

List of Services Offered by the Faculty of Electrical Engineering, University of Zilina

Research and Development Activities

- optimisation and regulation of electrical equipment, with respect to energetic aspects and ecological load for environment, determining lifetime and the stage of aging of binding insulation for electric machine in real time (KMAE)
- research in the field of industrial automation of technological processes, MES and SCADA/HMI systems. Synthesis of complex control algorithms based on sequential control (KME)
- research in the field of intelligent multi-robotic and mechatronic systems (KME)
- active filters with orientation to elimination of negative effects of semi-conductor transformers to electroenergetic system, control systems for electric drives, control systems for power electrical engineering, static transformers based on resonant principle (KVES)
- reconfigurable logical applications with FPGA (KME)
- analysis and diagnostics of electronic systems using image processing, analysis of integrated circuits (elements, chips) (KME)
- analysis and simulation of temperature fields in multiphysical environment COMSOL (KME)
- research and development in the field of sophisticated technologies and rapid prototyping of technical equipment based on mechatronic principles (KME)
- research, development and testing of magnetisation and demagnetisation technical equipment for the field of manufacturing technologies (KME)
- analysis of thermovision image, image processing and archivation in biomedicine (KME)
- development of suitable techniques for study of mechanical, electrical and optical properties of materials and structures (KF)
- development of methodologies of wave imaging – acoustic microscopy (KF)
- analysis and synthesis of system of protocols for communication systems with a special assortment of services, analysis and synthesis of systems with a defined level of safety (KRIS)
- analysis and synthesis of information systems, analysis and synthesis of modern safety-related systems, elaboration of project documentation in the field of protection of persons and property, and in the field of road traffic control (KRIS)
- research, studies, regulations, consultations in the field of intelligent transport systems (KRIS)



- analysis of mathematical models in the field of material research (KZI)
- diagnostics of optical properties of solid substance thin layers (KZI)
- investigation and optimization of optical properties of thin layers for thin-film solar cells and for hybrid electronics (KZI)
- automated systems of heliostat turning based on locally defined astronomic calculations, control and operating with the use of DC commutator and step motors (KExE)
- solution of heliotechnical equipment and system solutions in the field of concentration solar energetics, simulation, modelling, measurement of intensity of solar radiation, practical verification of conversion thermo-mechanical converters (KExE)
- amplifiers in the class E with serial and parallel configuration for the use as sinus transformers of AC/AC-DC/DC type and power functional generators, design of power and control circuits with the use of pulsewidth modulation (KExE)
- telecommunication and radiocommunication systems, networks and services (KTaM)
- development of applications with multimedia contents (KTaM)
- expertises in the field of optimizing structures of telecommunication networks of new generations (KTaM)

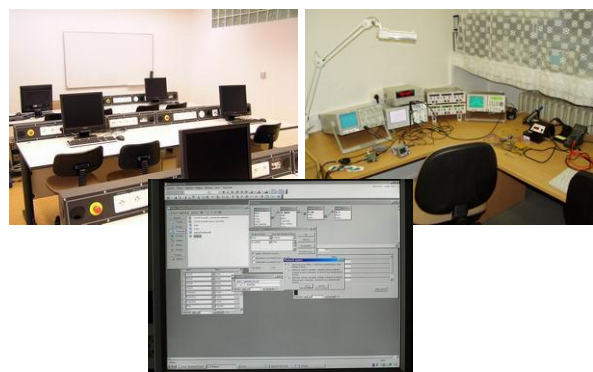
Training and Courses

- negative effects on electricity supply system, dispatcher control of electricity supply systems, problems of idle power, protections of buried equipment against electrochemical corrosion, supply of electrical traction equipment (KVES)

- training and courses for the field of LANs, MANs, WANs and their applications. Industrial and information networks (KME)
- training and courses in design and programming of industrial automatons Siemens, Rockwell Automation and Schneider Electric (KME)
- training and courses in the field of mechatronics and mechatronic systems (KME)
- training and courses in the field of sophisticated technologies, design of virtual parametric models and rapid prototyping of technical equipment models based on mechatronic principles (KME)
- re-construction of driving vehicles (KVES, KMAE)
- electrical drives and control of traction vehicles, traction calculations, design and dimensioning of urban mass transport, design of electric regulation drives with DC and AC engines, design of electric traction drives with asynchronous engines, repairs and innovations of electric drives (KVES)
- the field of dielectric vehicles, electric power transfer (KVES, KMAE)
- power semiconductor structures and elements - diodes, thyristors, bipolar and unipolar transistors, combined structures (KVES)
- IGBT, MCT and IGCT, power semiconductor transformers – rectifiers, inverters, DC and AC transformers, AC regulators, cycloconverters (KME)
- power semiconductor systems (switched supply sources, induction heating), active filters and power factor compensators, control systems with monolithic microcomputers and DSP-processors (KME)
- telecommunication and radiocommunication systems, networks and services (KTaM)
- optical communication systems and networks (KTaM)
- digital signal processing (KTaM)
- training oriented to basic as well as advanced problems of computer technique (KF)
- requalification courses in the field of car electrical engineering (KMAE)
- quality management systems according to requirements of the standards ISO 9000, training of internal auditors in the sense of standard ISO 19011 (KVES)
- Microsoft operation systems, Microsoft Office packet of programmes, using Internet
- private communication networks (KTaM)
- software development in the field of non-destructive testing of materials and technical equipment (KTEBI)
- mobile and wireless networks (KTaM)
- analogue and digital television, audio, video and data services (KTaM)
- modelling of access networks for audio, video and data services (KTaM)
- optical communication systems and networks (KTaM)
- digital signal processing, analysis of audio and video signals (KTaM)
- sound distribution, evaluation of space acoustics (KTaM)
- design of concepts, analysis, synthesis, design and management of information systems, assessment of modern electronic safety-related equipment, solution of problems of railway operation aimed at railway interlocking and signalling systems (KRIS)
- negative effects on electricity supply systems, EMC - harmonic components, asymmetry of electricity supply systems, total power factor, flicker (KVES, KME)
- dispatcher control of electricity supply systems, problems of idle power, protections of buried equipment against electrochemical corrosion, supply of electric traction equipment (KVES)
- technical translations (electrical engineering – weak current) from English, German and Spanish, translations to English and German (KTEBI)
- the field of small and medium enterprises – virtual institution, pedagogical supplementary education, didactics of teaching technical courses in secondary technical schools (KMAE, KTEBI)
- expert services in mechatronics (KME)
- the field of mechatronics and mechatronic systems (KME)
- analysis of mathematical – statistical and probabilistic models (KZI)
- the field of materials for thin layer solar cells (KZI)
- concentration solar energetics, generally consultations in solving and using renewable energetic sources (KExE)

Consultation Activities in the Fields

- design of special measurements of physical quantities and results interpretations (KF)
- next generation networks based on convergence of new information and communication technologies (KTaM)



Longlife Education Courses

- railway interlocking and signalling, applications of processor-based technique in railway interlocking and signalling systems (KRIS)
- information technologies concentrated on wideband and multimedia networks, SDH hierarchy of transmission networks, safe/secure communications (KRIS)
- safety technician, specialisation Technical means for protection of property, assessment of modern electronic alarm systems (KRIS)
- design of concept, analysis, synthesis, designing and management of information systems for the field of transport, telecommunications and technological processes, solution of particular problems of railway operation specialised to railway interlocking and signalling (KRIS)
- digital networks with integrated ISDN networks (KTaM)
- technologies in access networks (KTaM)
- technologies in transport networks (KTaM)
- next generation networks (KTaM)
- services of next generation networks (KTaM)
- multimedia technology and networks (KTaM)
- ATM networks (KTaM),
- converged networks and next generation networks (KTaM)
- telecommunication management networks TMN (KTaM),
- IP networks (KTaM)
- mobile radio networks (KTaM),
- television, digital TV and radio broadcasting (KTaM),
- satellite systems and services (KTaM)
- mechatronics and mechatronic systems (KME)
- light and heat technique (KME)
- Microsoft Office SW applications (Word, Excel, Power Point) aimed at data processing and evaluation, preparation of Power Point presentations, design of www pages (KExE)

Standardisation Activities

- electro-energetic systems and equipment, electromagnetic compatibility – EMC, power supply of electric traction equipment, electrical installations, electrical traction, electrical machine, drives, traction vehicles, power semiconductor systems (KVES, KME)
- consultations to a set of standards ISO 9000 and literature dealing with Quality Management (KVES)
- systems for protection of persons and property: alarm systems, fire alarm systems, network applications, transport technologies in highway network, railway signalling systems (KRIS)

- mobile radio networks, access networks, ATM, SDH, radio and TV broadcasting, radiorelay and satellite communication, data transmission networks (KTaM)

Expertises and Design Works

- electrical regulation drives with DC and AC electric motors, calculations of electric turning and non-turning machines, control and operation of a group of electric drives, active filters and compensators of power factor (KVES, KME)
- design works in electrical engineering (KMAE)
- design, construction and realisation of functional prototypes of measurement procedures of a non-conventional type (KF, KME)
- design, construction and realisation of functional prototypes of mechatronic and biomedical systems (KME)
- analyses and syntheses of information systems, analyses and syntheses of modern safety-related systems, preparation of project documents in the field of protection of persons and property, preparation of projecting documents in the field of road traffic control (KRIS)
- next generation networks (KTaM)
- optical communication systems and networks (KTaM)
- telecommunication management networks TMN (KTaM),
- mobile and wireless radio networks (KTaM)
- radiorelay systems and networks (KTaM),
- satellite systems (KTaM),
- radio networks (KTaM),
- analog and digital TV and cable TV distributions (KTaM)
- electroacoustics, sound distribution (KTaM)
- concept solution and technical preparation of reconstructions and modernisation of locomotives of independent traction, concept and technical solution of dieselelectric traction, design of electric circuits of dieselelectric locomotives (KMAE)
- design and experimental verification of traction and support drives of DE transmissions (KMAE)
- design and production of study aids (KF)

Development of Application SW

- computer sensing and processing of electrical and non-electrical signals and computer-based modelling and simulation of physical processes (KF, KME)
- traction calculations for design organisations, travelling times, tachographs, simulation of traction vehicles, dynamic and static simulation of operation and control of electric

machine, dynamic and static simulation of regulated drives with working machines (KVES)

- SW in the field of power semiconductor systems (KME),
- SW for measurement of electrical quantities and database systems (KMAE, KTEBI)
- telecommunication management networks TMN, radio networks TKR (KTaM)
- design of 3D-virtual models of electrical transmissions, design of sophisticated virtual models of railway vehicles (KME)

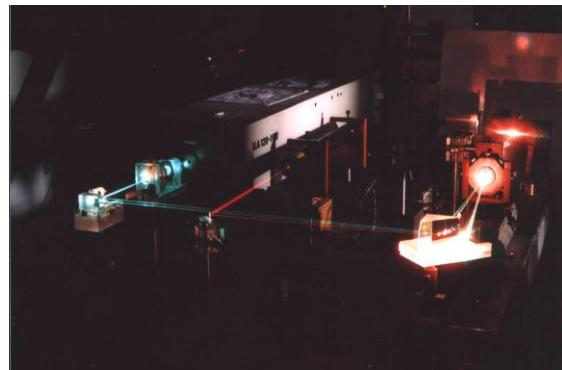
Electrical Engineering

- Means of digital data processing, 8-bit microcontrollers INTEL 'C 51, 16-bit microcontrollers SIEMENS SAB 80C166, C167
- Digital signal processor TI TMS320C25 (KVES)
- Measurement microcontroller TI MSP 430 (KVES)
- Digital signal processor AD 2101 (KVES)
- Automated design of electrical circuits (KVES)
- design of SW for computer-based processing of physical measurements and simulation of physical phenomena (KZI)
- radio networks, control of radio sources (KTaM)
- interactive cable TV distributions (KTaM)

Tests and Measurements

- negative effects on electricity supply system - harmonic components, asymmetry, power factor, ground current fields, stray currents, potential of buried equipment (KVES)
- measurement at supply stations, traction lines, transition phenomena, measurements at electric machines up to the power 30 kW (KVES)
- load tests of electric machines using dynamometer (up to the power 50 kW), measurement of moment characteristics of combustion engines, measurement and evaluation of accumulator batteries (KVES)
- measurement of time curves and integral values of electric quantities up to 1kV, 100 A, of frequency up to 500 MHz (KME)
- thermovision measurements according to the customer requirements (KMAE)
- diagnostics of electric machines according to the valid STN standards, possibilities of analysis of electric networks, experimental verification of technical parameters of transmission aggregates (KMAE)
- design and production of diagnostic systems of computer-controlled transformers (KMAE)
- thermoprocessing of samples of the ceramics up to the temperature 1340 °C (KExE)
- temperature tests of material samples according to the time and temperature defined

programme up to the maximum temperature 1340 °C (KExE)



Physical Measurements

- measurement of mechanical properties of materials by acoustics (ultrasound) methods – elastic modules, critical points, structural defects, residual deformations, crystallization state (KF)
- acoustic microscopy for the purpose of defectoscopy, monitoring of internal structure and non-homogeneity of materials (KF)
- measurement of dimensions and changes of dimensions using inter-ferometric and diffractographic methods (KF)
- measurement of internal friction (viscosity) and surface tension of liquids (KF)
- measurement of thermo properties of materials – thermal conductance, thermo extensibility and thermo capacities of solid and liquid substances (KF)
- measurement of electrical characteristics of materials – electric resistance of high resistance substances (up to $10^{15} \Omega m$), electric permittivity and loss angle of materials in a wide frequency range (KF)
- check of homogeneity of electric conductance of high resistance materials, measurement of V-characteristics of semiconductor elements and determination of basic electric parameters of materials from galvanometric measurements (KF)
- measurement of optical properties of solid and liquid materials – refractive index, absorption coefficient, radiant reflectivity (KF)
- measurement of basic parameters and physical properties of optical waveguides (optical fibres) (KF)
- measurement of light absorption coefficient of thin transparent layers (KF)
- determination of polarisation properties of light sources (KF)
- measurement of optical transmittance and reflectance properties of materials (ultraviolet, visible and infrared area), determination of refractive index

and absorption coefficient of volumetric and thin-layered samples (KZI)

- SW development for computer-based processing of physical measurements and simulation of physical phenomena (KZI)

Measurements in Telecommunications

- measurement of intensity of electromagnetic field and interference (KTaM),
- measurement of acoustic parameters of closed spaces (KTaM),
- measurements of optical systems and analysis of spectrum in near infrared area (KTaM)

Measurements in Digital Image Processing

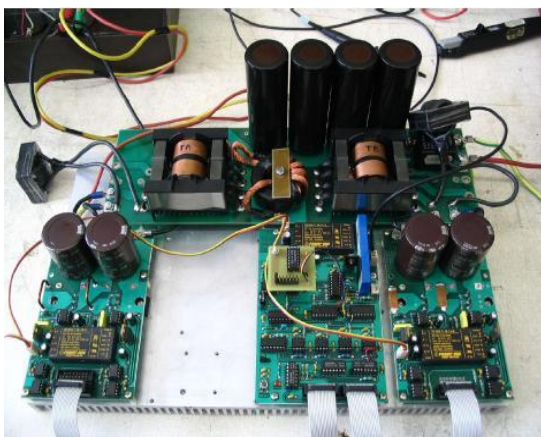
- image processing and analysis, calibration, filtration, image compression, measurement of objects (KME)

Implementation of Electronic Logical Systems

- for programmable logical elements PLD, computer-based automated technology of realisation, development of non-standard interfaces for monolithic microcomputers (KME)
- realisation of reconfigurable electronic logical systems (KME)

Design of Cards with Printed Circuits for Electronic Systems

- computer-based automated technology of design with manufacturing details: initial requirements specified by a customer, interconnecting of document plans, help with prototype realisation (KME)



Development of Physical Culture

- (in co-operation with Institute of Physical Education - ÚTV ŽU) skiing courses and water touring by water (KZI)

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Reference list of projects recently solved at the FEE (2010)

Projects of European Frame programmes:

Projects of 7th Frame Programme	(Sub-)Coordinator
FP7-SA-202855 Emergence of Research Driven Clusters in Central Europe	Milan Dado
European Science and Technology in Action Building Links with Industry, Schools and Home (ESTABLISH)	Eilish McLoughlin (Dublin City Uni.)

COST, MVTs and other international projects:

COST projects	(Sub-)Coordinator
Optical Fibres for New Challenges Facing the Information Society (FIDES) (299)	Daniel Káčik
Action TD1001: Novel and Reliable Optical Fibre Sensor Systems for Future Security and Safety Applications (OFSeSa)	Daniel Káčik
Project of European physical society International Physics Masterclasses 2010	Ivan Melo
Helicopter Fuselage Crack Monitoring and Prognosis through On-board Sensor Network "HECTOR" (A-0930-RT-GC)	Róbert Hudec
Safety appraisal of track safety device EAH-08 (Co-operation agreement on research activity Nr. 1/2010 between SignalBau Píerov and University of Žilina)	Karol Rástočný
EASYWAY (Improving Safety and Mobility by Intelligent Network Operations and Traveller Services on the European Road Network) (Co-operation agreement on research activity Nr 325/1/2009)	Milan Dado
Materials and Components for Environmental Protection (1M06031, Ministry of Education, Youth and Sports, Czech Republic)	Pavel Šutta (University of West Bohemia, Plzeň)
Mentoring partnerships – Children's University of Žilina and Children Age University Olomouc (Project realized within the framework of the project EUCU.NET – European Children's universities network is funded by the European Commission under the 7th Framework Programme, Science and Society.)	Peter Hockicko

International projects of Lifelong Learning Program:

CEEPUS II projects	(Sub-)Coordinator
From preparation to development, implementation and utilisation of joint programs in study area of Production Engineering – contribution to higher flexibility and mobility of students in central European region (CII-SK-0030-06-1011)	Ivan Kuric (ŽU)

Erasmus projects	(Sub-)Coordinator
502784-LLP-1-2009-1-BE-ERASMUS-EMHE Shaping Inclusive and responsive University Strategies – Project SIRUS	Michael Hörig (EUA)
155980-LLP-1-2009-1-IT-ERASMUS-ENWA Academic Network EUGEN – European and Global Engineering Education	Claudio Borri (Uni. degli Studi di Firenze, IT)

National grant projects VEGA:

Project Number	Name of the project	(Sub-)Coordinator
VEGA 1/0411/10	Study of the alternative solutions for mitigation of impairments due to polarization mode of dispersion in high-speed optical networks	Jarmila Müllerová
VEGA 1/0683/10	Design, fabrication and diagnostics of the microstructural optic fibres for sensoric and photonic applications	Ivan Martinček
VEGA 2/6166/6	Study of impact of thermodiffusion coefficient on kinetics of nanoparticles in magnetic fluids using the light diffraction or other methods	Július Štelina
VEGA 1/0868/08	Design, fabrication and diagnostics of the planar photonic structures and the photonic crystal fibers with a submicrometer period for optoelectronic devices	Dušan Pudiš
VEGA1/0548/09	Diagnostics of Power Transformers in Consideration of Short Currents and Ower Currents Effects	Miroslav Gutten
VEGA 1/0007/09	Antenna Systems of Radio Broadcasters Thermodiagnosics	Milan Šimko

VEGA1/0761/08	Design of Microwave Methods for Materials Nondestructive Testing	Dagmar Faktorová
VEGA 1/0198/08	Analysis of Electrical Machines Commutation Failure Influence at Computer and Telecommunication Networks and their Devices	Ján Poliák
VEGA 1/0203/08	Study of Useful Material Properties after Multiple Plastic Deformations	B. Hadzima (ŽU)
VV_VEGA11 – 1/0040/08	Mathematically – graphical modelling of safety properties of safety critical control systems	Karol Rástočný
VEGA 0/042/08	Experimental Systems of Metal Nanostructures Creation Used Continual Technologies of Intensive Plastic Deformations	Milan Žarnay (ŽU)
VEGA 1/0704/08	Research and Modeling of Temperature Areas in Power Electronic Systems	Miroslav Hrianka
VEGA 1/0474/09	Research of Topology and Control of Power Electronic Supply System with Single-Phase HF Input and Two-Phase Orthogonal Output for Two-Phase SM/IM Electrical Motors	Branislav Dobrucký
VEGA 1/0023/08	Theoretical apparatus for analysis and evaluation of hazards of telematic systems at transport	Juraj Spalek
VEGA 1/0207/10	The Development of Mechanical Subsystem of Tripod and Hybrid Kinematic Structure for Application in the Area of Production Machines and Robots	Viera Poppeová (ŽU)
VEGA 2/0070/10	Physical properties of the passivated a-Si:H based structures	Jarmila Müllerová
VEGA V-08-007-00	The Research of Reserved Output Needed in Slovak Power Transmission System after Decommissioning of Units of the Nuclear Plant V1 Bohunice by Meeting the N-1	Juraj Altus
VEGA 1/0474/09	Research of power electronic drive system control with single phase high frequency input and two phase orthogonal output for two phase SM/AM electrical machines	Branislav Dobrucký
VEGA 1/0809/10	Scientific research, modelling and simulation of transient events with the electrical systems of wind turbines	Pavol Rafajdus
VEGA 1/0308/08)	Innovative Approach to Material Failures Monitoring and Evaluation by Electromagnetic Methods	Klára Čápková
VEGA 1/0038/09	Regulation of Excitability and Respiratory Motor Output under Coughing and other Reflexes from Breathing System in Anaesthetized Casts and Rabbits	Ján Jakuš (Jessenius Medical Faculty, Martin)
VEGA-1/0392/10	The Research of Mobile Nodes Positioning in Wireless Sensor Networks	Peter Brída
VEGA-1/0336/10	Improvement of QoS Parameters in MANET and Mesh Networks	Vladimír Wieser
VEGA-1/0570/10	Algorithms Research for Automatic Analysis of Multimedia Data	Róbert Hudec
VEGA-1/0655/10	Algorithms for Scanning and Transmission and Reconstruction of 3D Picture in 3D IP TV	Roman Jarina
VEGA-1/0375/08	Analytic Model of New Generation Home Access Network for Audio, Video and Data Services	Vladimír Hottmar
VEGA-1/0313/08	The Investigation of the Methods of Detection of the Critical Conditions in Telecommunication Networks from the Speech Quality Point of View	Peter Počta

National grant projects KEGA:

Project Id	Name of the project	(Sub-)Coordinator
KEGA-K-09-003-00	Integration of renewable energy laboratory in the educational process through an interactive multimedia Web interface	Juraj Altus
KEGA 086-051ŽU-4/2010	The Development of Specialized Unit for Teaching of Parallel Kinematic Structures Application in the Area of Production Machines and Robots	Viera Poppeová (ŽU)
KEGA 075-008ŽU-4/2010	Development of Core Competences of Technical University Students in Physics Education	Peter Hockicko

National APVV projects:

Project Number	Name of the project	(Sub-)Coordinator
APVV-0535-07	Development of High-Voltage Modulus Assigned for Traction Applications	Ján Michalík
APVV-0505-07	Intelligent bearing model research and development for wind-power plant	Ján Michalík; Juraj Spalek
APVV SK-PL-0021-09	Ultrarelativistic Heavy-ion Collisions 2010-2011	Boris Tomasik, UMB B. Bystrica

APVV-0577-07	Research and parameter optimization of C-Si and POLY-Si MIS solar cells	Emil Pinčík, FÚ SAV Bratislava
APVV LPP 0059-09	Revealing microworld mysteries through experimental data analysis	Ivan Melo
APVV SK-PL-0015-09	Safety appraisal of railway safety systems	Karol Rástočný
APVV VMSP-P-0142-09	Development, research and implementation of supplemental road signalling for safety on railway crossings and cross walks	Juraj Spalek
APVV VMSP-P-0085-09	Galvanotechnological System with Synchronous Rectifier	Ján Rehuš, Jozef Čuntala
APVV LPP-0366-09	High Frequency Power Electronic Converters	Pavol Špánik
LPP-0195-07	Children's University of Žilina	Peter Hockicko
APVV-0530-07	Research and Development of Marginal Power Alternate Traction Drive (2008 – 2010)	EVPÚ Nová Dubnica
APVV-0560-07	Fault Localization in 22 kV Power Network by Using the Elements of Artificial Intelligence	Juraj Altus
APVV-0549-06	Investigation and development of traction equipment components for selected locomotives modernization intended for the 5th corridor new traction supply system	Daniel Kalinčák (ŽU)
APVV-SK-CN-0020-09	Investigation of electromagnetic design of switched linear reluctance motor (2010 – 2011)	Pavol Rafajdus
APVV-0194-07	Research on Methods for Enhancing the Information Rate of Signals in Quantitative Non-destructive Evaluation of Conductive Materials	Ladislav Janoušek
APVV LPP-0067-07	Searching and Education of Talented Students at Primary and Secondary Schools in Science by means of Talents' Competitions	Ivo Čáp
APVV-0732-07	Development of the Videoconference Archive System AVE and Users Applications for the EVO System	Michal Kuba
APVV-0369-07	Speech Technologies for Advanced Telecommunication and Information Services in Slovak Language - SPEETIS	Roman Jarina
APVV-0448-067	Progressive Ceramic Materials of Photo-thermo-mechanic Conversion System for Solar Thermal Motor Based on Steam Cycle	Zdeněk Dostál
APVV-VMSP-P-0030-07	Simple OnBoard Unit for Active Driver Support	Ján Mikula, VÚD Žilina
APVV-LPP-0126-09	Progressive Mobile Positioning in Indoor Environment by Means of Wireless Networks	Ján Dúha
APVV-LPP-0216-09	The Science and Research Popularisation in ICT Technology Area at Secondary Technical Schools	Róbert Hudec
PP7RP-0019-09	CARDIOCARE-Remote and Self Management of CVD Patients Treated for Anti-coagulation by a Novel Non-invasive Multi-Parameter Sensor	Róbert Hudec

Projects of the European structural funds:

Project Number	Name of the project	(Sub-)Coordinator
ITMS 2622012003	Excellency Centre - Power Electronics Systems and Materials for their Components	Pavol Špánik
ITMS 2620120046	Excellency Centre - Power Electronics Systems and Materials for their Components II	Pavol Špánik
ITMS 2622010004	Centre for Experimental and Clinical Respiriology I	Miroslav Hrianka
ITMS 2622010034	Centre for Experimental and Clinical Respiriology II	Miroslav Hrianka
ITMS 26220220019	Ciliary Kinetics Measurement of Respiratory Tractus	Miroslav Hrianka
ITMS 26110230004	Systemisation of Advanced Technology and Knowledge Transfer between Industrial Sphere and University Environment	Milan Saga (ŽU)
ITMS 26220220046	The Development of Parallel Kinematic Structures Prototypes for Application in the Area of Production Machines and Robots	Viera Poppeová (ŽU)
ITMS 26250120046	The support of the infrastructure of the University of Žilina for the teaching and learning improvement	Jarmila Müllerová
ITMS 26110230005	Flexible and attractive study at the University of Zilina for the needs of labour	Renáta Švarcová

	market and knowledge society (2010 – 2012)	(rector's office)
ITMS 26220220088	Applied research and development of innovative sources of energy for ultra-high pressure impulses (2010 – 2013)	Ecoland s.r.o.
ITMS 26140130016	The creation of new educational programmes in training for the needs of automobile industry	Ľubomír Galbavý (NI for Vocational Training)
ITMS 26220120028	Centrum of excellent for Systems and Services of Intelligent Transport	Milan Dado
ITMS 22420320001	Interregional Mobile Television DVB-H	Martin Vaculík
ITMS 26220220022	Design of New Diagnostic Algorithm for Selected Tumour Affections	Dušan Dobrota (Jessenius Faculty of Medicine, Martin)
ITMS 26220220021	Centrum of Translation Medicine	Dušan Dobrota (Jessenius Faculty of Medicine, Martin)
ITMS 26220220089	New measurement methods for physical dynamical parameters and interactions of traffic stream motor vehicles and roadway	Aleš Janota
ITMS 26220220009	Intelligent modular system for components quality control – InMoSysQC	B. Mičieta (FoCE)
ITMS 26220220049	Development of modular robotic systems – VMROS	M. Gregor (FoCE)
ITMS 26220220021	Centre for translational medicine	M. Zábovský(FoCI)

Other projects:

Project Number	Name of the project	(Sub-)Coordinator
State project	Mobile Communication System of the Armed Forces of the Slovak Republic	Milan Gottstein
State project	Compact communication environment of the Slovak Defence Ministry branch	Milan Gottstein
State project	Operational Radiocommunication Systems	Milan Gottstein

Business (contract-based) projects:

Number of contract	Title	Customer	(Sub-)Coordinator
P-103-0002/10	The study of data analysis of electricity consumption of particular ŽKV Cargo types	Energodata, s.r.o. Žilina	Juraj Altus
P-103-0003/10	Thermovision measurement	Tepláreň Považská Bystrica	Milan Chupáč, Milan Šimko
P-103-0004/10	Education training for KIA MOTORS SLOVAKIA s. r. o. employees on the PVP system	Rockwell Automation Slovakia, Bratislava	Juraj Ždánsky
P-103-0005/10	Co-operation on studies of electric generating station connectivity	IMD Žilina	Juraj Altus
P-103-0006/10	Connectivity of photovoltaic electric generating stations to the SSE networks	Stredoslovenská energetika, a.s. Žilina	Juraj Altus
P-103-0007/10	Education training for KIA MOTORS SLOVAKIA s. r. o. employees on PVP system	Rockwell Automation Slovakia, Bratislava	Juraj Ždánsky
P-103-0008/10	Calibration DST in ZSE Hlohovec	LambdaControl, s.r.o. Lipt. Hrádok	Miroslav Gutten
P-103-0010/10	Increase in volume of supporting services after bringing into operation the solar electric generating stations	SEPS, a.s.Bratislava	Juraj Altus
P-103-0011/10	Sponsoring performance	Mediaedge:cia Slovak Republic Bratislava	Peter Hockicko

P-103-0012/10	Study of the influence of solar power sources on the Slovak electric power system	SEPS,a,s, Bratislava	Juraj Altus
P-103-0015/10	Education training for KIA MOTORS SLOVAKIA s. r. o. employees on CLX and PVP system	Rockwell Automation Slovakia, Bratislava	Juraj Ždánsky
P-103-0014/10	Calibration DST in ŽOS Vrútky	LambdaControl, s.r.o.Lipt.Hrádok	Miroslav Gutten
P-103-0015/10	Extension of existing overall appraisal for electronic interlocking boxes in Slovakia by new or modified functions	Siemens AG Österreich	Karol Rástočný
P-103-0021/09	Safety appraisal of the BUES 2000 device	Scheidt&Bachmann s. r. o., Žilina	Karol Rástočný
P-103-0016/10	Modification of the system DST in Palestine	Lambda Control Liptovský Hrádok	Miroslav Gutten

