Classification of quality for chaining of speech units in Text-To-Speech system	I. Valová	K. Bachratá
3.	B	Testing and documentation of the speech analysing software	P. Bella	K. Bachratá
4.	B	Portal of the graduation theses for InfoComNetworks Department	M. Duran	K. Bachratá
5.	D	Speech quality for the IP telephony signal decomposed into various bases	J. Boroň	K. Bachratá
6.	B	Interactive e-study "Application of shortest path algorithm and graph	T. Vaško	J. Uramová
7.	D	Simulation of the Single Shared Channel Network	R. Petříček	J. Uramová
8.	B	Interactive e-study: "Application of Branch-and-bound method	T. Bulla	J. Uramová
9.	B	Basic skills off computer networks - WBT course	J. Mokráň	P.Ivaniga
10.	B	Universal e-business application	M. Laco	P.Selep
11.	D	NetFlow collector and analyser	I. Masár	P.Segeč
12.	B	Quality of Service architectures in IP networks. QoS tools on Cisco network devices	P. Čenščák	P.Segeč
13.	B	Intrusion Detection Systems and result analysis	M. Hrobák	P Segeč.
14.	B	Surety of computer networks and detection of attacks. Prelude IDS and results analysis	J. Saxa	P.Segeč
15.	B	WiFi networks security	J. Galis	P.Segeč
16.	D	QoS architecture design for IP telephony	P. Smítka	P.Segeč
17.	D	Sound Editor for Text-to-Speech System	C.Mészáros	P. Selep
18.	B	CMS-based integrated portal concerning networking technology	A. Krivulčík	P. Segeč
19.	D	Directory services application in information systems	M. Bruncko	P. Segeč
20.	D	Design of secure network architectures	M. Ilavský	P. Segeč
21.	B	Joomla! based web portal of the Department of InfoComm Nets	M. Jašica	P. Segeč
22.	B	IPSec Security Protocol: Properties and Application	D. Molík	P. Palúch
23.	B	Simple Network Traffic Analyser	J. Zahradníček	P. Palúch
24.	D	Computer networks configuration simulator	J. Rolko	P. Ivaniga
25.	B	GSM networks - animations	M. Kapičák	P. Ivaniga
26.	B	Syllable "e" allophones searching to build text-to-speech system	V. Géczy	O. Škvarek
27.	B	Practical exercises database for MS PowerPoint 2003 Sk	T. Dunajský	O. Škvarek
28.	B	Practical exercise for RIP routing protocol	I. Bugáň	O. Škvarek
29.	B	Database of practical exercise from MS Access 2003 CZ	J. Mundier	Ľ Mikuš.
30.	B	Blogs	V. Brienič	Ľ.Mikuš
31.	B	e-Books	E. Podhorský	Ľ.Mikuš
32.	D	Using ActionSript for interactive exercises	M. Čekan	Ľ.Mikuš
33.	B	Authoring Tools	M. Rybárik	Ľ.Mikuš
34.	B	Articulate Presenter - Multimedia user guide	M. Kunaj	Ľ.Mikuš
35.	D	Interactive IPTV	L. Pekara	M. Gejdoš
36.	B	Database of software	S. Klučková	Ľ. Mikuš
37.	D	Simulation of NGN Network	T. Jenej	Ľ. Mikuš
38.	B	Database of MS Work 2003 practical training	M. Palušek	M. Čerňanská
39.	B	Processing of sentences in Sound database for TTS	M. Stenclák	M. Čerňanská
40.	B	Text documents database of sentences for TTS	T. Kubinec	M. Čerňanská

No.	C.	Theme	Student	Supervisor
41.	B	Database of MS Excel 2003 practical training	M. Mihály	M. Čerňanská
42.	B	Electronic support of any processes at the Department of Information Networks FRI	P. Oster	M. Drozdová
43.	B	E-business system for the agricultural enterprise and its operations	I. Kvocera	M. Drozdová
44.	B	Information system design for the Tuning Club in Lučenec	J. Kolibiar	M. Drozdová
45.	D	E-study material design and realisation according to the IMS Global Learning Consortium	M. Rojko	M. Drozdová

VIII. PUBLICATIONS

Papers in English

- KOVÁČIKOVÁ, T., SEGEČ, P.: *Standardization Paths for NGN Architecture*. In: ISAST Transactions on Communications and Networking. No. 1, Vol. 1, 2007. pp. 6-10, ISSN 1797-0989.
- DROZDOVÁ, M., DADO, M.: *Innovation in engineering education based on the implementation of e-education*. (<http://www.tandf.co.uk/journals>) In: European Journal of Engineering Education. Publ.: 2007, SEFI, Taylor & Francis. Vol.: 32, Issue 2 May 2007, pages 193-201, ISSN149-5898 online.
- MAKYŠ, P., BIZOŇOVÁ, Z., VITTEK, and J.: *Creation and re-use of resources for e-learning courses on electric drives*. In: CD-ROM Proceedings of the 16th International Conference on "ELECTRICAL DRIVES and POWER ELEKTRONICS", 24.-26.september 2007, The High Tatras, Slovakia. Publ.: 2007, TULIP reclaim, Košice. pp 1-4, ISBN 978-80-8073-868-6.
- BIZOŇOVÁ, Z.: *Model driven LMS platform integration*. In: Journal of Information, Control and Management Systems Faculty of Management Science and Informatics, University of Zilina. Vol. 5, 2007, No. 1. Publ.: Faculty of Management Science and Informatics, University of Zilina, pp.3-11. ISSN 1336-1716
- SMIEŠKO, J.: *Hyperexponential Model of Human Speech Under Voice Activity Detection*. In: Journal of Information, Control and Management Systems, University of Zilina. Publ.: Faculty of Management Science and Informatics, University of Zilina, Vol. 4, 2006, No.2/2, pp.183-191. ISSN 1336-1716
- DROZDOVÁ, M.: *Who is responsible for using the information-communication technology in engineering education and Innovation in engineering education based on the implementation of e-education*. (<http://www.areonline.org/>) In: Annals of Research Engineering Education. Editor: AREE, 500 Fifth Street, NW, Room NAS G-11, Washington, DC 20001. Publ.: 2007, AREE. Summer 2007, pages 2, Vol.: 3, No. 1.

- LEGÍŇOVÁ, K.: *Reusability of learning objects for e-learning*. In: Proceedings of the 7-th European conference of young research and science workers TRANSCOM 2007, section 3: Information and Communication technologies, Žilina, June 25-27, 2007, Slovak Republic. Publ.: University of Žilina, First Editions, Printed by EDIS - Žilina University publisher. pp. 153-156, ISBN 978-80-8070-693-7
- ČOREJOVÁ, T., ROSTÁŠOVÁ, M., DROZDOVÁ, M.: *A new framework for measuring quality in engineering education and research in Slovak Republic*. In: Proceedings of the International Conference on Engineering Education 2007 (ICEE 2007) "The Moving Frontiers on Engineering", September 3-7,2007, Coimbra, Portugal, Universidade de Coimbra. Publ.: Departamento de Engenharia Química - FCTUC, Coimbra, Portugal,. Pages 7, ISBN 978-972-8055-14-1.
- DROZDOVÁ, M., PILÁTOVÁ, K.: *E-learning content design*. In: Proceedings of the Information and Communication Technology in Education, 17th-20th September 2007, Rožnov pod Radhoštěm, Czech Republic. Publ.: 2007, University of Ostrava. pp. 11-16, ISBN 978-80-7368-388-7.
- KOVÁČIKOVÁ, T.: *Incorporation of the Universal Communication Identifier (UCI) to NGN*. In: CD-ROM Proceedings of the Third International Conference on Services and Networks Communications, ICSNC 2007. IEEE Computer Society & IARIA, Cap Esterel, France, 25-31 August, 2007. 8 pages, ISBN 0-7695-2938-0.
- KOVÁČIKOVÁ, T., SEGEČ, P., KUBINA, and M.: *IMS in the Next Generation Network*. In: Proceedings of the 11th WSEAS International Multiconference CSCC (Circuits, Systems, Communications, Computers), Agios Nikolaos, Crete Island, Greece, July 23-28,2007. Publ.: 2007, by WSEAS Press. Vol. 3, pp.45-50, ISBN: 978-960-8457-91-1.
- BACHRATÁ K; BORONĚ; ROSIVAL: *Packet Loss Concealment by Shifted Basis*; In: ICETA 2007, Iceta, 5th international conference on emerging e-learning technologies and applications, Tatranská Lesná, 6.-8.9.2007; počet str. 5, ISBN 978-80-8086-061-5
- SEGEČ, P., KOVÁČIKOVÁ, T., KUBINA, M.: *Netacad program: How we implement in at the Faculty of Management science and informatics, University of Zilina*. In: ICETA 2007, Iceta, 5th international conference on emerging e-learning technologies and applications, Tatranská Lesná, 6.-8.9.2007; počet str. 4, ISBN 978-80-8086-061-5
- KOVÁČIKOVÁ, T., SEGEČ, P., KUBINA, and M.: *NGN for a new integrated e-learning*. In: ICETA 2007, Iceta, 5th international conference on emerging e-learning technologies and applications, Tatranská Lesná, 6.-8.9.2007; pages 4, ISBN 978-80-8086-061-5
- DROZDOVÁ, M., DADO, M.: *Innovation in Education Involves Quality Systems Implementation at Universities*. In: ICETA 2007, Iceta, 5th international conference on emerging e-learning technologies and applications, Tatranská Lesná, 6.-8.9.2007;pp.. 7, ISBN 978-80-8086-061-5
- MIKUŠ, Ľ., ŠKVAREK, O., ČERŇANSKÁ, M., IVANIGA, P.: *Course "Introduction to Engineer Study" in FMSI UZ*. In Proceedings 7-th International Conference: Virtual University VU"06. December 14th-15th, 2006, Bratislava, Slovak Republic. Pp 66-69, ISBN 80-227-2542-0.

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Assoc.Prof.Ing. Peter Fabián, PhD.
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Ing. Peter Jankovič
Assoc.Prof.Ing Ľudmila Jánošíková, PhD.
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Ing. Michal Lekýr, PhD.
Ing. Peter Márton, PhD.
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RNDr. Alžbeta Szendreyová, PhD.
Ing. Michal Žarnay, PhD
Ing. Michal Koháni, PhD.

PhD students Ing. Miroslav Holúbek
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Ing. Peter Lošonský
Ing. Peter Tarábek
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II. EQUIPMENT

- Laboratory of GIS
- Laboratory of Discrete Simulation Methods
- Laboratory of Multimedia Information Systems

III. PhD. - Programme

Theme	Student	Supervisor
Simulation of Manipulation and Transportation Processes in Logistic Chains	Miroslav Holúbek	Valent Klima
Microscopic Modelling of Mobile Objects Behaviour	Peter Kostúr	Valent Klima
Recognition and Processing of Graphical Information on Transport Infrastructure	Peter Tarábek	Petr Cenek
Modelling of systems with fixed costs	Peter Lošonský	Petr Cenek
Methods for Effective Storing and Retrieving Relevant Information in a Knowledge Management System	Monika Monošiová	Peter Fabián

RESEARCH PROJECTS

State and International Grant Projects:

KLIMA,V.: *Agent Oriented Architecture of Simulation Models of Service Systems* VEGA1/4057/07
JANÁČEK,J.: *Decision supporting tools ...* VEGA 1/3775/07
JANÁČEK,J.: *Increasing Safety and Reliability on Second category roads* T-07-013-00 MVTS
JANÁČEK,J.: *Design Methods for Optimal Structure of Public Service Systems* T-07-010-00 MVTS
ADAMKO,N.: *Using Simulation Techniques in Optimisation of Transport Processes in Industrial Plants.* T-07-006-00 MVTS
KLIMA,V.: *Simulation Models of Terminals of Multimode Transport* T-07-009-00 MVTS
FABIÁN,P.: *Socrates-Minerva Projects* Z-06-105/0002-05 and Z-06-105/0003-05
FABIÁN,P.: *LEONARDO Project* Z-05-105/0009-06

COOPERATION

V.1 Cooperation with Institutions and Enterprises in Slovakia

Slovak Telecom
Technical University Košice
Slovak Technical University Bratislava
University of Matej Bel, Banská Bystrica
ŽSR, Bratislava (Slovak Railway)
Volkswagen Bratislava
VUD -Research Institute in Transport, Žilina
Slovak Environmental Agency, Banská Bystrica
Slovak Association for Geographical Information, Bratislava

V.2 Cooperation with Foreign Institutions and Enterprises

GISIG, Genova, Italy
Rijksuniversiteit Utrecht, Netherlands
Universita Pardubice, Czech Republic
VSB-TU Ostrava, Czech Republic
TDJ Research Centre, Harbin, China
Florida International University, dpt. of Logistics
TU Dresden, Germany,
BASF Ludwigshaffen, Germany

V.2.1 Foreign Visitors to the Department

- 3 research workers from TDJ Research Center, Harbin, Peoples Republic of China, Sept. 26-29
- Group of 3 students from TDJ Research Center, Harbin, Peoples Republic of China – 2 months study stay Oct-Nov 2007
- Ing. Dušan Teichmann, PhD, Czech Republic, -3 months study stay Oct -Dec. 2007
In the frame of SOCRATES project

V.2.2 Visits of Staff Members to the Foreign Institutions

- FABIÁN,P.: PROJECTS seminars:
 - TEMPUS, March 18-23, Bruxelles, Leipzig
 - SOCRATES, March 14-18, Delft
 - WEKNOW, May 2-7, Porto
 - GI-Indeed, June 13-16

- July 18-27 Genova
- SOCRATES Sept 26-29, Delft
 - BLEND XL Oct 8-13, Aachen

- MÁRTON, P.:
 - Teacher's mobility May 13-19, HTW Dresden
 - Research scholarship TU Dresden, Jun 3 – August 2
 - In its frame visits of: SBB Swiss, TU Braunschweig, TU Darmstadt, TH Zürich

- LEKÝR, M., KOSTÚR, P., HOLÚBEK, M.: Cooperation visit to Chengdu university, China, in the frame of the Slovak- China cooperation project, delivering lectures. November 17-23

V.3 Membership in Slovak Organizations and Societies

Prof. RNDr. Jaroslav JANÁČEK, PhD:

- Member of SOK for PhD study in „Transport and Communication Technologies“.
- Member of SOK for PhD study in „Applied Mathematics“
- Member of OK for PhD study in „Control of Transportation Systems“.
- Member of committee SSOV (Slovak Society for Operations Research)
- Member of Board for Doctoral Study for Transport technique and technology, VSB-TU Ostrava

Assoc.Prof. Ing. Peter FABIÁN, PhD:

Member of presidia of SAGI, Bratislava

Assoc.Prof. Ing. Ľudmila JÁNOŠÍKOVÁ, PhD.

Member of SAGI (Slovak Association for Geoinformatics)

V.5 Membership in International Organizations and Societies

- JANÁČEK, J.: Reviewer of Zentralblatt für Mathematik
- FABIÁN, P.: Member of Executive Committee of GISIG (Geographic Info Systems International Group)
- FABIÁN, P.: Czech Society for Cybernetics and Informatics
- CENEK, P.: Member of the Transportation Research Board, by National Research Council, USA, Washington (representative of the University of Žilina)
- CENEK, P.: Alliance of Universities for Democracy (AUDEM)
- MATIS, P.: Member of People to People organization

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	B	Internet Editors System – Publication and Administration Data on Web.	M. Mokriš	M. Hrčka
2.	B	Database of practical exercises from Internet Explorer	O. Kasaj	A. Szendreyová
3.	B	Simulation model of a container terminal - 3D visualization and animation	M. Gouth	P. Cenek
4.	B	Simulation model of a container terminal - simulation of processes in terminal	L. Horník	P. Cenek
5.	D	Software system for location problem building on transportation network	M. Abaffy	J. Janáček
6.	D	Tool for computer aided decision by creation of disposition schedule of locomotives and motor units	P. Brunclík	R. Javorka
7.	B	Simulation of chosen service system in Arena simulation tool	A. Černák	P. Márton
8.	B	Simulation of chosen manufacture system in Arena simulation tool	S. Foltán	P. Márton
9.	B	Simulation of chosen service system in Arena simulation tool	J. Leporisová	P. Márton
10.	B	Tool for creation of Technical report of marshalling yard	M. Král'	P. Márton
11.	B	Simulation of chosen service system in Arena simulation tool	A. Kopček	P. Márton
12.	B	Simulation of chosen manufacture system in Arena simulation tool	N. Mešťánek	P. Márton
13.	D	Mesoscopic simulation of passenger's behaviour inside an airport terminal	J. Čičmanec	N. Adamko
14.	D	Simulation of movement dynamics of road vehicles	P. Miľocvčík	N. Adamko
15.	D	Simulation of airport ground handling processes	E. Richter	N. Adamko
16.	D	Tool for computer aided decision of station dispatcher of marshalling yard	P. Pribeli	P. Márton
17.	D	Comparison of Versions of the Banker s Algorithm	D. Nemčok	M. Žarnay
18.	D	Modelling of Transport Processes in YAWL Language	P. Britka	M. Žarnay
19.	D	Modelling of Resource Allocation System Using Petri Net	B. Zríni	M. Žarnay
20.	D	Random generation and rendering of large - scale terrain using current graphics hardware	Ľ. Ferianec	M. Lekýr
21.	B	Using of Taboo Search for the Location Problem solving	D. Kobilka	M. Koháni
22.	B	Using of the Genetic Algorithm for the Location Problem solving	L. Majerík	M. Koháni
23.	B	Database system for water consumption recording	M. Schiller	M. Hrčka
24.	B	Internet boo store	L. Mojto	M. Hrčka
25.	B	Internet chat portal	T. Slabej	M. Hrčka
26.	D	Rockwell Collins ProLine 21 avionics system simulation	Ľ. Černáček	R. Knápek
27.	D	The simulation environment for device based on SNMP protocol communication	R. Štuchal	A. Viselka
28.	D	Administration and access management to multimedia components in the Knowledge Management System	I. Kováčik	P. Fabián
29.	B	Simulation model of emergency medical service	P. Bučo	Ľ. Jánošíková

PUBLICATIONS

VIII.1. Journals and Proceedings

KAVIČKA, A., KLIMA, V., ADAMKO, N.: *Analysis and Optimisation of Railway Nodes Using Simulation Techniques*. In: Computers in Railways X. Computer System Design and Operation in the Railway and Other Transit Systems. WIT press, Ashurst Lodge, Ashurst, Sothampton, UK, 2006, ISBN 1-84564-177-9

ŽARNAY, M.: *Analysis of Marshalling Yard Model using Petri Nets*. In: Proceedings of International Conference Theory of Transportation Systems 2007, Pardubice, CR. Pp 267-273. ISBN 978-80-7194-927-5

CENEK, P., MÁRTON, P.: Finding Optimal Trackage Size of the Railway Station. In: Proceedings of International Conference "3. Forum of Railway Transport", March 2007, pp.36-39

SATTARI,S.,BACKHAUS,W., HENNING, K., SJOER, E.,FABIAN,P., MCQUADE, E.,PIMENTA, P.: *The Web-based Knowledge Map: The Combination of Practice-Oriented and Scientific Knowledge*. In: Proceedings of the 6. IASTED International Conference WEB-BASED EDUCATIONS, March 14-16, Chamonix. Pp.475-480, ISBN 9780-88986

FABIÁN,P., SKÝVA, L., KOVAŘÍK, K., SITÁNYIOVÁ, D., TARANOVÁ, K.: *European Projects Solved by CETRA –Transport section in 2006*. In: Poceedings of EURNEX- ZEL 2007,Tom 1, May 30-31,Žilina, pp.17-28, ISBN 978-80-8070-678-4

ČAMAJ, J., MÁRTON,P.: *A new Way of Completing Trains for Local Services in Bratislava-East Railway Station*. In: : Proceedings of EURNEX- ZEL 2007,Tom 1, May 30-31, Žilina, pp. 199-206, ISBN 978-80-8070-678-4

JANÁČEK, J., KOHÁNI, M.: *The Algorithm Supra for Marshalling Yard System Optimisation*. . In: : Proceedings of EURNEX- ZEL 2007, May 30-31, Žilina, pp. 191-198, ISBN 978-80-8070-678-4

JANÁČKOVÁ, M., SZENDREYOVÁ, A.: *Identification of Natural Centres in the Design of Intermodal Transport System*. . In: : Proceedings of EURNEX- ZEL 2007, Tom 1, May 30-31, Žilina, pp.183-190, ISBN 978-80-8070-678-4

CENEK, P., MÁRTON, P.: *Infrastructure Size Rationalization in Railway Stations*. In: Proceedings of ŽELAKTUEL 2007, Pardubice, 13.9.2007, pp. 23-27, ISBN 978-80-7194-993-0

CENEK, P., MÁRTON, P., MATIS, P.: *The Relationship Between Quantitative and Qualitative Measurements in Solving of Street Routing Problems*. In: Proceedings of 15th International Scientific Conference on Mathematical Methods in Economics and Industry, June 3-7,2007, Herľany, pp. 144-152, ISBN 978-80-89089-57-4, CD-ROM ISBN 978-80-89089-58-1

JANÁČEK, J.: *The Transport Facility Coordination Problem and the Optimization Solver MOSEL*. In: Proceedings of 15th International Scientific Conference on Mathematical Methods in Economics and Industry, June 3-7,2007, Herľany, pp. 44-49, ISBN 978-80-89089-57-4, CD-ROM ISBN 978-80-89089-58-1

SZENDREYOVÁ, A.: *Natural Distribution Centres and Intermodal Transportation System Design*. In: Proceedings of 15th International Scientific Conference on Mathematical Methods in Economics and Industry, June 3-7,2007, Herľany, pp. 50-56, ISBN 978-80-89089-57-4, CD-ROM ISBN 978-80-89089-58-1

KOHÁNI, M.: *Improving of the Upper Bound for Many-to-many distribution System Design*. In: Proceedings of 15th International Scientific Conference on Mathematical Methods in Economics and Industry , June 3-7,2007, Herľany, pp. 114-120, ISBN 978-80-89089-57-4, CD-ROM ISBN 978-80-89089-58-1

LOŠONSKÝ, P.: *FCTP Tabu Search Results Sensitivity to Structural Parameters*. In: Proceedings of 15th International Scientific Conference on Mathematical Methods in Economics and Industry, June 3-7,2007, Herľany, pp. 137-143, ISBN 978-80-89089-57-4, CD-ROM ISBN 978-80-89089-58-1

MATIS, P.: *Geomarketing in the Postal Services*. In: Proceedings of International Scientific Conference POSTPOINT 2007 “CUSTOMER SATISFACTION” , Žilina, Sept.12-14, 2007 ,pp.117-122, ISBN 978-80-8070-729-3

JÁNOŠÍKOVÁ, Ľ.: *Emergency Medical Service Planning*. In: Communications, Vol. 9,No 2, 2007, pp.64-68, EDIS – Publishing centre of the Zilina University, ISSN 1335-4205

JANÁČEK, J.: *Quality Criteria of the System of Medical Emergency Centres*. In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 125-130, ISBN 978-80-7194-989-3

SZENDREYOVÁ, A.: *Transfer Terminals in Intermodal Transport with Limited Service Perimeter*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 131-135, ISBN 978-80-7194-989-3

JANKOVIČ, P.: *Transport Systems Planning in Stochastic Conditions*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 137-142, ISBN 978-80-7194-989-3

ŽARNAY, M.: *Resources Assignment in Transport Systems*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 323-321, ISBN 978-80-7194-989-3

LOŠONSKÝ, P.: *Adaptive Setting of Parameters for Tabu Search Method*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 193-198, ISBN 978-80-7194-989-3

KOSTÚR, P.: *Agent-based Communication in Microscopic Simulation of Transportation Systems Control Using ABASim architecture*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 169-174, ISBN 978-80-7194-989-3

KOHÁNI, M.: *Using a Genetic Algorithm for Many-to-Many Distribution System Design Problem*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 163-168, ISBN 978-80-7194-989-3

JÁNOŠÍKOVÁ, Ľ.: *Transport-Accessibility Optimal Location of Medical Emergency Centres*. . In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 143-149, ISBN 978-80-7194-989-3

CENEK, P.: *Graphical support for Data Analysis*. In: Informatics in Education and in Practice. 2007, pp.8-11, Publishing Centre PF-KU Ružomberok, ISBN 978-80-8084-222-2

FABIÁN, P., MUHREN, A., WEEN, W.: *Finding a Balance in Blended Learning with Extra Large Student Group*. In: Proceedings of ICETA 2007, 5th International Conference on Emerging e-Learning Technologies and Applications. Sept. 6-8 2007, Stará Lesná, pp. 311-316, ISBN 978-80-8086-061-5

FABIAN, P., SATTARI, S., BACKHAUS, W., HENNING, K., SJOER, E., MCQUADE, E., PIMENTA, P., NASCIMENTO, C.J.: *Preserving The Experts Knowledge for the New Learners Map*. In: Proceedings of ICETA 2007, 5th International Conference on Emerging e-Learning Technologies and Applications. Sept. 6-8 2007, Stará Lesná, pp. 317-322, ISBN 978-80-8086-061-5

KAVIČKA, A., KLIMA, V., ADAMKO, N.: *Simulations of Transportation Logistic Systems Utilising Agent-Based Architecture*. In: International Journal of Simulation Modelling, Vol.6, No.1, March 2007, pp. 13-24. ISSN 1726-4529

ČAMAJ, J., MÁRTON, P.: *Adaption of Sorting Procedure in Railway Station Bratislava-East to the change of GVD*. In: Železničná doprava a logistika, No 1, 2007, pp.9-14, ISSN 1336-7943

LEKÝR, M., HOLÚBEK, M.: *The Development of Large Scale Models in the ABASIM Architecture*. In: Journal of Informatics, Control and Management Systems, Vol . 5, No. 1, 2007, pp.45-51, ISSN 1336-1716

TARÁBEK, P.: *Morphology Image Pre-Processing for Thinning Algorithms*. In: Journal of Informatics, Control and Management Systems, Vol . 5, No. 1, 2007, pp.131-138, ISSN 1336-1716

SLAVÍK, J.: *Road Accidents Investigation Model*. In: Journal of Informatics, Control and Management Systems, Vol . 5, No. 1, 2007, pp.337-344, ISSN 1336-1716

JANÁČEK, J.: *The Transport - Production Coordination Problem*. In: Communications, Vol. 9, No 2, 2007, pp.63-67, EDIS – Publishing centre of the Zilina University, ISSN 1335-4205

KOSTÚR, P.: *Design of Agent for Vehicle Movement at Cells in Microscopic Simulation Based on ABASIM*. In: Proceedings of TRANSCOM 2007, 7th European Conference of Young Research and Science Workers, Žilina, June 25-27, pp. 127-130, ISBN 978-80-8070-693-7

HOLÚBEK, M., LEKÝR, M.: *Operation Principles of Verification Module for ABA Builder Supporting Tool*. In: Proceedings of INFOTRANS 2007, Sept. 25-26, University Pardubice, pp. 115-118, ISBN 978-80-7194-989-3

HOLÚBEK, M.: *New Supporting Tool for Model Development ABASIM Architecture and its Future Extending*. In: Proceedings of TRANSCOM 2007, 7th European Conference of Young Research and Science Workers, Žilina, June 25-27, pp. 87-90, ISBN 978-80-8070-693-7

JANÁČEK, J.: *Service Systems Design with Limited Customer Distance*. In: Transport and Logistics, Košice 2007, International Conference LOADO, Nov. 7-11, 2007, Štrbské Pleso, ISSN 1451-107X

MÁRTON, P.: *Actual Condition in Transfer of Individual Carriages in Germany*. In: Železničná doprava a logistika, Vol. 3, No. 3/2007, pp. 11-14, ISSN 1336-7943

JACOB, R., MÁRTON, P., MAUE, J., NUNKESSER, M.: *Multistage Methods for Freight Trains Classification*. In: 7th Workshop on Algorithmic Methods and Models for Optimisation of Railways. Sevilla, Nov.15-16, 2007. ISBN 978-3-939897-04-0

Department of Management Theories

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Ing. Radka Majerová
Ing. Jana Makyšová
Ing. Marián Hrubizna
Ing. Vilam Lendel
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II. EQUIPMENT

Management laboratory

III. PhD.-Program

- DICOVÁ Jana: *Influence of creativity on the decision making in management*
- GAJDOŠÍK Jozef: *Innovation of CRM in the relation on the business strategy*
- GAŇOVÁ JANA: *Modelling of Performance Management processes, based on motivation and assesment*
- MAKYŠOVÁ Jana: *Exploitation of information technologies by the progressive forms of communication with customers*
- HRUBIZNA Marián: *Strategic decision making in management*
- LENDEL Viliam: *Customer relationship management in the company*

- MAJEROVÁ Radka: *Modelling of management processes on the base of effectiveness evaluating of human resources*
- MAREKOVÁ Paulína: *Algorithmization of decision making about the capital allocation in the risk conditions*
- MAGDOLENOVÁ Jana: *Decision making of management about the entry of the firm on the international market*
- NEDELJAKOVÁ Iveta: *Algorithmization of selected processes of management*
- RIPLOVÁ Katarína: *Influence of risk on the decision making in management*
- SOVIAR Jakub: *Development management of business activities in interaction of external and interaction environment*
- STREDÁKOVÁ Dana: *Strategic decision making in management*
- ŠTAFENOVÁ Jaroslava: *System Organizational Models In Context Of Learning Organization*

IV. RESEARCH PROJECTS

State Grant Projects – VEGA

- BLAŠKOVÁ, M.: *Dynamical Model of Motivation of Human Potential*
- HITTMÁR, Š.: *Management in Communication Systems II.*
- STRIŠŠ, J.: *Modelling of Management and Marketing Communication in Sector of Services*
- VODÁK, J.: *The growth of the competitive Advantage and measurement of the company performance*

State Grant Projects – KEGA

- HITTMÁR, Š.: *Methods for Management Decision-Making Support*

International Research - MVTS

- STRIŠŠ, J.: *The up to date Trends of Marketing and Management in Theory and Practice*

V. COOPERATION

V.1 Cooperation with Institutes and Enterprises in Slovakia

- The Railways of the Slovak Republic (ZSR)
- Slovak Rail (ZSSK)
- Slovak Rail CARGO
- Technical university Zvolen
- University of Matej Bell Banská Bystrica
- Tento, Žilina
- VW Slovakia, Bratislava.
- MASM, Žilina
- Wurth Holding, Bratislava
- Luger&Maklér, Trenčín

V.2 Cooperation with Foreign Institutes and Enterprises

- University of Pardubice, CZECH REPUBLIC
- OSŹD Warsaw, POLAND
- L'Institut Supérieur Logistique Industrielle Groupe ESC Bordeaux, FRANCE
- INT-EVRY, FRANCE
- European Polytechnical Institute, LLC., Kunovice, CZECH REPUBLIC

- Politechnika Warszawa, POLAND
- Silesian University of Technology, Katowice, POLAND
- Elanor, CZECH REPUBLIC
- Hexpert, CZECH REPUBLIC
- University of Vienna, AUSTRIA
- Central Connecticut State University, New Britain, USA
- Faculty of Public Administration of Mykolas Romeris University, LITHUANIA
- Częstochowa University of Technology, POLAND
- Ecole Nationale des Techniciens de l'Équipement Valenciennes, FRANCE
- Politecnico di Milano, ITALY
- RWTH Aachen, GERMANY
- TU Delft, NETHERLANDS
- University of Limerick, IRELAND
- University of Minho, Guimaraes, PORTUGAL
- Bradford, West Yorkshire Innovative Technology Institutes, UNITED KINGDOM
- Aalborg University, DENMARK
- University of technology, Espoo, FINLAND
- Estonian Agricultural University, Tartu, ESTONIA
- Masaryk University Brno, CZECH REPUBLIC
- University of Ljubljana, SLOVENIA
- University of West Hungary, Székesfehérvár, HUNGARY

V.2.1. Foreign Visitors to the Department

- Mr. Stanisław Borkowski, Mrs. Joanna Rosak - Czestochova University of Technology, POLAND
- April - Mr. Olivier Epinette, Olivier Segard - Colaboration with teachers in INT-Evry, FRANCE

V.2.2. Visits of Staff Members to Foreign Institutions

- Ms. Jana DICOVÁ - European Polytechnical Institute, Kunovice, CZECH REPUBLIC
- Ms. Jana DICOVÁ - Linköping University, Institute of Technology, Linköping, SWEDEN
- Mr. Štefan HITTMÁR - Central Connecticut State University, New Britain, USA
- Mrs. Mária BREZÁNIOVÁ, Mr. Jaroslav KRÁL - INT- Evry, FRANCE
- Mrs. Mária BREZÁNIOVÁ, Mr. Jaroslav KRÁL - University of Minho, Guimaraes, PORTUGAL
- Mrs. Mária BREZÁNIOVÁ, Mr. Jaroslav KRÁL - TU Delft, NETHERLANDS
- Mrs. Mária BREZÁNIOVÁ - House of Slovak Regions Brussels, BELGIUM
- Mrs. Mária BREZÁNIOVÁ - City Parliament Brussels, BELGIUM

V.3 Membership in Slovak Organizations and Societies

Assoc. Prof. Ing. **Jozef STRIŠŠ**, PhD.

- Slovak Marketing Society
- Czech and Slovak Society of University Marketing Teachers

Prof. Ing. **Štefan HITTMÁR**, PhD.

- Slovak Economical Club at Economical University of Bratislava
- Slovak Association for System Integration
- The Management Trainers' Association
- Slovak Science-technical Society

Ing. **Jozef GAJDOŠÍK**

- Slovak Association for System Integration

Assoc. Prof. Ing. **Jaroslav KRÁL**, PhD.

- APICS Association for Operations Management (global organization for academics and professionals)
- EDEN European Distance and E-learning Network (EU network of academics and professionals)

Assoc. Prof. Ing. **Josef VODÁK**, PhD.

- The Management Trainers' Association.
- Slovak Marketing Society.
- Slovak Science-technical Association.
- Supply Chain Council

RNDr. **Mária BREZÁNIOVÁ**, PhD.

- Slovak Marketing Society.

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	B	Managerial project of Hotel KASKADA	Z. Hrdá	Š.Hittmár
2.	B	Managerial project of firm NOVCHEM	T.Matejovičová	Š. Hittmár
3.	B	Training education for middle and higher management in Slovak firms	K. Matiašková	Š. Hittmár
4.	D	System of personal development and self management of a manager	T. Remek	Š. Hittmár
5.	B	Managerial Project of Firm PRIEBYT	I. Bielická	Š.Hittmár
6.	B	Test program application as a support for research and management of workgroup	P. Vojtková	J. Soviar
7.	B	Overview of marketing research methods	K. Svačková	J. Soviar
8.	B	Marketing plan of nonprofits organization	S. Šnircová	J. Soviar
9.	B	Marketing plan of nonprofits organization	J. Oswaldová	J. Soviar
10.	B	Proposal of selected EU support fund use for satisfaction of self-government of Rztocno city needs	M.Ivanová	J. Gajdošík
11.	B	Model solution of evaluating of resources in management of enterprise	M. Kadašiová	J. Dicová
12.	B	Implementation of selected function of management in management of enterprise	D. Kluvancová	J. Dicová
13.	B	Sources and financial support in the small and medium enterprise	E. Belancová	K. Riplová
14.	B	Quality of service in the selected firm	R. Okajčeková	R. Jankal
15.	B	Customer service evaluation in the conditions of elected firm	J. Pišová	R. Jankal
16.	B	Methods for customer requirement and satisfaction determination	J. Rusová	R. Jankal
17.	D	Scheme of an information system for needs in smaller self-government	T. Slavkovský	R. Jankal

No.	C.	Theme	Student	Supervisor
18.	B	Methods for quality assurance of products	R. Rus	R. Jankal
19.	B	Analysis of bank loans and preparing of Business plan	H. Balázsová	P. Mareková
20.	D	Marketing activities in tourism in a chosen locality of Slovakia	D. Liptáková	M. Kubina
21.	D	Marketing Strategies, their employment and imposition for new telecommunication services	P. Mišún	M. Kubina
22.	D	Market segmentation in the BtB marketing for supply house	M. Mráz	M. Kubina
23.	D	Proposal marketing strategy for company Váhostav-SK, a.s.	M. Comorek	I. Kálna
24.	B	Analysis of the national assistance and subsidies to enterprisers and processing the business plan	I. Rybianska	K. Riplová
25..	B	Improvement of enterprising environment in SR and its influence on SME	A. Oršulová	J.Magdolenová
26.	B	Selection of enterprising legal forms in conditions of SME	P. Píš	J.Magdolenová

27.	B	Marketing communication plan for a chosen micro enterprise	R. Makovický	J. Hlaváčová
28.	B	Marketing communication plan for a chosen small enterprise	S. Nemcová	J. Hlaváčová
29.	D	Utilization structural s funds European union in municipality micro-region Dolná Orava	V. Šuvadová	J. Gajdošík
30.	B	Information safety proposal of firm GeWiS Ltd.	M. Pekárová	J. Gajdošík
31.	B	Proposal of selected EU support fund use for satisfaction of self-government of Cigel city needs	D. Čertíková	J. Gajdošík
32.	B	Marketing approach by introducing new product on the market	Z. Ivančík	J.Strišš
33.	D	The influence of advertising on expansion of internet trade	M. Cimbák	J. Strišš
34.	D	Establishing of a new company on market	J. Chovancová	J. Strišš
35.	D	The motivation and motivating of employees and managers at the KRPA - Kubico, s.r.o. Bytča	D. Škriteková	M. Blašková
36.	D	The using of individual differences of personality at creation of motivation program of employees	A. Tarovská	M. Blašková
37.	D	Application of Quality Management Methods and Tools in a Manufacturing	M. Gallik	J. Král
38.	D	Application of Quality Management Methods and Tools in a Manufacturing	M. Michalec	J. Král
39.	D	Application of Quality Management Methods and Tools in a Manufacturing	P. Vojtek	J. Král
40.	D	Application of Quality Management Methods and Tools in a Manufacturing	L. Ružiak	J. Král
41.	D	Application of Quality Management Methods and Tools in a Manufacturing	R. Bros	J. Král

No.	C.	Theme	Student	Supervisor
42.	D	Application of Quality Management Methods and Tools in a Manufacturing	L. Országh	J. Král
43.	D	Application of Quality Management Methods and Tools in a Manufacturing	M. Rebroš	J. Král
44.	D	Effective implementation Balanced Scorecard method into company	N. Borody	J. Vodák
45.	D	Possibilities of application of Knowledge Management platform in selected organisation	M. Klimko	J. Vodák
46.	D	The creativity as a factor of business innovation process	J. Kováčová	J. Vodák
46.	D	Communication Mix Design for AGROSPOL Kysuce, s.r.o., Svrčinovec Creamery	M. Varmus	J. Strišš
47.	D	Project of communication activities for selected product	L. Karch	J. Strišš
48.	B	Marketing approach by introducing new product on the market	A. Pastierik	J. Strišš
49.	B	Communication strategy for selected corporation in industrial marketing	R. Nováková	J. Strišš
50.	B	Marketing in selected region	M. Sičová	J. Strišš
51.	B	Marketing approach by introducing new product on the market	J. Richter	J. Strišš
52.	D	Suggestion of communication campaign in company of service	M. Buchová	J. Strišš
53.	D	The propel of relationships between system of evaluation and system of motivation of employees and managers at chosen organizations	M. Šimunek	M. Blašková
54.	D	The using of communication and communication skills at creation of motivation program of employees and managers at chosen enterprise	D. Svítková	M. Blašková
55.	D	The proposal of motivation program of employees and managers at the VÁHOSTAV-SK-PREFA, s.r.o. Horný Hričov	I. Hrabovský	M. Blašková

VII. OTHER ACTIVITIES OF DEPARTMENT

Assoc. Prof. Ing. **Martina BLAŠKOVÁ**, PhD.

- Co-founder of the new Scientific Journal - Human Resource Management & Ergonomics
- Member of Scientific Committee of the Scientific Journal - Management of Industrial Enterprises
- Scientific guarantee of International Scientific Conference (Management of the Human Potential 2007, Modern Approaches to the Human Resources Management)
- Member of Academic Senate Faculty of Management Sciences and Informatics
- Member of the Council of Higher Education Institutions of the Slovak Republic

RNDr. **Mária BREZÁNIOVÁ**, PhD.

- Member of Sokrates/Minerva WeKnow 2006-2007, 225456-CP-1-2005-1-DE-MINERVA-M “WeKnow - The Web Knowledge Map: Integrating old and new generation's knowledge into higher education”
- Sokrates/Erasmus: 2007 Teaching Staff Mobility - Teaching of Business to Business Marketing in French on INT – Evry France

Ing. **Jozef GAJDOŠÍK**

- Member of Academic Senate Faculty of Management Sciences and Informatics
- General Editor SSSI magazine „System Integration”.
- Member of Committees for Preparing Conferences (System Integration 2007)

Prof. Ing. **Štefan HITTMÁR**, PhD.

- Member of Scientific Council of Faculty of Management Sciences and Informatics, University of Žilina
- Member of Scientific Council of Faculty of Special Engineering, University of Žilina, Žilina
- Member of Editorial Board EDIS ŽU
- Member of Committees for Preparing Conferences (Management in Railway 2007)

Assoc. Prof. Ing. **Jozef STRIŠŠ**, PhD.

- Member of Committee No 16 Ministry of Education SR for VEGA projects
- Member of Science Council of Faculty of Management Science and Informatics, University of Žilina
- Member of Draft Committee of Faculty Journal “Journal of Information, Controls and Management Systems”, University of Žilina

Ing. **Viliam LENDEL**

- Member of Academic Senate University of Žilina, the student chamber of Faculty of Management Sciences and Informatics

VIII. PUBLICATIONS

VIII.1. Books

- **BLAŠKOVÁ, M.:** *High-educated Human Potential Management and Development.* Monograph, (chapters 1, 2, 3, 4, 5, 6, 8). (10,00 AH - 121 pp.). Publishing house of Technical University in Zvolen. ISBN 80-228-1701-5
- **VODÁK, J., KUCHARČÍKOVÁ, A.:** *Effective education of employees.* Monograph, GRADA Publishing, ČR, 2007, 205 pp, ISBN 978-80-247-1904-7

VIII.2. Reviews published in Journals and Conferences

- **BLAŠKOVÁ, M.:** Dimensions of Motivation Programs. In: *Human Resource Management & Ergonomics 2/2007.* Zvolen. Technical University in Zvolen. 2007, pp. 5 – 13. ISSN 1337-0871

- BLAŠKOVÁ, M.: *Classification of motivation tools at motivation of human potential*. In: Scientific papers of Faculty of Economics and Administration - Research Report 2: Actual problems of theory and practise in economy. Pardubice: FES UP. 2007. pp. 13 – 20. ISBN 978-80-7395-005-7
- BLAŠKOVÁ, M.: *The Model of motivation penetration into process of manage and development of High-educated Human Potential*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 89 – 104. ISBN 978-80-8070-663-0 – CD
- BREZÁNIOVÁ, M.: *Benchmarking and informations*. In: Proceeding of scientific-specialist conference New trends in marketing, Trnava, 2007. Trnava: Faculty of Mass Media, University of SS Cyril and Methodius in Trnava, 2007. pp. 43-46. ISBN 978-80-89220-55-7
- BREZÁNIOVÁ, M.: *Quality and moral principles as tool of quality increasing through human potential*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina,, 2007. pp. 9-14. ISBN 978-80-8070-672-2
- DICOVÁ, J.: *Creative Knowledge Environment as Important Tool for Support of Managerial Decision-making Process*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 2/1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 147 – 152. ISSN 1336-1716
- DICOVÁ, J.: *Creativity – its Blockades and Possibilities of Development in Management*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 13-17. ISSN 1336-1716
- DICOVÁ, J.: *Function of managers in enterprise communication*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 200-206. ISBN 978-80-8070-663-0 – CD
- DICOVÁ, J.: *Development of human potential in intention of using creativity in education*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 143- 148. ISBN 80-7314-107-8
- DICOVÁ, J.: *Creativity in decision-making process of manager*. In: Proceeding of international scientific conference *TRANSCOM*, 7-th EUROPEAN CONFERENCE OF YOUNG RESEARCH AND SCIENCE WORKERS, Section 2, Part 1, Žilina, 2007. Žilina: University of Žilina, 2007. pp. 89 – 92. ISBN 978-80-8070-706-4
- DICOVÁ, J.: *Innovation – tool of increase enterprise competitiveness*. In: Proceeding of International Scientific Conference Enterprise and enterprise environment in SR. Bratislava, 2007. 10.5. – 11.5.2007, Modra. Bratislava: Faculty of enterprise management, University of Economics in Bratislava, 2007. pp. 270-273. ISBN 978-80-225-2364-6

- DICOVÁ, J.: *Human potential and its development by education*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina., 2007. pp. 93-97. ISBN978-80-8070-672-2
- DICOVÁ, J.: *Management and Quality of Customer Service in Transport*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Zilina: Faculty of Management Science and Informatics, University of Zilina, 2007. pp. 11-16. ISBN 978 -80-8070-780-4.
- DICOVÁ, J.: *Application of creativity in media environment*. In: Proceeding of scientific-specialist conference New trends in marketing, Trnava, 2007. Trnava: Faculty of Mass Media, University of SS Cyril and Methodius in Trnava, 2007. pp. 221-230. ISBN 978-80-89220-55-7
- GAJDOŠÍK, J.: *The Value of Business Intelligence by customer relationship management*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 211-216. ISBN 978-80-8070-663-0 – CD
- HITTMÁR, Š.: *Fundamentals of management theory*. In: Scientific papers of Faculty of Economics and Administration - Research Report 2: Actual problems of theory and practise in economy. Pardubice: FES UP. 2007. pp. 42-49. ISBN 978-80-7395-005-7
- HITTMÁR, Š.: *Communication management – science field, discipline or practical function?* In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 217-222. ISBN 978-80-8070-663-0 – CD
- HITTMÁR, Š.: *Managers – original category of human potential*. In: Proceeding of International Scientific Conference FP UVUT Brno. Brno: FP VUT Brno. pp. 5. ISBN 978-80-214-3482-0. CD
- HITTMÁR, Š.: *Decision-making in management*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 35-41. ISBN 80-7314-107-8
- HITTMÁR, Š.: *The Analysing and Modelling of ZSR Strategy*. In: Academic journal Mechanics Transport Communications, issue 3/2007, part III. Sofia, Bulharsko: ВИСШЕТО ТРАНСПОРТНО УЧИЛИЩЕ “ТОДОР КАБЛЕШКОВ”. 2007. Article No 0208, pp. XII-35 – XII-40. ISSN-1312-382310.
- HITTMÁR, Š.: *The Model of Slovak Railway System Strategy*. In: Proceeding of XXXIV. International Scientific Conference North Business and Economics Association 2007. USA, New Britain: Central Connecticut State University. 2007. pp. 332-336
- HITTMÁR, Š.: *Management of quality in transport as service*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Zilina: Faculty of Management Science and Informatics, University of Zilina, 2007. pp. 21-28. ISBN 978 -80-8070-780-4.

- HITTMÁR, Š.: *Marketing information systems*. In: Proceeding of International Scientific Conference Marketing and Trade 2007. Department of marketing, business and world wood. Zvolen, 2007. Zvolen: Faculty of wood science and technology, Technical University in Zvolen. 2007. pp. 57-61. ISBN 978-80-8093-026-4
- HITTMÁR, Š.: *Approaches and styles of communication*. In: Proceeding of scientific-specialist conference New trends in marketing, Trnava, 2007. Trnava: Faculty of Mass Media, University of SS Cyril and Methodius in Trnava, 2007. pp. 59-64. ISBN 978-80-89220-55-7
- HITTMÁR, Š.: *Decision-making under condition of uncertainty – core of risk management..* In: Proceeding of 12. International Scientific Conference *Solving Crisis Situations in Specific Environment*, Faculty of Special Engineering, University of Žilina, 2007. pp. 799-802. ISBN 978-80-8070-701-9. CD
- HITTMÁR, Š.: *Work place and its sense in management*. In: Proceedings of international scientific conference Modern approaches to the human resources management. TnU AD Trenčín. 2007, pp. 60-66. ISBN 978-80-8075-195-1.
- HITTMÁR, Š.: *Theoretical basics of management*. In: Proceeding of International Scientific Conference Society and Science 2007. Trenčín: TnU AD Trenčín, FSEV. 2007. pp. 6. ISBN 978-80-8075-184-5
- HRUBIZNA, M.: *Strategy of Enterprise*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 31 – 38. ISSN 1336-1716
- HRUBIZNA, M.: *Decision process*. In: Proceeding of international scientific conference *TRANSCOM, 7-th EUROPEAN CONFERENCE OF YOUNG RESEARCH AND SCIENCE WORKERS*, Section 2, Part 1, Žilina, 2007. Žilina: University of Žilina, 2007. pp. 153-156. ISBN 978-80-8070-706-4
- HRUBIZNA, M.: *The utilization of knowledge management tool: trainee program*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina., 2007. pp. 109-114. ISBN978-80-8070-672-2
- HRUBIZNA, M., LENDEL, V.: *University as strategic aspect of regional development*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 71 - 74. ISBN 80-7314-107-8 (0,5)
- JANKAL, R.: *Communication and informatics technologies*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 223 – 226. ISBN 978-80-8070-663-0 – CD
- JANKAL, R.: *Quality and its importance in transport services*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Fakulta riadenia a informatiky, Žilinská univerzita v Žiline, 2007. pp. 34-39. ISBN 978 -80-8070-780-4.

- KRÁL, J.: *Introduction to Coordination concept*. In: Human Resource Management & Ergonomics 2/2007. Zvolen. Technical University in Zvolen. 2007, pp. 40 - 45. ISSN 1337-0871
- KUBINA, M., LENDEL, V.: *Conception of complex (total) service*. In: Marketing and communication. Praha: Czech marketing society, 2007. Volume XVII. No. 3/2007. pp. 10 - 11. ISSN 1211-5622
- KUBINA, M., LENDEL, V.: *CRM processes and possibilities of its informatization*. In: Post, telecommunications and electronic trade. Žilina: University of Žilina, 2007. Volume II. No. III/2007. pp. 25 - 31. ISSN 1336-8281 (0,5)
- KUBINA, M., LENDEL, V.: *Telemarketing – effective form of direct marketing*. In: Post, telecommunications and electronic trade. Žilina: University of Žilina, 2007. Volume II. No. IV/2007. pp. 6 - 10. ISSN 1336-8281 (0,5)
- KUBINA, M., LENDEL, V.: *Buildup of relationships with customer*. In: Proceeding of International Scientific Conference Marketing and Trade 2007. Department of marketing, business and world wood. Zvolen, 2007. Zvolen: Faculty of wood science and technology, Technical University in Zvolen. 2007. pp. 154 - 158. ISBN 978-80-8093-026-4 (0,5)
- LENDEL, V.: *The Value Net*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 2/1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 241 - 250. ISSN 1336-1716
- LENDEL, V.: *Attributions of work staffs in context CRM*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 56 - 62. ISBN978-80-8070-672-2
- LENDEL, V.: *The CRM Process Framework*. In: Proceeding of international scientific conference TRANSCOM, 7-th EUROPEAN CONFERENCE OF YOUNG RESEARCH AND SCIENCE WORKERS, Section 2, Part 2, Žilina, 2007. Žilina: University of Žilina, 2007. pp. 9 – 12. ISBN 978-80-8070-707-1
- LENDEL, V.: *Increasing of quality providing services in transport enterprise through CRM*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Zilina: Faculty of Management Science and Informatics, University of Zilina, 2007. pp. 51 - 58. ISBN 978 -80-8070-780-4.
- LENDEL, V., HRUBIZNA, M.: *Internal and external communication of education institution*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 163 - 166. ISBN 80-7314-107-8 (0,5)
- LENDEL, V., KUBINA, M.: *Teleworking and communication technologies*. In: Post, telecommunications and electronic trade. Žilina: University of Žilina, 2007. Volume II. No. III/2007. pp. 18 - 22. ISSN 1336-8281 (0,5)

- LENDEL, V., KUBINA, M.: *Procedure of Successful Preparation and Implementation of CRM in the Company*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 2/1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 233 - 240. ISSN 1336-1716 (0,5)
- LENDEL, V., KUBINA, M.: *Supporting procedure for successful preparation of CRM in an organization*. In: The International Scientific Conference - Customer Relationship Management 2007. Liberec: University of Pardubice - Faculty of chemical technology and Technical university of Liberec - Faculty of business and economics, 10. - 11. September 2007. pp. 90-97. ISBN 978-80-7395-015-6 – CD (0,5)
- MAGDOLENOVÁ, J.: *Empiric methods of decision-making in management*. In: „Scientific Papers of the University of Pardubice-Series D” Pardubice. University of Pardubice. 2007. pp.192-196. ISSN 1211-555X
- MAGDOLENOVÁ, J.: *Decision-making Process of the Firm’s Modus Operandi in the Foreign Markets*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 53-60. ISSN 1336-1716
- MAGDOLENOVÁ, J.: *Managerial decision-making process about entry of firm at foreign market*. In: Management in theory and practice, Volume 3, 2007, No.1-2. Department of management, PHF Košice, Economic University in Bratislava. pp. 73 – 79. ISSN 1336-7137
- MAKYŠOVÁ, J.: *Modern information technologies as tool of export travel tourist*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 275-281. ISBN 978-80-8070-663-0 – CD
- MAKYŠOVÁ, J., SOVIAR, J.: *Education process at university of Zilina as factor of regional development*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 125 - 130. ISBN 80-7314-107-8 (0,5)
- MAREKOVÁ, P.: *Customer Relationship Management*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 67 - 72. ISSN 1336-1716
- MAREKOVÁ, P.: *How to be successful with small-sized enterprise in the market (Guerrilla marketing)*. In: Proceeding of scientific-specialist conference New trends in marketing, Trnava, 2007. Trnava: Faculty of Mass Media, University of SS Cyril and Methodius in Trnava, 2006. pp. 121-124. ISBN 978-80-89220-55-7
- MAREKOVÁ, P.: *Counter trade*. In: Proceeding of international scientific conference *TRANSCOM*, 7-th EUROPEAN CONFERENCE OF YOUNG RESEARCH AND SCIENCE WORKERS, Section 2, Part 2, Žilina, 2007. Žilina: University of Žilina, 2007. pp. 21-24. ISBN 978-80-8070-707-1

- MAREKOVÁ, P.: *Quality in personal department - Investor in People*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina., 2007. pp. 63-67. ISBN978-80-8070-672-2
- MAREKOVÁ, P., RIPLOVÁ, K.: *Utilization of management in practical activity of managers of university*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 137-141. ISBN 80-7314-107-8 (0,5)
- RIPLOVÁ, K.: *Failure mode and effects analysis and failure modes, effects and criticality analysis as tool of risk*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 1 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 111-120. ISSN 1336-1716
- RIPLOVÁ, K.: *Function of communication in work with strategy of enterprise*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 227-231. ISBN 978-80-8070-663-0 – CD
- RIPLOVÁ, K.: *Increasing of project management performance by project team*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina., 2007. pp. 75 – 81. ISBN978-80-8070-672-2
- RIPLOVÁ, K.: *Necessity to manage of risks of enterprise projects*. In: Proceeding of International Scientific Conference Enterprise and enterprise environment in SR. Bratislava, 2007. 10.5. – 11.5.2007, Modra. Bratislava: Faculty of enterprise management, University of Economics in Bratislava, 2007. pp. 289-291. ISBN 978-80-225-2364-6
- RIPLOVÁ, K.: *Project risk management*. In: Proceeding of international scientific conference *TRANSCOM*, 7-th EUROPEAN CONFERENCE OF YOUNG RESEARCH AND SCIENCE WORKERS, Section 2, Part 2, Žilina, 2007. Žilina: University of Žilina, 2007. pp. 99-102. ISBN ISBN 978-80-8070-707-1
- RIPLOVÁ, K.: *Risk and decision making process*. In: Science journal Journal of Information, Control and Management systems, VOLUME 5, No. 2/2 Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 331 - 336. ISSN 1336-1716
- RIPLOVÁ, K.: *The sense of quality in decision-making process of transport enterprise*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Zilina: Faculty of Management Science and Informatics, University of Zilina, 2007. pp. 85 - 90. ISBN 978 -80-8070-780-4.
- SOVIAR, J.: *Cluster – possibility of competitive advantage profit*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 282 – 289. ISBN 978-80-8070-663-0 – CD

- STRIŠŠ, J.: *Analysis of customers at international markets and forms of entry at international markets*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 290-297. ISBN 978-80-8070-663-0 – CD
- STRIŠŠ, J.: *Possibilities of outsourcing of enterprise transport in Slovak post, s. c.* In: Proceedings of the International Scientific Conference „Outsourcing in transport-logistic processes and scope localization of public logistics centres“ DFJP University of Pardubice. 2006. pp. 181-185. ISBN 978 -80-7395-22-4.
- STRIŠŠ, J.: *Analysis of customers segment by semiometrics*. In: Proceeding of International Scientific Conference Marketing and Trade 2007. Department of marketing, business and world wood. Zvolen, 2007. Zvolen: Faculty of wood science and technology, Technical University in Zvolen. 2007. pp. 290 – 296. ISBN 978-80-8093-026-4
- STRIŠŠ, J.: *Relationship of quality and marketing*. In: Proceeding of International Scientific Conference Management in the railway transport 2007, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina, 2007. pp. 91-94. ISBN 978 -80-8070-780-4.
- STRIŠŠ, J., NADÁNYIOVÁ, M.: *Marketing communication as factor of sphere development*. In: Proceeding of III. International conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 75-78. ISBN 80-7314-107-8 (0,5)
- STRIŠŠ, J., KUBINA, M.: *Utilization of information technologies in marketing – factor of successful of enterprise at global markets*. In: Proceedings of scientific conference Globalization and its social-economical effects '07“. FPEDaS ŽU, Žilina. Randa a.s., 2007. pp. 541 - 545. ISBN 978-80-969742-0-7 (0,5)
- VODÁK, J.: *An Approach to Measuring the Return on Investment in the Area of Human resources*. Economy and Management, 1/2006, Czech republic, TU Liberec, pp. 41-47. ISSN 1212-3609
- VODÁK, J.: *Marketing planning for entry at foreign markets*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 186-192. ISBN 978-80-8070-663-0 – CD
- VODÁK, J.: *Increasing of competitive ability of enterprise by Balanced Scorecard*. In: Proceeding of scientific papers Science Veda 2006, Žilina, 2007. Žilina: Faculty of Management Science and Informatics, University of Žilina 2007. pp. 193-198. ISBN 978-80-8070-663-0 – CD
- VODÁK, J.: *Compatibility critical factors of successful and Balanced Scorecard*. In: Festive Scientific Conference on the Occasion of 15th Anniversary of the Establishment of Faculty of Business and Management Brno University of technology. Czech Republic. ISBN 978-80-214-3482-0. CD

- VODÁK, J.: *Identification of education requirements as factor of increasing of competitive ability of enterprise*. In: Proceeding of 4. International Scientific Conference Management of human resources in enterprise. Žilina, 2007. 16. – 17. May 2007. Žilina. Žilina: Faculty of Management Science and Informatics, University of Žilina,, 2007. pp. 161-165. ISBN978-80-8070-672-2
- VODÁK, J., MATUŠÍKOVÁ, I.: *Increasing of education effectively of high school students of managerial orientation*. In: Proceeding of III. International Conference University as facilitator of society and region development, Kunovice, 2007. Kunovice: European Polytechnical Institute, Kunovice, 2007. pp. 149-155. ISBN 80-7314-107-8 (0,5)

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II. EQUIPMENT

II.1 Teaching and Research Laboratories

Laboratory of Object Technologies

Laboratory of Control Process Developing

II.2 Servers:

KST	Fedora Core
VAII	Fedora Core
TITAN	Fedora Core
EOS	MS Windows 2003 Server
PERSEUS	MS Windows 2003 Server

III. PhD-Programme

Theme	Student	Supervisor
Knowledge Search in Semantic Defined Environment	P. Hrkút	K. Matiaško
Transport Technology and Computer Graphics	J. Ružbarský	K. Šotek
Comprehensive Database of Railway Transport	V. Tavač	K. Šotek
Car fleet optimization in the transport system in fuzzy conditions.	M. Gábor	K. Šotek
Object and temporal database transformation	M. Tavač	K. Matiaško
Database Distribution Process Control	J. Janech	K. Matiaško
Modeling and Simulation of Technological Processes	M. Abaffy	K. Šotek, Ľ. Sadloň

IV. RESEARCH PROJECTS

- Ľ. SADLOŇ - Models of Transport Processes, Project Number – ČR/SR/ŽU/05
- O. BARTL - Decision Support Tools for Design of Complex Distribution and Servicing Systems, Project Number: VEGA 1/3775/06 – assistant manager
- E. KRŠÁK, P. HRKÚT - Co-ordination and stimulation of innovative ITS activities in Central and Eastern European countries (TEMPO project)
- E. KRŠÁK, P. HRKÚT, M. TAVAČ, V. TAVAČ, J. RUŽBARSKÝ, H. BACHRATÝ, Ľ. SADLOŇ, M. GÁBOR: International cooperation among fire and life rescue departments using monitoring and navigation system for firetrucks on emergency incidents in Euroregion Byskydy (European Interreg IIIA project)

V. COOPERATION

V.1 Cooperation with Institutes and Enterprises in Slovakia

- University of Matej Bel, Banská Bystrica
- Railways of Slovak Republic
- Slovak Society for Quality
- Slovak Post
- Hewlett Packard Slovakia, Ltd.
- Slovak Gas Industry

V.2 Cooperation with Foreign Institutes and Enterprises

- University of Pardubice, The Jan Perner Transport Faculty, Department of Informatics in Transport, Czech Republic
- INT - National Institute of Telecommunications, Evry, France
- TUD - University of Technology Dresden, Germany
- Czech Railways
- AŽD Prague, Czech Republic
- Ministry of Health, Czech Republic

V.2.1. Foreign Visitors to the Department

- BARWALD Werner, Prof., University of Technology, Dresden, Germany
- BAUMANN Stephan, Ass. Prof, University of Technology, Dresden, Germany

V.3 Membership in Slovak Organizations and Societies

O. Bartl:

- Slovak Society for Operations Research

M. Hrnčiar:

- Slovak Society for Quality

E. Kršák:

- SANET – ADMIN

M. Gábor:

- Intelligent Transport Systems Association Slovakia

H. Bachratý:

- Union of Slovak Mathematicians and Physicists

V.4 Membership in International Organizations and Societies

M. Hrnčiar:

- Austrian Society for Process Management

V.5 Contracts with Slovak and Foreign Institutions

- Railways of Slovak Republic
- Czech Railways
- Slovak Post
- Slovak Society for Quality
- Czech Ministry of Health
- Hewlett Packard
- AŽD Praha, s.r.o.
- Scheidt & Bachmann

VI. MASTERS THESES (D) and BACHELORS WORKS (B)

No.	C.	Theme	Student	Supervisor
1.	D	Enterprise Framework Extension	V. Hrach	P. Obert
2.	B	Teaching aid for semester project of subject 5BI04 Object-oriented programming	T. Bača	Ľ. Sadloň
3.	B	Online booking for hotels - teaching aid	V. Kysel'a	Ľ. Sadloň
4.	D	Reverse engineering to UML diagrams	P. Kovalík	L. Sadloň
5.	D	Forward engineering from UML diagrams	M. Špigura	L. Sadloň
6.	B	Translating Dictionary for Mobile Telephone	F. Červeň	V. Tavač
7.	B	Graphical representation of a algorithm in the theory of graphs	A. Ferianc	V. Tavač
8.	B	File Manager of Shared Folders	M. Ferletjak	V. Tavač
9.	D	Knowledge Database of design Patterns.	S. Šlosár	V. Tavač
10.	B	Caching application block	J. Rybárik	M. Tavač
11.	B	Validation tool for application code consistency with database schema	K. Daňo	M. Tavač

12.	B	Design and implementation of tree generator as plugging for animation program XSI 5.0	M. Tomka	M. Tavač
13.	D	.NET Assemblies Automated Deployment System	L. Kopernický	M. Tavač.
14.	B	Information system for used car sale	M. Kuba	M. Tavač
15.	B	Analysis, design and implementation of bank reader device driver	P. Pudiš	S. Piecka
16.	B	Academic information system	T. Čurilla	J. Ružbarský
17.	D	Design and implementation of system for controlling the transportation information boards	V. Mikušík	S. Piecka
18.	D	Design and implementation of parts of Information system modules using metamodeling	V. Fedorco	P. Obert
19.	D	ASP.NET custom controls package for creating Web 2.0 web applications	J. Sokoly	P. Obert
20.	D	Communication between an on-board unit and peripheral devices	V. Bittner	P. Hrkút
21.	D	Development of secure network applications for Pocket PC platform	M. Piroh	P. Hrkút
22.	B	Documents generating based on LDAP server data	M. Valihora	P. Hrkút
23.	B	Bug tracking system for FRI projects	J. Guniš	P. Hrkút
24.	B	User Effectivity increasing of Information system S.REAL	M. Pulc	P. Hrkút
25.	B	Document transformation using XSLT	J. Mihok	P. Hrkút
26.	D	Windows application design with 3D user interface	R. Pacek	M. Tavač
27.	B	Simple information system for manufacture company	J.Manduch	M. Tavač
28.	D	Assessment of the benefits from changed approach to production	M. Bubanec	M. Hrnčiar
29.	D	Failure Mode and Effect Analysis in a production process	R. Chupáč	M. Hrnčiar
30.	D	Assessment of the software products development processes	M. Hrobák	M. Hrnčiar
31.	D	Database information system for credit evidence	M. Hanajík	M. Hanajík
32.	D	Architecture of mixed application for Pocket PC	A. Kobr	Kršák E.
33.	B	Web interface for network element monitoring system via SNMP	M. Štěpánek	J. Bobek
34.	B	Delphi component creation	T. Rakšáni	J. Ružbarský
35.	B	Futsal management system	J. Marek	J. Ružbarský
36.	B	Sound processing	Príbeli	M. Gábor
37.	B	Calendar server	P. Jánoška	E. Kršák
38.	B	Freeway Commander - Plugging engine	V. Púčik	E. Kršák
39.	B	Freeway Commander - Graphical user interface (GUI)	Š. Baďura	E. Kršák
40.	B	Freeway Commander - Virtual file system (VFS)	J. Mikulovský	E. Kršák
41.	B	Application for management with shared calendars	V. Mlatko	E. Kršák
42.	D	Symbian universal 3d presentation module for navigation systems	M. Dovjak	E. Kršák
43.	D	Pocket PC universal 3d presentation module for navigation systems	M. Hudák	E. Kršák
44.	D	Intelligent building	R. Holas	E. Kršák

45.	D	Integration of web application based on Struts into enterprise portal	P. Šimšík	A. Vanek
46.	B	Web system for school	M Švidroň	B.Kožiaková
47.	B	Sport-racing computer game	M.Boháčik	J. Ružbarský

VII. OTHER ACTIVITIES

M. Hrnčiar:

- Vice-president of Slovak Society for Quality
- Member of the Editorial Board of the revue “Kvalita”
- Member of the Slovak Technical Committee K22 - Quality

E. Kršák:

- Administrator of Certificate Authority FRI-ZU
- Registrar of internet domains TLD sk

H. Bachratý:

- Governor of foundation “Ingenium”
- Lecturer in ESF project for schooling of mathematics teachers
- Member of the regional committee of Union of Slovak Mathematicians and Physicists
- Activities in mathematical talents education

J. Ružbarský:

- Coordinator of Partnership among University of Applied Sciences Dresden, Germany and FRI ŽU Žilina

VIII. PUBLICATIONS

VIII.1 Books

DADO,M., ZÁHRADNÍK,J. A KOL.: *Technologies and Services of Intelligent Transport*. Published by ŽU-EDIS, 2007, part 149-158, ISBN 978-80-8070-691-3

VIII.2 Journals

HRNČIAR,M.: *Service Level Agreement – quality guarantee tool of delivering service* , Journal KVALITA 2/2007, pages.12 - 14, ISSN 1335-9231

VIII.3 Conferences

ŠOTEK,K., BACHRATÝ,H.: *New possibilities of the real-time simulation models in railway transport*. Conference "Theory of transport systems" 2007, Pardubice 2007, pages.9-18, ISBN 987-80-7194-927-5

BACHRATÝ,H., SADLOŇ,L.: *Modification of the generalized flowchart*, Conference "Theory of transport systems" 2007, Pardubice 2007, , pages. 9-18, ISBN 987-80-7194-927-5

KRŠÁK,E., BACHRATÝ,H., TAVAČ,V.: *GTN-Information system for control support of international corridor lines*, Conference- 3rd track transport forum 2007, Reming Consult, a.s.,Bratislava 2007, pages. 121-128

BACHRATÝ,H., TAVAČ,M.: *VIS System Algorithm for train connection searching and accelerating methods*, Conference INFOTRANS 2007, September 25-26th , 2007, Pardubice, issued by Univerzita Pardubice, pages 51-56, ISBN 978-80-7194-989-3

HRKÚT,P.: *Board unit functions for dangerous load transport and their software implementation*, Conference INFOTRANS 2007, September 25-26th , 2007, Pardubice, issued by Univerzita Pardubice, pages119-124, ISBN 978-80-7194-989-3

RUŽBARSKÝ,J., KRŠÁK,E.: *Platform transformation of the graphic software systems*, Conference INFOTRANS 2007, September 25-26th , 2007, Pardubice, issued by Univerzita Pardubice, pages 175-180, ISBN 978-80-7194-989-3

ŠOTEK,K.: *10 years of all-network SENA-JŘ-VT operation in Czech Republic railways*, Conference INFOTRANS 2007, September 25-26th , 2007, Pardubice, issued by Univerzita Pardubice, pages 277-286, ISBN 978-80-7194-989-3

SADLOŇ,L., AMCHA,R., KRÝŽE,P.: *Application of the flowchart for working intervals calculation*, Conference INFOTRANS 2007, September 25-26th , 2007, Pardubice, issued by Univerzita Pardubice, pages 277-286, ISBN 978-80-7194-989-3

ŠOTEK,K., BACHRATÝ,H.: *Creation of the simulation models as a part of research study solution*, XXIX. International Autumn Colloquium ASIS 2007, 18-20.9.2007, Technická Universita Ostrava, pages 69-74,ISBN 978-80-86840-34-5

BACHRATÝ,H., BACHRATÁ,K.: *Stochastic variable on internet*, Conference on Mathematic and Physics in Technical Universities ", September, 13rd. 2007, Brno, University Obrany Brno, pages 21-31,ISBN 978-80-7231-274-0

HRNČIAR,M.: *Management of Compliances in Post Services Area*, Conference POSTPOINT 2007, 12-14.9.2007,pp. 113-116, ISBN 978-80-8070-729-3

HRNČIAR,M., MATIS,P.: *Geomarketing in Post Services Conditions*, Conference POSTPOINT 2007, 12-14.9.2007,pp. 117-122, ISBN 978-80-8070-729-3

TAVAČ,M.: *MDA Based Object Database Transformation*, Conference Transcom 2007, Žilina, pages 245-248, ISBN 978-80-8070-693-7

KRŠÁK,E., HRKÚT,P.: *Software architecture of the vehicle board unitand control center*, Conference ITS 2007. Bratislava. September, 11-12th. 2007 Bratislava, 2007, CD-ROM, ISBN 978-80-254-0207-8