ANNUAL REPORT

2004

BRNO UNIVERSITY OF TECHNOLOGY

ANNUAL REPORT ON THE ACTIVITIES OF BRNO UNIVERSITY OF TECHNOLOGY IN 2004

This annual report is being submitted in conformance with the Higher Education Act no. 111/1998 Coll. Its structure is following the Guidelines for Describing University Activities in 2004 issued by the Ministry of Education, Youth, and Sports. It presents to the public data on and major outcomes of all the activities at Brno University of Technology performed to achieve its aims and objectives as a Czech and international university and place of research.

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Brno University of Technology

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FOREWORD

This Annual Report of Brno University of Technology (BUT) contains textual information, figures and numeric data documenting the key educational, scientific, research, and creative activities carried on at this university in engineering and business fields, in applied natural sciences, architecture, and fine arts and featuring the relations and cooperation with domestic and foreign universities, industries, and other institutions in 2004.

In this year, Brno University of Technology continued its efforts to achieve the objectives set out in its Mission Statement that emphasize our credo – to offer education to all those who wish to study at this university and have the capacity to meet all the demanding requirements of study. We are an institution that responds to all the current needs of modern society offering the young generation the new, much sought for fields of study. An educating process that is in harmony with the pursuit of science and research is the best way of stimulating the students' creative potential. With respect to all the key aspects, mostly in its Master's and Doctor's degree programmes, the university meets the research standards while offering broadly conceived Bachelor's degree programmes with a possibility to study for a Master's degree as an option.

With regard to the study profiles of its eight present faculties, Brno University of Technology may be thought of as a technical university with the broadest scope in the Czech Republic offering a wide spectrum of courses ranging from engineering, to economics, to arts or engineering-related arts. This provides an ideal ground for interdisciplinary programmes and fields such as mechatronics, materials engineering, biomedical engineering, industrial design, architecture of building construction, programmes combining engineering with business, or computer science with business, many of which become the starting point of further scientific or engineering pursuit. That the current approach to education offered at Brno University of Technology is a modern and promising one is evidenced by the ever growing interest of young people in study at this university. In the academic year 2004/2005, the total student number reached 18,623, which is by 1,062 students more on the previous year. This total number includes 1987 doctoral students, which also testifies to the close ties existing between education, science, and research at this university. Moreover, a great majority of its graduates can find their jobs without any major difficulties and, being provided with a good professional background, can pursue their careers in most diverse fields.

From the point of view of each modern university, the European dimension of education is now of increasing importance. This particularly applies to the Czech universities after the country's EU accession in May 2004. As the last step in pursuit of the Bologna process encouraging the creation of a European educational space, the transformation of education towards a three-tier system of Bachelor's, Master's, and Doctor's programmes was accomplished at the Faculty of Civil Engineering where the last programmes were accredited. In the academic year 2004/2005, for the first time, all the BUT first-year students could enrol on the newly structured programmes. Receiving additional funding from the university's own resources, the international student and teacher mobility has been on a steady increase for some time. The present high standard and position of our alma mater is well evidenced by the fact that, in 2004, BUT had been accepted as a member of the Conference of European Schools for Advanced Engineering Education and Research (CESAER), which currently associates the 55 most prominent European technical universities. At the end of 2004, BUT received a positive evaluation undertaken as part of the European University Association's Trend IV project whose primary objective was to judge the transformation steps undertaken towards the implementation of the Bologna process. Among the 60 European universities taking part in this project, BUT was the only one representing the Czech Republic.

Science, research, and other creative activities being the permanent focus of our attention, new research teams had been formed to work on particular research plans or within the framework of the research centres established, with doctoral students and graduates becoming increasingly involved. In this way, science and research have been acquiring new long-term perspectives and objectives. The number and total volume of projects receiving funding from both domestic grant agencies and from abroad including the 6th EU Framework Programme are a proof of the important position that Brno University of Technology is taking up among the Czech universities doing also well on an international scale.

For a university such as this, cooperation with industries and other institutions, based either on bilateral agreements or taking the form of joint grant projects, is of immense importance. It is my conviction that, in this field, we can make major contributions towards innovating engineering works to make them competitive in the international markets with a positive impact on the economy. An example may be the new tourist VUT 100 aircraft designed for 4 to 5 passengers in close cooperation with EVEKTOR a.s., a Kunovice-based company. A prototype of this aircraft was shown to the public for the first time at the Kunovice airport on 16th November 2004. This new modern design may significantly revitalize the Czech aviation production in the particular aircraft category. The BUT Technology Incubator, which has now been in operation for more than one year, fulfilling the original expectations, its extension to an optimum size is now planned drawing on the European structural funds and the South Moravian Region budget. In 2004, twelve companies were involved in the incubator's activities with the first products having already been launched on the market. The incubator's good kick-off may be a motivation for creative and enterprising graduates and maybe even students to start their own business and put their own inventiveness to practice. It is very important to encourage such activities today when the Czech Republic's position in Europe and its contribution to the EU educational and technological development is at stake.

Building a university is a long-term process depending on the efforts made by all those who form its parts. As the history of this university shows, this has required and certainly will still require the devotion of whole generations. I am sure that last year had brought our common efforts one step further.

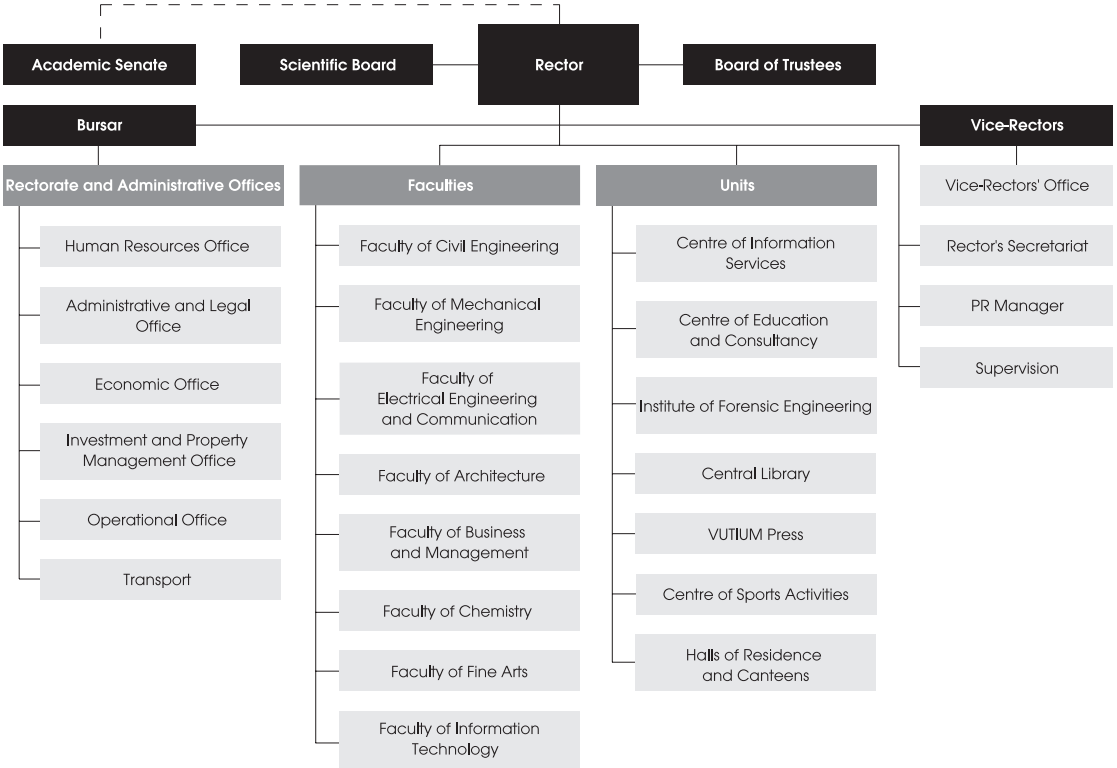
Brno, 4th April 2005

Prof. RNDr. Ing. Jan Vrbka, DrSc., dr. h. c.
Rector of Brno University of Technology

I. LEADING BUT OFFICIALS

Rector	prof. RNDr. Ing. Jan Vrbka, DrSc., dr.h.c.
Vice-Rector	prof. RNDr. Josef Jančář, CSc. for development of creative activities prof. Ing. Jiří Kazelle, CSc. for external relations prof. Ing. Karel Rais, CSc., MBA for strategic development doc. RNDr. Miloslav Švec, CSc. for study and students
Bursar	Ing. Jaromír Pěnčík (until 15th December 2004)
PR Manager	PhDr. Jitka Vanýsková

II. BUT ORGANIZATIONAL CHART



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III. BUT BODIES

Academic Senate, Rector, and Scientific Board are the self-governing bodies of Brno University of Technology. Other bodies include the Board of Trustees and the Bursar. Members of the Academic Senate are listed in Table III. – 1–3.

IV. EDUCATION

Degree Programmes

In 2004, the eight BUT faculties offered a total of 63 accredited Bachelor's, Master's and Doctor's degree programmes with 201 fields of study. These range from the classic engineering and science fields, to new interdisciplinary ones linking engineering with diverse fields of science or business, to architecture and fine arts. Thanks to the new structure of the programmes based on the requirements of practice, an improvement has been marked over the last year (Table IV. – 1a, 1b). New programmes have been accredited at the Faculty of Civil Engineering (Table IV. – 1a, 1b).

The quality of the newly prepared programmes has also been improved by the Transformation and Development Projects of the Ministry of Education (Table IV. – 7) and the projects financed from the Higher-Education Development Fund (Table IV. – 8). An ECTS compatible credit system has been introduced at all the BUT faculties. The university is now preparing to apply for the Diploma Supplement and ACTS Label certificates.

Students

A total of 18,623 students were enrolled at BUT on 31st October 2004 including 8,451 students in the Bachelor's degree programmes. 1,583 students in the follow-up Master's degree programmes, 6,602 students in the Master's degree programmes, and 1,987 doctoral students (Table IV. – 2a, 2b, 2c, 2d). A total of 17,561 students studied at BUT in 2003

The number of drop-outs (Table IV. – 3a, 3b). The highest proportion was reached in the engineering programmes, which is due to the exacting requirements of such fields, the structure of applicants, and the fact that mathematics an physics, although key subjects for an engineer, are given insufficient support at secondary schools. We expect the number of dropouts to be dwindling after the programmes are restructured. The study discipline and results are continually monitored on the basis the BUT Study and Examination Rules and Guideline issued by the deans of faculties by recording the number of credits achieved in each semester and year. A student may be expelled if not meeting the criteria.

The number of graduates is shown in Tables IV. – 4a, 4b, 4c, 4d. The increasing number of graduates in most of the programmes, including the doctoral courses, at almost all the BUT faculties is a favourable trend.

An overview of the Rector Awards and further awards can be found in Table IV. – 9a.

Admissions

The number of applicants for study at BUT was 15,621 in 2004 with 8,774 applicants admitted to study of which 6,801 students actually enrolled (see Table IV. – 5a, 5b). 501 rejected applicants appealed and the deans of faculties changed their decisions in 55 cases. The largest number of appeals was at the Faculty of Business and Management.

The real interest in study and the quality of applicants varied considerably from faculty to faculty. In 2004, study at the faculties of civil engineering, mechanical engineering, business and management, and electrical engineering was in the greatest demand. Traditionally, the most sought for are the study fields related to business and management. Even if the number of the enrolled students has risen, the interest in the engineering study fields is still not adequate to their significance and the demand for young educated experts. All the faculties keep devoting much of their efforts to recruiting good students. Events like Days of Open Doors, organized at all the faculties and the presentations at the Gaudeamus Education Fair may serve as examples. Visits of teachers and students to secondary schools are also among very powerful tools in this respect.

Students' Creative Activities

Creative activities of all students, especially those of doctoral programmes, are traditionally supported by the university. Students organize conferences and competitions at all the BUT faculties. These are described in detail in the reports given by faculties.

Evaluation

Students may voice their opinions on study and teachers in anonymous enquiries supported by an information system at all the BUT faculties. When preparing and evaluating the enquiries, faculty officials cooperate with student organizations. At the artistic BUT faculties where the approach to students and study is more personal and diversified (FA and FFA), students may choose their studio and thus the teacher, which is also a quality feedback. As one of the pilot universities, BUT has embarked on a project of the Centre for Higher-Education Studies entitled Evaluation of the Quality of Higher Education.

Degree programmes implemented outside a public institution of higher education

Through the Faculty of Mechanical Engineering, BUT implements three combined Bachelor's degree programmes. Courses are offered in Žďár nad Sázavou (engineering technology) and in Uherský Brod (engineering technology and applied computer science and control). Cooperation is being prepared with regional higher specialized schools.

Within a development project, BUT is preparing the implementation of two joint-degree programmes.

Support of disabled students

During the reconstruction of BUT buildings, barrier-free entrances were built to improve the study conditions for the disabled students. A development project has been implemented at BUT over the last three years to speed up the integration of variously disabled groups of students. To accept more such students and integrate them into ordinary study groups is part of BUT's policy.

Lifelong Learning

In addition to accredited programmes, BUT offers courses of a lifelong learning programme. A total of 420 lessons were taught in 20 courses in 2004, with 330 attendants (see Table IV. – 6).

The Lifelong-Learning programmes are organized by the BUT Centre of Education and Consultancy. In 2004 the Centre's activities focussed on the overall strategy, logistic and marketing support of the entire series of Lifelong-Learning courses as well as on the development and pilot courses in project management,

international project management, planning and management of emergency situations, development of study units with a European dimension and courses covering the European Civil Aviation Development Scheme (ECADS).

The University of the Third Age at BUT (U3A) opened its fifth year in 2004.
List of courses: Modern Technologies, basic course – 26 lectures a year.
Digital Photography – 26 lectures/seminars a year.
PC Courses – 12 two-lesson classes in a semester.

The U3A 2004 time schedule (basic course, PC courses, DFPG) took a total of 576 lessons. There were 461 senior students at the U3A in the academic year 2003/2004 and 359 seniors started their study in the academic year 2004/2005.

U3A activities at BUT in 2004:

- Participation in the international LLL projects – the EuCoNet project.
- International EFOS conference on problems of lifelong learning with information exchange concerning this part of university education.

The BUT U3A administrative centre runs the affairs of the Association of the Universities of the Third Age in the Czech Republic serving as its secretariat, http://www.BUTbr.cz/au3v.

V. SCIENTIFIC AND CREATIVE ACTIVITIES (RESEARCH AND DEVELOPMENT)

In 2004, the research and creative activities of BUT academic staff were further advancing with an increased proportion of doctoral students participating in such activities. Thanks to the favourable development of the institutional funding of research, the research teams created within the framework of the Research Centre programme and the Research Plan project had been stabilized. The average age of the research teams is 32 years, which is also a good sign. At BUT, research and creative activities are carried on in many engineering, business, and artistic fields. Such diversity provides a basis for newly formed interdisciplinary pursuits. As in the previous years, research and artistic activities of the BUT staff received funding from three major sources.

The first source was the institutional funding of university research based mainly on the research development programmes run by the Ministry of Education. In 2004, there were 20 research plans (see Table V. – 1). Also specific university research governed by Act 130/2002 Coll. forms a major part of institutional funding.

The second source of research funding at BUT was targeted research funding covering projects within grant systems such as the Grant Agency of the Czech Republic, and grant agencies of other ministries. The Ministry of Industry and Trade, Ministry of Transport an Communications, and Brno University of Technology were running one centre and BUT participated in the programme for two more centres together with the Czech Technical University in Prague. In this area, BUT has long been among the most successful universities as measured by the number of applications accepted, which is high above the national average. Contracted applied research also forms a major part of creative activities receiving funds on the basis of contracts with both domestic and foreign industrial companies.

The third source was the funding coming from institutional resources amounting to 215 million CZK. The total volume of funding received from the three sources supporting research and creative activities at BUT exceeded 360 million CZK, which is about 20 percent of the entire university budget. As every dynamic institution, despite the positive trends observed, BUT must seek comparison with other rival universities such as the Czech Technical University in Prague and Masaryk University in Brno. From such comparisons, it follows that the dynamic of the development is in keeping with both institutions.

The numbers of grant projects worked on at BUT and the total volume of funding won in grant competitions to support specific research are shown in Tables V. – 2, V. – 3. In 2004, 271 projects were worked on receiving a total funding of 172 million CZK. Compared with the year 2003, the number of projects was reduced by 8 % and the total volume of funding was cut down by 3.8 %. Also 46 international projects had been embarked upon receiving a total of about 18 million CZK. It should be noted that there are significant differences between faculties. These differences are due partly to the sizes of individual faculties and partly to the substantial differences in the structure of the funding resources, to the sizes of the grants and, most of all, to the proportional representation of research workers who are the solution providers of grant projects. From this point of view, the best situation is at the Faculty of Mechanical Engineering with the most solution providers. The Faculty of Chemistry marked a major shift with the ranks of its grant recipients being extended by young members of staff and doctoral students successful in winning grants for work on their research projects. Unlike other Czech universities, BUT can report the most applied research funding being gained from the departmental grant agencies offered mostly by the Ministry of Industry and Trade. This is a proof of efforts made to apply the outcomes of basic research to the industrial practice. Like in the previous years, it was with the grant agencies of the Ministry of Industry and Trade and the Ministry of Transport that most of the applications have been successful. The bulk of funding went to the faculties of mechanical engineering, civil engineering, electrical engineering, and chemistry. For an overview of amounts spent on creative activities, see Tables V. – 9, 10, 11.

Efforts to promote the transfer of the outcomes of research to the industrial practice led to reorganizing the knowledge transfer department. In 2004, the activities of the Regional Contact Organization for Southern Moravia were in full swing. A number of events were held where information and consulting was offered, a database of entities had been created and research capacity offered by BUT to the regional industrial companies overviewed. In 2004, BUT became the contractor of another project extending the activities of the regional contact organization by another 3 years. In this new project, BUT cooperates with new partners including the Centre of Transport Research and South Moravian Innovation Centre.

There is rather little information on the engineering works implemented and artistic activities. Measures will have to be taken there to make the evaluation of the contributions of engineering works more objective and to at least partially categorize the artistic activities. A technological audit and stocktaking of intellectual property protected by the law was carried out at BUT in 2004. The results of the audit confirmed that much more efforts in respect of this kind of protection will have to be made to ensure BUT potential revenues from future licences and technology transfers see Table V. – 8.

In this year, also a SWOT analysis was carried out whose outcomes, together with forecasts of the development of industries in the region, were used to identify the strategic areas of research to be included in BUT's priorities. The bulk of research and development projects were concentrated in these key promising areas striving for greater achievements and extending the research teams so that they may compete with others conducting comprehensive research with a high proportion of young scientists. Another major objective was to create strong links with related industries. The following were listed among strategic areas:

- material engineering and chemistry of materials
- design (of aircraft)
- communication technologies
- cybernetics and artificial intelligence
- mechatronics
- information technologies
- environmental technologies and biotechnologies
- non-traditional methods of generating, distributing, and using electricity
- water management
- reliability of building structures
- architecture and town-planning
- management of engineering companies

The research focussed on selected traditional fields with long-standing cooperation with industries and, further, on those fields in which BUT staff had made major achievements, but which are not among the long-term research priorities including :

- nuclear power engineering
- engineering technology
- electrical technology
- consumer chemistry
- building construction
- geodesy
- transport machinery and equipment

Creative activities in artistic areas also form a significant part of research and development including:

- industrial design
- modern artistic forms and methods
- graphics, drawing, painting

The results of a competition of applicants submitting research plans to receive institutional grants and those seeking targeted funding within the framework of the programme for research centres provided a factor important for setting further priorities of research at BUT.

The year 2004 was the last one of 20 research plans worked on at BUT beginning in the year 1999 (18 research plans) and in the year 2000 (2 research plans). The BUT officials decided that the research plans extending from 1999 (2000) to 2004 should be evaluated by a commission on 3rd and 4th March 2005 using the rules set by the Ministry of Education. A time schedule of preparatory work and the form of the final reports and presentations were discussed and approved in December 2004, .

In March 2004, applications for 18 new research plans to begin in January 2005 were submitted and in December 2004, the results of the competition were announced. Two research plans were included in category A (all eligible costs subsidized), 6 plans ended up in category B (90 % of eligible costs), 8 plans in category C and 2 in category D. Although the evaluating commission suggested that categories C and D should receive some funding, no subsidy had been provided due to the restricted budget of the Ministry of Education.

	field of specialization	points received
Research plans receiving subsidies:		
category A:		
• Drochytka	building materials	487.9
• Stehlík	environmental technologies	470.6
category B:		
• Jančář	polymeric materials	460.0
• Svačina	communication technology	457.8
• Cihlář	advanced materials	457.1
• Vrba	electrical engineering and optoelectronics and electrical technology	454.7
• Březina	use of computers, robotics and its applications	448.8
• Kazelle	electronics, and optoelectronics, electrical technology	
Research plans without subsidy:		
category C:		
• Honzík	information technologies	437.2
• Jura	cybernetics	433.7
• Štěpánek	reliability of structures	429.1
• Píška	machinery equipment and tools	420.6
• Jícha	thermodymanics	420.6
• Macur	informatics	409.8
• Říha	engineering construction	409.2
• Němeček	business	357.0
category D:		
• Novotný	civil engineering	388.6
• Chybík	architecture	307.2

Even if BUT received about 160 million CZK/year in funding from this programme, which is by 15% more than the total funding of the research plans finished in 2004, the results of this competition must be seen as a failure since among those research teams receiving no funding were also some working in research fields of strategic importance for BUT even though the results and outcomes of their research are ranking high both in the Czech Republic and abroad in terms of both the number of publications and engineering applications. An analysis identified as the main reasons for this failure the wrong evaluation methodology used and the incorrectly chosen method of distributing subsidies among individual categories. The Rector of BUT sent a letter to the Minister of Education in which he expressed his opinion to this effect.

Following a recommendation of the Council for Research and Development, the Rector asked the Minister of Education for a an extraordinary subsidy for 2005 to maintain the teams of young promising scientists already set up. At he same time, the BUT officials started analysing the potential of internal resources that could be gathered to finance the teams of young research workers in 2005 in case the request is not granted by the Minister of Education.

There are some very special research teams at BUT including:

- Department of water structures – functional models of water works (FCE)
- Laboratory of optoelectronic systems used to measure the parameters of the speed of flow (FCE)
- Associated laboratories for testing bearing structures (co-financed by the Department of Applied Mechanics s. r. o.), (FCE)
- Testing laboratory of aviation technology (FME)
- Laboratory of mechatronics (sponsored by Honeywell), (FME, FEEC)
- Experimental house for the research of ventilation (FME)
- Laboratory of directional and satellite communication (sponsored by AMSAT), (FEEC)
- Laboratory for telepresence and robotics (FEEC)
- Laboratory for voice communication with computers (FEEC)
- Laboratory for synthesis of macromonomers (FC)
- Laboratory for the preparation of fibre composites (sponsored by CPN), (FC)
- Laboratory for biopolymers (FC)

and others.

Cooperation with industries

Information of the offer made by BUT and on the cooperation of BUT with industries may be found at the BUT "Cooperation with industries" website portal.

VI. INFORMATION AND COMMUNICATION TECHNOLOGIES

In 2004, the SAP information system was used for the first time to manage the university affairs. A new BUT web-publishing portal was installed and put into use. The BUT information system was first run under the Apollo central database application interface.

BUT Network Infrastructure

High-speed backbone network

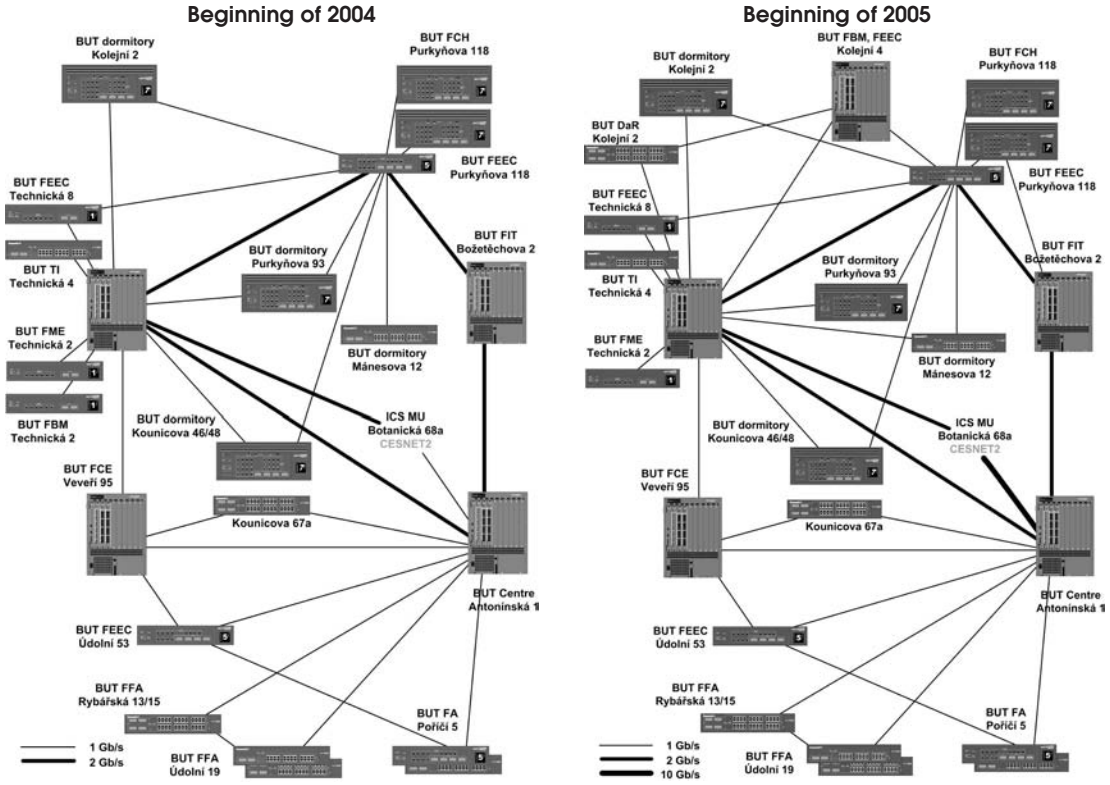
In 2004 the capacity and reliability of the backbone network was further enhanced:

- the new network node at Kolejní 4 was connected to the integrated building of the Faculty of Business and Management and the Faculty of Electrical Engineering and Communication;
- the halls-of-residence node network at Mánesova 12 was reinforced by installing a Summitli L3 switch;
- the connection was prepared of a new node at the directorate of the BUT Accommodation and Catering Services at Kolejní 2, block A06;
- the BlackDiamond type backbone switches were reinforced. The reinforcement covered the elements placed at the BUT Centre, the Faculty of Mechanical Engineering at Technická 2, Faculty of Information Technology at Božetěchova 2, and Faculty of Civil Engineering at Veveří 95. By the end of 2004, all the backbone BlackDiamond-type switches had been equipped with two processor units and power-supply units. Next the number of 1-Gb optical and metallic ports had been increased;

• a limited number of new-generation elements were installed within the backbone network with an option to reach a connection speed of 10 Gb;

• tests are under way of a connection to the CESNET2 national academic network at a rate of 10 Gb/s to be offered to common users by the middle of 2005.

The following figure shows the current state of the BUT Gigabit backbone network as compared with the beginning of 2004. The figure does not include connections of a capacity lower than 1 Gb/s or connections linking BUT with other academic and research entities – secondary schools, universities and institutes of the Czech Academy of Sciences located in Brno with the exception of the CESNET2 connection via the Masaryk University node at Botanická 68a



BUT network safety

The advances of the Internet bring a world of new applications but also numerous new risks. The academic Internet is an open environment in which every safety error may be misused to cause severe problems sooner or later. As the capacity of the network and the computer performances grow, the safety

risks are soaring making the network susceptible to various attacks and safety intruders. In 2004 much attention was paid to the safety of the BUT connection to the national network and of the student network at the BUT halls of residence.

Safety of the BUT connection to the national network

A hardware firewall was bought to secure the connection of BUT to the national CESNET2 network – RadWare DefensePro was chosen within the "Securing the BUT Connection To The National Network" project. It should be put into operation by the middle of 2005 with the following parameters:

- national network connection speed of 10 Gb/s
- IDS attack detection of the DoS, DDoS, SYN Flood, Scanning types
- antivirus protection of selected services
- prevention against attacks, detection of anomalies in the network
- blocking of unsolicited addresses and services

Safety of the student network at the BUT halls of residence

Currently, the largest user of the BUT network is the KolejNET student computer network with about 3,500 PC's connected in four halls of residence. At the beginning of 2004, KolejNET was connected to the Internet through a router on the platform of a common PC equipped with a P4-series processor. The insufficient performance of the router had necessitated some upgrade. Three firewalls had been bought and installed to secure the KolejNET student network: DELL 1750, 1x XEON 3,06 GHz, 1 GB RAM. Firewalls had been installed at the following sites: at Kolejní 2 – in the Pod Palackého vrchem halls of residence, at Purkyňova 93 – in the Purkyňovy halls of residence, and at Kounicova 46/48 – in the Listovy halls of residence.

Optical routes built in 2004

Work was started in 2004 on the following routes:

- Botanická 68a – Kounicova 46/48 the Listovy halls of residence – Kounicova 67a
- the Purkyňovy halls of residence at Purkyňova 93– the Hradecká/Královopolská crossroads

New network nodes were added:

- the newly built integrated building housing the faculties of business and management and electrical engineering at Kolejní 4
- the A06 node of the Directorate of the BUT Halls of Residence and Canteens at Kolejní 2

In 2005, work will begin on the following routes:

- Technická 2 (A6-200) ground route – the Centre of Sports Activities F1 and F2 buildings. The newly built multipurpose stadium. The route is 950 m long including a 650 m long trench
- the Incubator – Incubator II and Incubator – annex to building D3 ground route at Technická 2. The route is 250 m long including a 200 m long trench
- reconstruction of the connection between the integrated building at Kolejní 4 with block A05 of the halls of residence. The route is 350 m long.

For a list of the nodes of the BUT network and the current state of their connection, see Table VI. – 1.

BUT telecommunication network

The following localities were added to the BUT telephone network in 2004: the integrated building at Kolejní 4, the Pod Palackého vrchem halls of residence at Kolejní 2, the Listovy halls of residence at Kounicova 46/48. Thus the number of connections rose to 3,800 in 2004 with the following projects also undertaken:

• **Change in the telecommunication network topology**

Because of the uneven distribution of connections – 80% in the northern part of the network and 20 % in the remaining parts - the number of the telephone exchanges had been reduced at Údolní 19 and Kounicova 67a with the central exchange strengthened at Technická 2. The network topology had been changed so that the exchanges are now being arranged in a logical star pattern. Also the software used at the exchanges had been unified to improve the safety of the central exchange, which is now equipped with a backup control system running in a dual mode. Independent backup connections were added to the backbone routes in case the opto-cable routes fail.

• **Support of the telecommunication network in the BUT Central Database**

At the end of 2004, the BUT Central Database module used to administer, and record telephone calls was finished. Thus the BUT Central Database had become the only source of data on the telephone connections and their parameters. Since any updates of such data are now automatically carried out in the relevant telephone exchanges, the management of the telephone connections could be transferred to the faculties and other university units.

• **Wireless computer network**

In the course of 2004, step by step, the BUT premises had been covered by a wireless computer network based on the Wi-Fi platform. The funds of a Ministry of Education projects together with some funding provided by the faculties were used to build 25 new access points (AP's). At the end of the year, the Rector of BUT issued a regulation setting out the duties of the administrator and those of the users of this service.

BUT Information systems

The ApolloVUT information systems

The ApolloVUT information system built over the BUT Central Database had been extended by the following new modules:

- students' scholarships fully integrated with the SAP economic system
- science and research – an editor recording publications and projects and online monitoring of compliance with the research information register rules
- project-funding SAP module allowing all the users to control their spending off-line
- BUT equipment description records for the building managers to maintain information on room equipment
- statistics, study, and admissions
- state final examinations and certificates
- study field selection
- study affairs at faculties including registration for exams, definition and evaluation of courses, results of exams, etc.
- matching the Vacus money orders
- setting up teaching schedules
- checking the ETCS data and supplementary certificates

This system will be further enhanced by added modules monitoring science and research, and document circulation. In 2004, initial analyses had been made for developing a central BUT contract database module.

BUT web information portal

In 2004 the BUT web information portal was run using a new portal2 publication technology being connected to the BUT Central Authentication System and BUT Central Database.

Using the new portal applications each user may:

- search for persons
- print his or her own business cards with contacts and personal information
- send short messages to other users
- take part in discussion groups, forums, and enquiries
- submit an electronic application for study at BUT; in 2004, most of the applications were submitted electronically

a BUT staff member may:

- monitor his or her own telephone bill
- publish articles, news, and messages
- monitor his or her own meal credit in BUT canteens

a BUT student may:

- register for sports courses
- sit for a qualifying English test

students at faculties using the new faculty layer of the central study system (at the faculties of mechanical engineering, architecture, chemistry, and fine arts) may:

- manage their study affairs
- register for exams
- select a study group, schedule, and study field

SAP management information system

In 2004, the SAP Varias Education system was put into operation at BUT. Over a time, the system was stabilized with most of the teething problems removed. At present, R/3 versions 4 and 6c are used with the following modules: Financial Accounting, Controlling, Assets Management, Inventory, Material Management, Sales and Distribution, Project Management, Human Relations, Payroll, and the System Base Core.

BUT is a member of a SAP Coordination Centre where six universities share their human resources and know-how of SAP. Within the framework of a joint project entitled Convergence, BUT is involved in unifying the SAP code and parameters.

In 2004 BUT provided complete outsourcing for the Janáček Academy of Music in Brno.

In 2004, the ICS/Probáze system was put into pilot operation at the faculties of business and management and electrical engineering and communication to support invoicing and inventory bar-code-marking.

Technical Information and facility management system

In 2003, BUT was outsourcing a ASP/GTFacility system run in pilot operation at the Czech Technical University in Prague. In 2004, a new version of this system was also implemented at BUT. This had paved the way for closer cooperation with SAP and the BUT Central Database.

VII. LIBRARIES AND INFORMATION SERVICES

Replenishing the collection of books

The libraries' collections are being replenished drawing both on the budgets of individual faculties and the part of the university budget set aside for buying international journals and information databases. Each acquisition is carried out by the Central Library in cooperation with the department involved.

Numbers of books, new acquisitions and loans are shown in Table VII. – 1.

Availability of Electronic Sources

Continual subscription is a rule that is adhered to at BUT with those wide-spectrum sources being given priority that meet the needs of the BUT academics. Some scientific periodicals are available in a combined form (printed and electronic).

If BUT is a member of a particular consortium, it has access to all the titles subscripted to other consortium members. For the years 2004 to 2008, the Ministry of Education has announced a 1N programme that guarantees on-line access to renowned information databases for the support of research and development.

BUT is involved in several projects. Unlimited access to such information sources is guaranteed for the entire university.

Apart from the consortium databases supporting research and development, access is still maintained to important electronic sources of information paid for from the BUT budget and shared in the university network.

Shifts were marked towards the new forms of traditional sources in the library and information services as a result of successful negotiations on e-books. Since 2004 such electronic publications have been available. It is information technologies that are mostly in focus.

Table VII. – 2 shows numbers of seats in study rooms.

Library and information services

Also in 2004, the BUT library infrastructure was enhanced at two levels: the user-friendly background was improved with the numbers of seats in study rooms increased, equipment installed to facilitate the retrieval of electronic information and sources of information replenished by maintaining continual subscription to Czech and foreign periodicals, both printed and electronic publications were acquired to extend the library's collection.

Services provided by the BUT libraries:

- information, reference and research services
- loans of books both to be studied in a reading room and those that may be taken home
- access to electronic sources of information
- access to classic documents on display
- information education of users
- interlibrary loan services

Electronic services for universities

The BUT libraries provide its users with on-line access to:

- electronic versions of journals through consortia
- information databases supporting research

As part of the databases made available only contain references of research papers, users may also receive the full versions from the libraries either in the form of photocopies or using the traditional interlibrary services.

The way in which the interlibrary service is used may be judged from Table VII. – 1.

User Education

Based on a recommendation of Rector's Board, lectures and seminars have been taking place since the academic year 1995/1996 in the first year of study. This introductory lecture has been running for the second consecutive year using digitalized text and electronic enquiries. The incorporation in the study plans is diverse.

Staff – qualification centre, lifelong learning

In several libraries the number of staff was increased in 2004. This was mostly due to the longer opening hours and the improved and additional services provided.

In 2004 a new branch library was established at the Faculty of Electrical Engineering and Communication in the integrated building at Pod Palackého vrchem.

Table VII. – 3 shows the numbers of employees in BUT libraries and their education.

Other activities, miscellaneous

A new Aleph500 library system was put into productive operation in 2003. The conversion and migration to this system was only finished in 2004 because of different library systems being used at the faculties of information technologies and civil engineering. Thanks to this unification, updates could be made of the BUT Comprehensive Catalogue to make the data more up to date.

A project guaranteeing access to sources of information in the BUT was successful in receiving funding from the University Development Fund in 2004. This financial support also helped secure the operation of the Aleph500 server and equip the library at the Faculty of Business and Management with PC's.

VIII. ACADEMIC STAFF

For the qualification and age of the academic staff see Table VIII. – 1.

For the total and recalculated number of the university academic staff see Table VIII. – 2).

For the number of internal and external university academic staff see Table VIII. – 2.

New associate professors and professors

For associate professorships and professorships awarded at the university, see Tables V. – 4 and 5.

Internal education of BUT staff

As part of the Internal BUT Staff Education programme, the following courses were organized by the Centre of Education and Consultancy in 2004:

- Project Management
- International Project Management

- Educational Methods in Distance Study and their application to the university practice
- Complementary Pedagogic Studies
- Language courses:
  English for beginners, slightly advanced and advanced students, conversation
  German for beginners and slightly advanced students

For its instructors and those interested, the Centre of Education and Consultancy provides educational programmes, specialized seminars, training, and accreditation courses.

IX. ASSESSMENT OF ACTIVITIES

BUT activities are assessed in conformance with the BUT Statute and Mission Statement. The evaluation process covers teaching, research, development, creative, and other activities, the quality of the academic, democratic, and self-governing environment, the quality of the activities carried out by members of the academic community, officials and other staff, and the functional and economic efficiency.

At BUT there are the following levels of teaching quality assurance
- accreditation of the university as a whole,
- accreditation of degree programmes,
- teaching assessment carried out at each faculty,
- BUT assessed by its graduates.

BUT is involved in work on a public administration project led by the Centre for Higher-Education Studies in Prague that is devoted to the process of teaching evaluation in the Czech Republic. BUT is one of the two universities selected for a pilot project of higher-education system quality assessment. The project is entitled Evaluating the Higher Education Quality.

The system of teaching assessment uses feedback received from students and the responses of faculty (university) officials to comments by students sent in via the Academic Senate. Also confidential enquiries are conducted and information system used in various forms at every faculty. When designing and evaluating questionnaires, faculty managements cooperate with student organizations. At faculties with a predominantly artistic element and individual approach to study and students (FA, FFT), students are assessing the teaching by selecting a studio and thus a teacher as well.

An enquiry made by BUT in 2004 was concerned with job opportunities for new BUT graduates. Questionnaires were disseminated by the BUT Centre of Education and Consultancy. Over 3,500 graduates from all the eight BUT faculties were among the respondents. The return rate of the questionnaires was 60.2 %.

At the beginning of each academic year, the BUT Scientific Board assesses the procedures held in the previous academic year for awarding new associate professorships and professorships focussing on their quality compliance with the regulations. The results are then used to devise measures for the coming period.

The Czech Conference of Rectors chose BUT as a representative of the Czech higher education to conduct an EUA enquiry to determine the degree of implementation of the Bologna process within the Czech higher-education system.

To help remove bias from the assessment of all the university activities, BUT officials had asked the European University Association (EUA) to carry out an audit in the academic year 2004/2005. An international team of experts is scheduled for this assessment in 2005.

X. INTERNATIONAL COOPERATION IN EDUCATION

Direct International Cooperation

Inter-University Cooperation – BUT has signed 41 cooperation agreements. Six new agreements were signed in 2004 – see Table X. – 1. The concrete form of cooperation is then stipulated by bilateral agreements between the faculties involved.

Ministry of Education development programmes – in 2004 there were 61 stays of students abroad with a total length of 216.5 months and about 2 million CZK spent. These stays took place either within the framework agreements concluded between universities or as "free movers". The programmes are specially designed to support stays of student at foreign universities.

Cooperation with TU Dresden – this cooperation through the **Herbert Quandt Foundation** residing in Bad Homburg has been running for the sixth consecutive year and includes offers of stays at TU Dresden of students, doctoral students and BUT scientists with scholarships granted by this foundation. In the academic year 2003/2004, this offer had been used by one student.

BUT involvement in the EU programmes for education and vocational training

Socrates/Erasmus – second phase of the 2000/2006 programme

Mobility of students and teachers is seen as a decentralized activity (managed by the National Socrates/Erasmus Agency in Prague). There are basically two funds used to finance such mobility – the EU funds (about 1/5 of the total amount) and a grant from the Ministry of Education, which covers the rest of the funding. As the amount of the grant has been cut to 350 EUR per month from the original 450 EUR a month since the academic year 2004/2005, the amounts of the contributions to study stays now vary considerably. The contributions are divided into nine classes depending on the subsistence level in a particular country ranging from 120 to 440 EUR per month. The student mobility had also received considerable help from the university, which used its own Mobility Scholarship Fund to provide additional funding. This part of the contribution was also determined by the subsistence level in the countries involved.

The contribution amounted to 480 EUR per teacher/week.

When comparing the consecutive academic years, one can see that the numbers of student and teacher stays have been steadily on the rise (see Table X. – 2).

The length of the stay of one student at a foreign university averaged to 6.4 months in the academic year 2003/2004 while, for teachers, this figure was 1.6 weeks.

Faculties also provided a considerable amount of funding for teacher stays. In the academic year 2003/2004, the faculties spent almost 460,000 CZK on teacher mobility.

For more information on the involvement of universities in international programmes, see Tables X. – 3, 4, 5.

Preparation visits – one preparation visit took place resulting in the signing of a bilateral student and teacher mobility agreement.

Monitoring visits – three visits took place under bilateral agreements with BUT presentation.

Monitoring and preparation visits in the academic year 2003/2004

Visit type	Faculty/Unit	University visited	Country
monitoring	External Relations, Rectorate	DTU Lyngby, University College Arthus	Denmark
monitoring	FEEC	UJF Grenoble	France
monitoring	FA	Hogeschool voor Wetenschap & Kunst Brussels and Gent	Belgium
preparation	FEEC	Instituto Politecnico de Coimbra	Portugal

Language courses offered within the Socrates/Erasmus programme – a Czech course took place for international students coming to BUT as part of the programme. The course was offered in both semesters. Also two one-week intensive Czech courses for foreign students took place before the beginning of each semester. The teachers were provided by the Brno English Centre. The courses were financed from the EU funds.

Audit of the Socrates/Erasmus programme performed by the National Agency (NA) – in January, the Socrates/Erasmus NA asked for all the documents relating to a selected 12 students and 6 teachers who stayed abroad in the academic year 2002/2003. The audit had discovered no discrepancies.

For EU programmes see Tables X. – 3, 4, 5.

Within the framework of the Leonardo da Vinci programme, an application had been submitted for a student mobility programme for the Faculty of Architecture. The project foreseen for 1.5 years was accepted and so 16 students could stay abroad in 2004. Another 7 students and graduates could stay abroad using the funds of a project of the University of West Bohemia in Pilsen.

International teacher and student mobility (benefits and problems – such as recognition of a part of study at a foreign university).

The BUT student and teacher mobility is governed by the rules set by the BUT Mission Statement, which require that as many students as possible should spend part of their studies at a foreign partner university. Students are kept informed on the possibilities of study abroad at meetings held at faculties and events organized for all the university students.

In March, a forum was held in cooperation with DAAD Prague for students interested in studying in Germany. Visitors from abroad were received during the entire academic year with information exchanged on the cooperation forms possible stressing the mobility activities. Such meetings mostly resulted in an agreement signed on the preparation of bilateral agreements between the departments involved.

The BUT website updated on a continual basis brings the latest information on such activities. This has a considerable impact as evidenced by the ever increasing numbers of students staying abroad within the Socrates/Erasmus programmes (see Table X. – 2). All the final reports on stays abroad are published at the BUT website.

Teachers' stays abroad also receive positive assessments and fully achieve the aim for which they have been designed.

However, some problems of student and teacher mobility are still encountered.

The following is a list of major problems concerning the student mobility:

- each faculty adopts a different approach to recognizing parts of study at foreign universities
- at a number of partner universities, the semester lengths vary
- there are not offer of courses in English at some of the partner universities
- insufficient language skills and initiative of some students
- since the academic year 2004/2005, the grants supporting student mobility have dropped considerably

Student Mobility Scholarship Fund – was established in 2002 to increase the number of BUT students taking part in mobility projects. This fund is used to support study stays both within the Socrates/Erasmus programme and outside it. The contribution could amount up to 25 000 CZK for the entire stay. As the number of stays rose in the academic year 2003/2004, a total of 2,850,000 CZK was spent from this fund on student mobility. This included 176 students within the Socrates/Erasmus programme and 71 free movers. Since the academic year 2004/2005, the fund has been used to partially compensate all the students staying abroad for the drop in the Socrates/Erasmus grant.

The three years' experience has proved that the fund is a great help for extending the student mobility. This fund has also been used to compensate the students for a higher subsistence level if proved in a particular country.

When organizing teacher mobility, problems are encountered with getting additional financing from the faculties in the event of more expensive stays, which is a major problem with some of the teachers. The faculties themselves are not always willing to appreciate the additional efforts the teachers need to make to prepare their teaching abroad.

XI. OTHER BUT ACTIVITIES

Brno Centre of European Studies

One of the major activities of Brno University of Technology is the promotion of Europe-oriented teaching as part of the initiatives to create a European space of higher-education and research.

BUT is a member of the Brno Centre of European Studies (BCES). BCES was established by an agreement signed by the university rectors and the mayor of the city of Brno in 2002. The mission of this centre is to unite the potential of the Brno universities towards European education, provide education in the form of programmes organized both at individual universities and jointly dealing with issues of the European

Union, provide related counselling and information services in diverse areas related to the process of the European integration and association as well as to present the joint activities at an international and particularly European level.

The following is a list of BCES educational activities in 2004:

1. Development of Europe-oriented degree programmes, at the FME – technical standards in the EU countries and the implementation of international standards in the Czech Republic, at the FCE – design engineering, at the FBM and FIT – Point Degree Programme

2. Courses in the European law and regulations in the countries of Central and Eastern Europe with international accreditation

3. The "Chances of University Presses in the European Book Market" seminars held (Prague on 6th May 2004, BUT Centre BUT from 1st to 2nd September 2004, Brno on 12th November 2004)

4. Presentations of literature published with the support of BCES (The World of Books international fairs held in Prague in May 2004, and in Brno in November 2004)

5. Publications and materials with a European dimension published by VUTIUM Press (including Brno Universities, translation of a book by Erwin Schrödinger: What Is Life? Mind and Matter. Autobiographical Sketches in cooperation with the Centre for Higher-Education Study and the Compostela group of Universities)

6. Participation in the workshops of the Challenges in European Higher Education programme coordinated by CHEPS (NL)

In 2004 the Centre of Education and Consultancy coordinated the development of ESJ ensured the presentations of BCES and presented the BUT activities within the BCES.

105th Anniversary of BUT

Three important events were commemorated at Brno University of Technology in 2004:

- 155th anniversary of the beginning of technical higher education in a multicultural city of Brno
- 105th anniversary of the beginning of Czech engineering education in Brno and in Moravia
- 15th anniversary of the beginning of a new era of freedom in the history of this country and of the important role played by students in l989.

On this occasion, a special meeting of the BUT Scientific Board was held on 8th November to confer honorary doctorates upon the following distinguished persons:

- prof. Ing. Lubomír Lapčík, DrSc.,
- prof. Ing. arch. Miroslav Masák,
- prof. DI Dr. techn. DDr.h.c. Peter Herbert Osanna,
- Bohuslav Woody Vašulka,
- Ing. Robert Vích, DrSc., Dr.-Ing. h.c., (see Table V. – 7).

Another event held in the spirit of the celebrations was an Academic Gathering on 8th November 2004 where gold medals (see Table V. – 6) and Rector Awards (see Table IV. – 9b) were handed over. After these events a ceremony followed to open an exhibition on the BUT 105th anniversary.

Concerts, exhibitions, lectures, debates

Conferences, student competitions, and seminars were organized by BUT at the BUT Centre and at faculties (for their list, see the BUT Calendar of Events in 2004. For the academic staff and the public, BUT organized concerts, exhibitions, lectures and debates on topical social and political themes.

BUT Choir

Cooperation went on in 2004 with VOX IUVENALIS – a BUT choir. Apart from Christmas and Easter concerts and a "Seriously Unserious Concert" for academics and the public, VOX IUVENALIS gave two joint concerts with two choirs from abroad.

BUT News university monthly

PhDr. Jitka Vanýsková, PR Manager, as editor-in-chief, and Mgr. Igor Maukš as editor. This is a monthly magazine featuring life at BUT and bringing articles and interviews on the current events inside and outside BUT.

Information brochures

A Brno University of Technology promotion brochure was reprinted and an information flyer in English printed with information on each BUT faculty.

BUT also took part in an updated edition of The Brno Universities a book published with the support of the Brno Municipality and Brno Centre of European Studies.

For the Socrates/Erasmus students coming to Brno, every year BUT publishes BUT and Brno guides.

XII. STUDENT CARE

BUT accommodation facilities

See Other BUT Units, Tables XII. – 1, 1a.

BUT catering facilities

See Other BUT Units, Table XII. – 2.

Information services a counselling

Such services are provided by each faculty and, at the central level, by the Department of Higher-Education Counselling of the BUT Centre of Education and Consultancy.

Sports, artistic, and other students' activities

Sports activities:

In 2004 the Centre of Sports Activities offered various forms of courses for students of all faculties structured in 5 different performance levels and 42 sports specializations. Over the semesters, 7500 students had registered for a course with the interest in various forms of sports activities steadily rising.

Teams representing BUT took part in the Third Czech Academic Games in Prague. By the number of medals won, the BUT athletes ranked among the best.

In their leisure, students may go in for sports in 18 disciplines.

For the traditional sporting events organized by the BUT Centre of Sports Activities, see Other BUT Units or visit www.vutbr.cz – BUT Calendar of events in 2005. For major achievements at academic championships of the Czech Republic, see Other BUT Units.

Artistic activities – see Chapter XV. – Faculty of Architecture, Faculty of Fine Arts. A list of events can be found in the Calendar of events in 2004 at www.vutbr.cz.

Student Chamber of the BUT Academic Senate

In 2004 the Student Chamber of the BUT Academic Senate worked as part of a stable structure of the student organizations at BUT. This year saw major changes in the membership of the student chamber. This was the reason why part of the student chamber's work was devoted to the setting up of a new team of student senators and the specification of their powers. Both committees of the student chamber in charge of the halls of residence and canteens and leisure activities were working throughout the entire year. Their decisions made in this periods were of special importance because of the above-mentioned changes in the team of the student senators. During the year, the student chamber was chaired by Ing. Jaroslav Švec from the Faculty of information Technology.

The student chamber of the BUT Academic Senate also has its representatives in the Supervisory Board of the Halls of Residence and Canteens. Mr. František Drtil from the Faculty of Electrical Engineering and Communication until 6th April 2004, Ms. Lenka Burgerová from the Faculty of Architecture until 10th February 2004, and Ing. Pavel Jelínek from the Faculty of Mechanical Engineering until 6th April 2004 were members of the student chamber of the BUT Academic Senate.

As every year, students organized a BUT Great Ball, the traditional Majáles festival, and other events.

Support of BUT Activities Common to All Public Universities in the Czech Republic

Academic Centre of Student Activities (ACSA) – is a nationwide project receiving organizational backing from BUT. The Centre's main objective is to support the student representatives of universities in the Czech Republic and abroad (such as the Visegrad group) mostly by offering them consulting, and training concerning the development of academic self-government.

GAUDEAMUS – is a European Education Fair. Attended by almost 30,000 visitors, mostly last-year secondary-school students, in 2004 it was held for the 11th time in a row. GAUDEAMUS offers information on degree programmes offered by universities and specialised vocational colleges. BUT is the traditional sponsor of the fair.

XIII. UNIVERSITY DEVELOPMENT

For detailed information, see Table XIII. – 1 – 8.

SUBSIDIES FROM THE STATE BUDGET USED TO REPRODUCE ASSETS

The following subsidies were used to reproduce assets:

Construction – Ministry of Education

- individual subsidy of 78,658,000 CZK
- system subsidy of 51,123,000 CZK

Construction – State Fund for Environment
- system subsidy of 610,000 CZK

Machinery and equipment – Ministry of Education
- targeted subsidies of 73,806,000 CZK

Other funding for machinery and equipment
- Ministry of Transport and Communications 75,000 CZK

OTHER INVESTMENT

Apart from subsidies from the state budget, BUT could also reproduce assets using its own resources, subsidies from the Southern Moravia Region and the city of Brno, funding from grant agencies, donations, and subsidies from abroad.

Construction
- Fixed Assets Development Fund – 173,271,000 CZK
- Southern Moravia Region – 5,107,000 CZK
- City of Brno – 2,000,000 CZK

Machinery and Equipment
- Fixed Assets Development Fund – 61 743,000 CZK
- Grant Agency of the Czech Republic – 5,099,000 CZK
- a donation of 1,137,000 CZK
- subsidies from abroad 698,000 CZK

Purchases and exchanges of land, exchange of buildings, balance
- Fixed Assets Development Fund – 26,082,000 CZK

RENOVATION AND MAINTENANCE OF BUILDINGS

BUT could renovate its buildings using its own resources and subsidies from the state budget (of both investment and non-investment nature). New buildings were erected, old ones reconstructed, modernized, and repaired. For spending on construction in 2004, see Tables XIII. – 1 to 6d.

PARTICIPATION IN THE HIGHER-EDUCATION DEVELOPMENT FUND PROJECTS

(Table IV. – 8)

PARTICIPATION IN THE DEVELOPMENT PROGRAMMES FOR PUBLIC HIGHER-EDUCATION INSTITUTIONS

(Table IV. – 7)

XIV. OTHER DATA REQUIRED BY THE BOARD OF TRUSTEES OF A PUBLIC HIGHER-EDUCATION INSTITUTION

No other data have been required by the BUT Board of Trustees

Activities of the BUT Board of Trustees

Two sessions of the BUT Board of Trustees in 2004 with the following agenda:

Session 13 held on 3rd May 2004

- BUT Board of Trustees was acquainted with the activities of the Technological Incubator
- BUT Board of Trustees passed an opinion on the Annual Management Report for 2003
- BUT Board of Trustees passed an opinion on the 2004 budget
- BUT Board of Trustees passed an opinion on the draft 2005 mission statement
- BUT Board of Trustees approved the transfer of real estates
- BUT Board of Trustees approved the granting of an easement

Session 14 held on 15th November 2004

- BUT Board of Trustees approved the transfer of real estates
- BUT Board of Trustees approved the granting of easements

For members of the BUT Board of Trustees, see Table III. – 3

XV. ACTIVITIES OF FACULTIES AND OTHER BUT UNITS

Information on the activities of BUT faculties and other BUT units can be found on pages 31 to 84.

Faculty of Civil Engineering (FCE)
Veveří 331/95, 602 00 Brno
tel.: +420 541 141 111
http://www.fce.vutbr.cz

Faculty of Civil Engineering

menu >

Dean prof. RNDr. Ing. Petr Štěpánek, CSc.

Vice-Deans doc. Ing. Vlastimil Stara, CSc.
prof. Ing. Jindřich Melcher, DrSc.
prof. Ing. Rostislav Drochytka, CSc.

Teachers in charge of study fields

E:	Ing. Alena Tichá, Ph.D.
G:	doc. Ing. Josef Weigel, CSc.
K:	Ing. Miroslav Bajer, CSc.
M:	doc. Ing. Rudolf Hela, CSc.
S:	doc. Ing. Ladislav Štěpánek, CSc.
V:	Ing. Ladislav Tuhovčák, CSc.
Theory and Humanities:	prof. Ing. Drahomír Novák, DrSc.

Chairman of the Academic Senate doc. RNDr. Josef Dalík, CSc.

Secretary Ing. Tibor Horoščák, CSc.

Departments

1. Department of Mathematics and Descriptive Geometry
   headed by prof. RNDr. Josef Diblík, DrSc.
2. Department of Physics
   headed by prof. RNDr. Zdeněk Chobola, CSc.
3. Department of Chemistry
   headed by prof. RNDr. Pavla Rovnaníková, CSc.
4. Department of Structural Mechanics
   headed by prof. Ing. Drahomír Novák, DrSc.
5. Department of Geodesy
   headed by doc. Ing. Josef Weigel, CSc.
6. Department of Geotechnics
   headed by doc. Ing. Kamila Weiglová, CSc.
7. Department of Building Structures
   headed by doc. Ing. Milan Vlček, CSc.
8. Department of Technology of Building Materials and Components
   headed by prof. Ing. Rostislav Drochytka, CSc.
9. Department of Concrete and Masonry Structures
   headed by prof. Ing. Jiří Stráský, CSc.
10. Department of Road Structures
    headed by doc. Ing. Jan Kudrna, CSc.
11. Department of Railway Structures and Constructions
    headed by doc. Ing. Pavel Zvěřina, CSc.
12. Department of Metal and Timber Structures
    headed by prof. Ing. Jindřich Melcher, DrSc.

13. Department of Municipal Water Management
    headed by doc. Ing. Jan Mičín, CSc.
14. Department of Water Structures
    headed by doc. Ing. Vlastimil Stara, CSc.
15. Department of Landscape Water Management
    headed by doc. Ing. Miloš Starý, CSc.
16. Department of Building Services
    headed by Ing. Jiří Hirš, CSc.
17. Department of Computer Aided Engineering and Computer Science
    headed by doc. RNDr. Jiří Macur, CSc.
18. Department of Structural Economics and Management
    headed by Ing. Leonora Marková, Ph.D.
19. Department of Technology, Mechanization and Construction Management
    headed by Ing. Vít Motyčka, CSc.
20. Department of Building Testing
    headed by doc. Ing. Leonard Hobst, CSc.
21. Department of Social Sciences
    headed by PhDr. Darja Daňková
22. Library and Information Centre
    headed by Mgr. Marie Davidová
23. Centre for Computing Equipment Management
    headed by Ing. Miloslav Zimmermann

Teaching

The Faculty of Civil Engineering offers accredited degree programmes listed in the table below:

Code	Programme name	Study field code	Study field description	standard study length			study form foreign language
				Bc.	Mgr.	Ph.D.	
B 3609	Construction since 01.09.2004	3647R013	structures and transport construction	3			P
		3608R001	building construction	3			P
		3607R020	construction and materials engineering	3			P
		3647R015	water management and structures	3			P
		3607R038	construction management	3			P
		3606R004	military structures	3			P
B3503	Architecture of buildings since 01.09.2004	3501R012	architecture of buildings	4			P

B 3607	Construction Engineering since 01.09.2004	3647R013	structures and transport construction	4			P
		3608R001	building construction	4			P
		3607R 20	construction and materials engineering	4			P
		3647R015	water management and structures	4			P
		3607R038	construction management	4			P
		3606R004	military structures	4			P
B 3646	Geodesy and Cartography since 01.09.2004	9107R002	military geodesy and cartography	3			P
		3646R003	geodesy and cartography	3			P
M 3607	Construction Engineering	3608T001	building construction		5		PKA
		3607T020	construction and materials engineering		5		P
		3607T009	structures and transport construction		5		PK
		3607T027	water management and structures		5		PK
		3607T003	construction management and financing		5		P
M 3646	Geodesy and Cartography	3646T033	geodesy and cartography		5		P
M 3646	Geodesy and Cartography since 01.09.2004	3646T033	geodesy and cartography		2		P
N 3607	Construction Engineering since 01.09.2004	3607T038	construction management		1.5		P
		3607T009	structures and transport construction		1.5		P
		3608T001	building construction		1.5		P
		3607T020	construction and materials engineering		1.5		P
		3607T027	water management and structures		1.5		P
P 3917	Forensic Engineering	3917V001	forensic engineering			3	PKA
P 3646	Geodesy and Cartography	3646V003	geodesy and cartography			3	PKA

P 3607	Construction Engineering	3607V038	construction management			3	PK
		3607V009	structures and transport construction			3	PKA
		3607V027	water management and structures			3	PKA
		3911V006	physical and construction materials engineering			3	PK
		3608V001	building construction			3	PK

In 2004:

- the Faculty began to offer new Bachelor's degree programmes,
- the former five-year Master's degree programmes were still running,
- a new Architecture of Buildings Bachelor's degree programme was accredited,
- the accreditation of the Construction Engineering Bachelor's degree programme had been extended to the combined study type with courses taught in English for all study fields except for Military Construction.

On 31st December 2004, a total of 4,398 students were enrolled at the faculty, including 1,211 first-year students. Four hundred and ninety students graduated in this year. There were 478 doctoral students with 47 receiving the Ph.D. degree.

Research and development

Research and development was mostly centred around 4 research plans: MSM 261100006 – Development of methods for modelling and management of water management and transport systems, MSM 261100007 – Theory, Reliability, and Mechanisms of the Displacement of Dynamically Loaded Building Structures , MSM 261100008 – Research and Development of New Materials from Waste and Guarantee of Their Durability in Building Structures, and MSM 261100009 – Non-traditional Methods for the Research of Complex and Ambiguous Systems. Faculty staff were involved in 7 international projects within the 5th EU Framework Programme including CARE W, CARE S, AQUAREC, INTERACT, etc., in a project within the 6th EU Framework Programme entitled CORPTUS, 1 INGO project and four projects of bilateral cooperation with countries including Slovakia and Poland.

Main objectives of creative activities at the Faculty of Civil Engineering

The main objectives of creative, research and development activities are given by the faculty long-term development concept as included in the Mission Statement of the BUT Faculty of Civil Engineering from 2000 to 2005. These include:

- analysis, design methods, verification, and identification of statically and dynamically loaded building structures in view of their service life
  - devising, evaluating, verifying, and calibrating design methods
  - new use of structures from traditional materials
  - creation and development of auto-adaptive composite structures
  - deterministic and stochastic modelling of stationary and non-stationary phenomena and processes,

- progressive building materials based on secondary raw materials,
- reliability and risk analysis of water management systems and structures:
  – development of theoretical models and expert systems,
  – drinking-water supply, drainage of developed areas, analysis of inundation areas, hydrotechnical structures,
- improving the quality of building interior,
- development of new structures and design methods using the criteria and principles of sustainable development; design optimising,
- integrated technologies for engineering geodesy and digital maps,
- complex and vaguely defined engineering systems (theory, modelling, and application of results),
- development of economic tools for optimal design and implementation of construction.

Associate Professorships and Professorships

Five academics fulfilled the criteria of becoming associated professors.

One candidate has successfully completed the proceedings and was appointed professor.

Students' Creative Activities

Students' creative activities were coordinated by the Council for Student Creative Activities and representatives of the faculty departments. A 2004 faculty competition was organised with 274 projects in 29 sections competing. The best twenty projects in 120 sections then represented the faculty in an international competition in Prague winning 4 first, 2 second, and 2 third prizes.

Juniorstav 2004

A 6th International Conference of Doctoral Studies was held in February 2004. More than 450 competitors took part in 16 sections and subsections.

International Relations

In 2004 the faculty continued its activities and cooperation under bilateral and framework agreements with the number of foreign partner universities and institutions rising to 84.

A total of 481 business trips abroad were made including 382 with active participation. These trips abroad were funded from grants and research plans.

In 2004 the faculty was visited by 102 teachers, doctoral students, and students from abroad. In cooperation with faculties of civil engineering from Prague and Ostrava, the faculty also organized an international conference of deans and officials of civil engineering faculties in the EU and associated countries. The conference was attended by 100 international participants and the outcomes of this conference resulted in increased student and teacher mobility.

Lifelong learning

In 2004 lifelong learning programmes had further advanced at the faculty. The educational system consisted of the following two areas:

- accredited degree programmes,
- courses in building practice and public administration.

The lifelong-learning courses in building practice and public administration had been accredited by the Czech Chamber of Accredited Engineers and Technicians. Also the faculty was accredited by the Ministry of the Interior as employing a new educational concept.

Complementary Activities

As part of complementary activities, every department took a more active attitude to cooperation with the practice as compared with the previous years. A number of project tasks were completed, experiments conducted, and expert opinions made.

Library and Information Centre of the BUT Faculty of Civil Engineering

Over 300 seats are available in five study rooms including 80 workstations connected to the Internet.

Thanks to funding from the BUT budget, the opening hours could be extended to be from 8 a.m. to 10 p.m. on working days and from 8 a.m. to 4 p.m. on Saturdays in compliance with the guidelines of the Development Plan of the Library and Information Centre for the years 2004 to 2006. The services provided may also be used by students from other BUT faculties.

When extending the library collections, the requirements for information being available both in the classic and electronic form were being complied with. Foreign monographs were bought to be used in support of courses taught in English as well as basic publications needed by students from other BUT faculties. With the help of library consortia and the outcomes of projects implemented within the 1N programme entitled "Information Infrastructure of Research" specialised research databases and electronic journals were made available. Conditions were agreed with the Kluwer editing house for access to electronic books.

Faculty of Mechanical Engineering

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Dean prof. Ing. Josef Vačkář, CSc.

Vice-Deans
prof. Ing. Jiří Švejcar, CSc.
deputy dean, for science and research, doctoral study, economic activities
doc. RNDr. Miroslav Doupovec, CSc.
for 1st stage Master's degree programmes, admissions, Bachelor's degree programmes, combined study, system of study records
doc. Dr. Ing. Radek Knoflíček
for external relations, promotion, and development of the faculty
doc. RNDr. Radim Chmelík, Ph.D.
for 2nd stage Master's degree programmes, scholarships, editing, external teaching, lifelong learning

Faculty Secretary Ing. Vladimír Kotek

Chairman of Academic Senate doc. PaedDr. Dalibor Martišek, Ph.D.

Chairman of Scientific Board prof. Ing. Josef Vačkář, CSc.

Departments

Department of Mathematics
headed by prof. RNDr. Josef Šlapal, CSc.
Department of Physical Engineering
headed by prof. RNDr. Miroslav Liška, DrSc.
Department of Mechanics of Solids, Mechatronics and Biomechanics
headed by doc. Ing. Jindřich Petruška, CSc.
Department of Materials Science and Engineering
headed by prof. RNDr. Jaroslav Cihlář, CSc.
Department of Machine Design
headed by doc. Ing. Martin Hartl, Ph.D.
Energy Department
headed by doc. Ing. Zdeněk Skála, CSc.
Department of Manufacturing Technology
headed by doc. Ing. Jaromír Roučka, CSc.
Department of Metrology and Quality Assurance Testing
headed by doc. Ing. Leoš Bumbálek, Ph.D.
Department of Production Machines, Systems and Robotics
headed by doc. Ing. Miloš Hammer, CSc.
Department of Process and Environmental Engineering
headed by prof. Ing. Petr Stehlík, CSc.
Department of Transport Engineering
headed by prof. Ing. Václav Píštěk, DrSc.
Institute of Aerospace Engineering
headed by prof. Ing. Antonín Píštěk, CSc.

Department of Automation and Computer Science
headed by RNDr. Ing. Miloš Šeda, Dr.
Heat Transfer and Flow Laboratory
headed by doc. Ing. Miroslav Raudenský, CSc.
Department of Foreign Languages
headed by Mgr. Dita Gálová

The Faculty offers the following degree programmes:

programme	field of specialization	form	degree	years
Bachelor's degree B2341 mechanical engineering	Mechanical Engineering	P	Bc.	3
	Industrial Design in Mechanical Engineering	P	Bc.	3
	Applied Computer Science and Management	P, K	Bc.	3
	Power Supply and Processing Equipment	P	Bc.	3
	Aerospace Traffic	P	Bc.	3
	Applied Environmental Engineering	P	Bc.	3
	Design of Machines and Equipment	P, K	Bc.	3
	Manufacturing Technology	P, K	Bc.	3
Bachelor's degree B 3901 Applied Sciences in Engineering	Physical Engineering	P	Bc.	3
	Mathematical Engineering	P	Bc.	3
	Mechatronics	P	Bc.	3
	Materials Engineering	P	Bc.	3
Follow-up Master's degree N3901 applied sciences in engineering	Physical Engineering	P	Ing.	2
	Engineering Computer Science and Automation	P	Ing.	2
	Engineering Mechanics	P	Ing.	2
	Mathematical Engineering	P	Ing.	2
	Materials Engineering	P	Ing.	2
	Mechatronics	P	Ing.	2
	Industrial Design in Mechanical Engineering	P	Ing.	2
	Precise Mechanics and Optics	P	Ing.	2
	Quality Assurance Management	P	Ing.	2
Follow-up Master's degree N2301 mechanical engineering	Transport and Handling Equipment	P	Ing.	2
	Power Engineering	P	Ing.	2
	Fluid Engineering	P	Ing.	2
	Design Engineering	P	Ing.	2
	Process Engineering	P	Ing.	2
	Airplane Technology	P	Ing.	2
	Foundry Technology	P	Ing.	2
	Design of Manufacturing Machines and Equipment	P	Ing.	2
	Manufacturing Technology	P	Ing.	2
	Manufacturing Techn. and Industrial Management	P	Ing.	2
	Environmental Engineering	P	Ing.	2

Follow-up Master's degree N2301 mechanical engineering	Applied Computer Science and Management	P, K	Ing.	3
	Design of Machines and Equipment	P, K	Ing.	3
	Manufacturing Techn. and Industrial Management	P, K	Ing.	3
Doctor's degree P2302 Machinery and Equipment	Design and Process Engineering	P, K	Ph.D.	3
Doctor's degree P2302 Machinery and Equipment	Manufacturing Technology	P, K	Ph.D.	3
Doctor's degree P3917 Physical and Mathematical Engineering	Physical and Mathematical Engineering	P, K	Ph.D.	3
Doctor's degree P3901 Applied Sciences in Engineering	Engineering Mechanics	P, K	Ph.D.	3
Doctor's degree P3913 Applied Sciences	Mathematical Engineering	P, K	Ph.D.	3
P3917 Forensic Engineering	Forensic Engineering	P, K	Ph.D.	3
Doctor's degree P3903 Metrology and Quality Assurance Testing	Metrology and Quality Assurance Testing	P, K	Ph.D.	3

P *full time study*
K *combined study*

Major features of study at the Faculty of Mechanical Engineering

(1) Structured study. The programmes are structured to correspond to the three-tier education pattern: Bachelor's degree, Master's degree, and Doctor's degree programmes. To receive the "ing." Master's degree, a student must complete two related stages, namely: a Bachelor's programme (3 years) plus a follow-up Master's degree programme (2 or 3 years). Being the standard form of higher education in Europe and in the USA, structured study provides the students with a qualification comparable with that provided by universities abroad.

(2) Entry examination. Applicants for study at BUT have to pass a written test in physics and mathematics. Exempt from these tests are applicants who have taken a school-leaving exam in physics or mathematics with an excellent or good result in at least one of these subjects.

(3) "Mechanical Engineering" and "Applied Sciences in Engineering" Bachelor's degree programmes. After passing a state final exam, the graduates receive the Bachelor's degree (Bc.). These degree programmes are divided into general and profession-oriented fields.

Profession-oriented fields of study: are of a more practical type being primarily designed for those who want to embark a practical career after graduation. However, graduates from these programmes may choose to continue their study in related three-year degree programmes for an ("Ing.") Master's " degree. The profession-oriented Bachelor's degree fields include: "Applied Computer Science and Management ", "Power Supply and Processing Facilities", "Air Traffic ", "Design of Machines and Equipment ", "Manufacturing Technology ", „Applied Environmental Engineering ". The first-year courses are common for all the profession-oriented fields, a specification may be chosen during the first year of study.

General fields of study: are suitable for those graduates who want to go on studying for an ("Ing.") Master's " degree. After a general Bachelor's degree programme, each graduate may register for a two-year related Master's degree programme and will be admitted without having to sit for an entry examination. Graduates of the general-field Bachelor's degree programmes are equipped with knowledge sufficient to enrol on a higher (Master's degree) mechanical engineering programme as well as with skills needed for work in engineering positions in development and design institutes or offices, in engineering production companies, services or marketing. The general Bachelor's degree fields include: „Mechanical Engineering", "Industrial Design in Engineering ", "Physical Engineering ", "Materials Engineering ", "Mechatronics ".

Two-year follow-up "Applied Sciences in Engineering" and "Mechanical Engineering" Master's degree programmes are intended for those general Bachelor's degree graduates who want to go on studying for an ("Ing.") Master's degree. Students may choose form among 20 fields of study.

Three-year follow-up "Mechanical Engineering" Master's degree programme is intended for those general Bachelor's degree graduates (also from engineering faculties of other universities) who want to go on studying for an ("Ing.") Master's degree. The students may choose from among three fields of study.

Combined form of study: this is a combination of full-time and distance study in a proportion of 1:2. The full-time (third of) study takes the form of a workshop with consultations held on a weekly basis in one of the following consulting centres: at the Faculty of Mechanical Engineering in Brno, in Žďár nad Sázavou, and in Uherský Brod. The distance part of study takes the form of controlled home study. A complete list of fields of study and consulting centres for the academic year 2005/2006 will be published at the faculty's website and in guidelines for admissions issued by the dean.

Important Events in 2004

An important event that had had its impact on many faculty departments, academic and other staff was the reconstruction of some buildings and their parts. The faculty management had made arrangements for the departments to be moved to a more rational arrangement, which was made possible by the Faculty of Business and Management moving to a new building. The reconstruction began in June 2004 and was completed during the year, however, some of it at the very end of the year. The resulting demands especially on the teachers were enormous because of the number of laboratories, rooms, and offices under construction. However, thanks to the efforts made by the teachers, and other faculty staff, courses could begin on schedule and take their normal course.

Another important event at the Faculty of Mechanical Engineering was the final stage of transferring the courses to meet the requirements of the Bologna declaration. Thanks to the new information system, study applications, selection of fields of study and required courses, registration for final state examinations, and other options could be processed electronically, which considerably improved the communication between students and the study department making its work more efficient.

The Most Important Achievements in Science and Research

At the end of 2004, work on 6 research plans and that of a research centre was completed. Over 135 grant projects were implemented at the faculty with the funding totalling about135 million CZK. Among important "tangible" achievements was the BUT 100 airplane presented to the public in 2004 by its maiden flight.

Student Competitions

Faculty of Mechanical Engineering is the only BUT faculty that offers grant projects to doctoral students and young staff members up to 35 years of age. Each of these faculty grant projects is intended for one year to be completed by drawing up a final report and participation in a poster competition, to which also other persons may submit their projects. In three categories – Design, Applied Sciences, Technology – the three best projects are chosen and their authors rewarded by a diploma.

New Associate Professors and Professors

The faculty's Scientific Board approved the appointment of 7 new associate professors who successfully presented a thesis and 5 new professors.

Preparation and Accreditation of New Degree Programmes

A "Metrology and Quality Assurance Management" field of study was accredited as part of a follow-up Master's degree programme. "Design Engineering" and "Process Engineering" fields of study were accredited as part of the "Mechanical Engineering" follow-up Master's degree programme. The accreditations of some existing fields of study were extended to include courses taught in English.

Information Important for the Faculty

The Faculty of Mechanical Engineering is successful in responding to the needs of society, which currently undergoes a dynamic development. The new structure of its study, its extensive research activities both at home and abroad as well as its close cooperation with industries, institutes of the Academy of Sciences and other research institutes and universities make it a modern progressive faculty.

Faculty of Electrical Engineering and Communication

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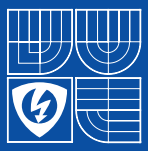

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Dean prof. Ing. Radimír Vrba, CSc.

Vice-deans
doc. Ing. Pavel Jura, CSc.
for Master's degree programmes, dean's deputy
doc. Ing. Jarmila Dědková, CSc.
for Bachelor's degree programmes
prof. Dr. Ing. Zbyněk Raida
for creative activities, and doctoral programmes
doc. Ing. Ivo Provazník, Ph.D.
for public and international relations

Chairperson of the Academic Senate RNDr. Vlasta Krupková, CSc.

Faculty Secretary Ing. Miloslav Morda

Departments

Department of Control and Instrumentation
headed by doc. Ing. Pavel Jura, CSc.
Department of Biomedical Engineering
headed by prof. Ing. Jiří Jan, CSc.
Department of Electrical Power Engineering
headed by doc. Ing. Antonín Matoušek, CSc.
Department of Electrical and Electronic Technology
headed by doc. Ing. Josef Jirák, CSc.
Department of Physics
headed by doc. Ing. Lubomír Grmela, CSc.
Department of Foreign Languages
headed by PhDr. Milena Krhutová, Ph.D.
Department of Mathematics
headed by prof. RNDr. Jan Chvalina, DrSc.
Department of Microelektronics
headed by prof. Ing. Vladislav Musil, CSc.
Department of Radio Electronics
headed by prof. Ing. Jiří Svačina, CSc.
Department of Theoretical and Experimental Electrical Engineering
headed by Ing. Pavel Fiala, Ph.D.
Department of Telecommunications
headed by prof. Ing. Kamil Vrba, CSc.
Department of Power Electrical and Electronic Engineering
headed by doc. Ing. Čestmír Ondrůšek, CSc.

Degree Programmes

• **Electrical Engineering, Electronics, Communications and Control Equipment Bachelors' degree programme** with the following fields of study since 2002/2003

- Automation and Measuring Instruments
- Electronics and Communications
- Microelectronics and Technology
- Heavy-Current and Power Electrical Engineering
- Teleinformatics

• **Electrical Engineering, Electronics, Communications and Control Equipment Masters' degree programme** with the following fields of study since 2005/2006

- Biomedicine and Environmental Engineering
- Electronics and Radio Communication
- Power Electrical Engineering
- Electrical Engineering Production and Management
- Cybernetics, Automation, and Measurement
- Microelectronics
- Heavy Current and Power Electrical Engineering
- Telecommunications and Information Technology

• **Electrical Engineering, Electronics, Communications and Control Equipment Doctors' degree programme** with the following fields of study since 2002/2003

- Electronics and Communications
- Microelectronics and Technology
- Biomedicine Electronics and Biocybernetics
- Heavy Current and Power Electrical Engineering
- Teleinformatics
- Cybernetics, Automation, and Measurement
- Theoretical Electrical Engineering

There are also the following initiated and running out degree programmes:

- **Electrical Engineering and Computer Science Bachelor's degree programme,**
- **Electrical Engineering and Computer Science Master's degree programme,**
- **Electrical Engineering and Computer Science follow-up Master's degree programme.**

Special Biomedicine Engineering or Biomedicine Electronics programmes are also offered with special medicine and biomedicine courses added to the existing programmes.

In 2004, 12 graduates received a Bachelor's degree, 328 an Ing. Master's degree and 29 doctoral students a Ph.D. degree. A total of 1,301 first-year students enrolled on the full-time programmes and 87 graduates on doctoral programmes. Over 36 international students attended paid-for courses taught in English.

Important Events in 2004

The following are the events that have had a major impact of the faculty life:

- prof. Ing. Jiří Svačina, CSc., head of the Radio Electronics Department was awarded a BUT Gold Medal,

- doc. Ing. Miroslav Kasal, CSc. received a Special Award from the rector of BUT and a 2004 Siemens for his research of satellite communication,
- prof. Dr. Ing. Zbyněk Raida received a 2004 Siemens Prize for publishing an outstanding paper entitled "Analysis of Microwave Structures in Time Domain ",
- former BUT deans attended a meeting with the current BUT rector on the occasion of the 99th birthday anniversary of prof. Ing. Jiří Brauner, one of the first deans of the BUT faculty of electrical engineering,
- a faculty great ball was held, this time in the Voroněž hotel,
- at the GAUDEAMUS 2004 education fair, new degree programmes offered by the faculty were presented,
- combined Electrical Engineering, Electronics, Communications and Control Equipment Bachelor's degree programmes were opened with 153 students enrolled,
- Days of Open Doors were held from 15th to 29th January with secondary students visiting the faculty and teachers the secondary schools
- the faculty took part in the 11th GAUDEAMUS education fair held from 19th to 22nd October to promote study at the faculty and attract the interest of secondary school students,
- an international STUDENT EEICT 2004 conference with competition was held sponsored by SIEMENS in cooperation with the Faculty of Information Technology attended by 87 Master's degree and 141 doctoral students with their projects,
- considerable subsidies were obtained from HONEYWELL to upgrade the equipment of the laboratory of mechatronics and promote research targeted at the company's objectives,
- a meeting took place with HONEYWELL officials and headmasters of important vocational secondary schools to better meet the demand for graduates in individual fields of study and specializations,
- three new faculty research projects had received subsides from 2005 to 2009 with prof. Ing. Jiří Kazelle, CSc., prof. Ing. Jiří Svačina, CSc., and prof. Ing. Radimír Vrba, CSc. being the solution providers.

The Most Important Achievement in Science and Research

A team at the Department of Radio Electronics led by doc. Ing. Miroslav Kasal, CSc. developed and implemented a PLL frequency synthesizer and detectors with subsequent signal processing for a receiver of the transpoder of the Phase 3 satellite to be launched by AMSAT in 2006. For the work on the equipment for Phase 3E, doc. Ing. Miroslav Kasal, CSc. received a Special 2004 Award from the rector of BUT.

A team at the Department of Power Electrical and Electronic Engineering led by Ing. Bohumil Klíma, Ph.D., and Ing. Petr Huták, Ph.D. implemented an electronic control system of hydrostatic drives of the LARIX Hydro cable railway used to transport felled trees in environmentally sensitive areas with difficult access. The project was implemented in cooperation with LP Křtiny, the Czech Republic, and Beltra Resources, Ireland and funded from the EUREKA E2989 international project.

Student competition

Faculties of electrical engineering and communication and information technologies organized 10th EEICT 2004 international student competition conference. The conference was intended for undergraduate and doctoral students' projects to be presented and relations developed between the faculty and its

industrial partners among major companies producing electrical equipment. The winners of this faculty competition went to the international competition round organized by Slovak Technical University in Bratislava in 2004.

New Associate Professors and Professors

Eight new associate professors were approved after successfully presenting their theses and three new professorships received.

Combined Study

Preparation and opening of the first year of the Electrical Engineering, Electronics, Communications and Control Equipment degree programme in combined form was among important activities of 2004. New electronic teaching materials and aids were created. The curricula of this Bachelor's degree programme include 160 courses with 144 of them taught by the faculty teachers and the rest by the staff of other BUT units and faculties (Centre of Sports Activities, Centre of Education and Consultancy, Faculty of Information Technology). Eighteen new textbooks in electronic form were created comprising a total of 1,703 pages. A further 37 existing electronic materials were modified to meet the special requirements of combined or distance study comprising 1 560 pages. Work continued on virtual laboratories as teaching aids for real laboratory exercises. Ten courses were complemented by problems to be solved in virtual laboratories. Thirty-two new problems were created and 17 modified.

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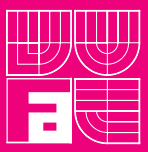


Faculty of Architecture

menu >

Dean doc. Ing. Josef Chybík, CSc.

Vice-deans
Ing. arch. Hana Ryšavá, CSc.
for external relations, deputy dean
Ing. arch. Iva Poslušná Ph.D.
for study
Ing. arch. Josef Hrabec, CSc.
for creative activities, admissions
ak. soch. Oldřich Rujbr
for faculty development

Faculty Secretary Ing. Jan Krnáč

Chairman of the Academic Senate Ing. arch. Jiří Knesl

Departments and Studios

Department of drawing and modelling
headed by doc. Ing. arch. Zdeněk Makovský
Department of free creativity activity
headed by akad. sochař Oldřich Rujbr
Department of theory and history of architecture
headed by Ing. arch. Jan Hrubý, CSc.
Department of theory of town-planning
headed by prof. Ing. arch. Jan Koutný, CSc.
Department of building structure
headed by doc. Ing. Miloslav Meixner, CSc.
Department of construction
headed by Ing. Petr Kostiha
Studio of living environment
headed by doc. Ing. arch. Dagmar Glosová, CSc.
Studio of public construction
headed by Ing. arch. Hana Ryšavá, CSc.
Studio of manufacturing construction
headed by prof. Ing. arch. Alois Nový, CSc.
Studio of monument reconstruction
headed by prof. Ing. arch. Helena Zemánková, CSc.
Studio of urban design
headed by Ing. arch. Karel Havliš
Studio of interiors and exhibitions
headed by prof. Ing. arch. Jiljí Šindlar, CSc.
Computing Centre
headed by doc. Ing. Jan Viktorin, CSc.
Modelling Centre
headed by ak. soch. Oldřich Rujbr

The faculty offers the following degree programmes:

- **Bachelor's degree programme B3501: architecture and town-planning**

standard length: 4 years
form: full-time study
field of study: 3501R002 architecture

- **Master's degree programme N3501: architecture and town-planning**

standard length: 2 years
form: full-time study
field of study: 3501T002 architecture
courses are also taught in English

- **Doctor's degree programme P3501: Architecture and town-planning**

standard length: 3 years
form: full-time and combined study
fields of study: 3501V002 architecture
3501V009 town-planning

Aims and objectives of study

The Bachelor's degree programmes should educate versatile experts equipped with skills needed in architectural and construction project offices and other institutions. Such skills should be applicable to work on projects of residential, public and industrial buildings, reconstruction of buildings and their interiors ranging from broader town-planning and architectural concepts to town-planning, architectural, and technical details.

The Master's degree programmes should produce creative professionals who are able to work on and manage construction projects. The graduates should be able to work in public administration.

The doctoral graduates should be trained to acquire the qualifications necessary to conduct research in the first place. These include the capacity to analyse problems, synthesizing the results of analysis, and using them to design solutions. The graduates should be prepared for the career of an academic.

Important events in 2004

Students and teachers of the faculty took an active part in a conference on the renovation and reconstruction of towns and cities in the Czech Republic and the former East Germany after 1990 held at the Technische Hochschule in Leipzig. Student works from both universities were on exhibition during the event.

An international conference on modern sacral buildings was held. It was attended by experts from five countries – England, Czech Republic, Poland, Slovakia, and Greece. Professor Jiří Vaverka was the leading expert of the conference and he also led a team of authors of the book „Modern Sacral Buildings of Churches and Religious Communities in the Czech Lands, Moravia, and Silesia ".

A three-week workshop was held in the holidays co-organized by Zalman Chazar, an Israeli student centre, AVIACHI, an Israeli fund, and the Studio of Monument Reconstruction. The workshop aimed to trace the Jewish settlements in Moravia. It was attended by 30 Israeli students from the faculties of architecture, journalism, and film sciences in Jerusalem and from the BUT Faculty of architecture.

In cooperation with Ecole d' Architecture de Nancy and Hochschule für Technik und Wirtschaft des Saarlandes, the faculty organized a Séminaire textile workshop as part of the Erasmus programme. It was

concerned with the design of a removable roofing consisting of a membrane structure for a building at Place Stanislas, the main square in Nancy. The event was held from 21st to 25th June 2004 with 11 students from the faculty attending it led by Ing. Petr Kostiha.

A Figurama 2004 exhibition was held in Znojmo presenting works by students from the BUT faculties of architecture and fine arts, from the Academy of Arts, Architecture and design in Prague, Akademie für angewandte Kunst in Venna, and Fachhochschule in Mohan. A Czech-German catalogue in colour was published for the exhibition.

An exhibition was held to commemorate professor Otakar Diblík, an outstanding graduate from the faculty. It presented the key works and archive materials made by the leading Czech designer. The most interesting exhibits included an engine, bus, prototype of a passenger automobile and of the Zetor tractor.

Student projects made by students on a programme of the department of free creativity activity were on display in the City Museum of Bystřice nad Pernštejnem. The exhibition was entitled "Like Sculptures".

Projects were on display at he faculty submitted to a Concrete House competition organized by the Czech Chamber of Architects together with the Research Institute of Materials in Prague, and the Association of Cement producers in the Czech Republic. The winning project was submitted by Ing. arch. Petr Šmídek, a graduate from the faculty.

The studio projects are on regular display on the faculty premises. Some degree projects supervised by Ing. arch. Jiří Knesl and Ing. arch. Jakub Kynčl, Ph.D., were available to the public in the Brno Gallery of Architecture.

In the Spring months, this year's Town-Planning Days were held for the third time. Ing. arch. Petr Hurník from the Department of Town Planning organized a cycle of lectures and a student workshop on topical issues of contemporary architecture.

A student workshop was also held from 3rd to 5th May in cooperation with the City Authority in Bruntál. It was concerned with a revitalization of the abandoned parts of a former district capital. The event was organized by Ing. arch. Karel Havliš from the Studio of Urban Design and attended by 26 students.

VUTIUM Press published a monograph on the life and work of Professor Ing. arch. Ivan Ruller.

The faculty invited Willem Jan Neutelings, a world famous architect from Belgium to give a lecture on 23rd April as part of the 7th day of architecture.

On 4th May 2004, the faculty was visited by Mayor of Brno Petr Duchoň. In a discussion with students, the Mayor presented his views on the problematic constructions in Brno. The debate also touched on the current political issues.

The Most Important Achievements in Science and Research

"The Czech Architecture and Town Planning In a New Situation" research plan was completed. Involved in this research were numerous academics of the faculty. It became a pivot element of the faculty research development. Its results have been published in books, journals, and proceedings and presented at congresses, conferences, and seminars.

The year 2004 also saw the completion of a project funded by the Grant Agency of the Czech Republic researching the situation and outlooks of production areas in the industrial towns and cities of the Czech Republic by a team headed by prof. Ing. arch. Alois Nový, CSc. At the project's final stage a Brownfields – Chance for the Future international conference was held with a printed proceedings published. Invited were expert lecturers from Austria, Germany, and the Czech Republic.

Work on a project funded by the Grant Agency of the Czech republic concerned with housing for senior citizens was continued by a team led by doc. Ing. arch. Dagmar Glosová, CSc. The second year of this project ended by an international conference on this theme attended by experts from Holland, Austria and the Czech Republic.

Student competitions

A team of faculty teachers and students led by prof. Ing. arch. Helena Zemánková, CSc. took part in an international tender for the conversion of a coal laundry in Les Mines in Burgundy, France. The faculty's bid was among the five most successful ones. The winning bid was submitted by an MVRDV team from Holland.

All three prizes had been won by the faculty students in the prestigious XELLA student competition with 62 works submitted by students from all the schools of architecture in the Czech Republic. Marian Lanc won the first, Martin Cviček the second and Jiří Prokeš the third prize.

The traditional Bohuslav Fuchs faculty competition was held. From among 25 projects submitted, that of Pavel Martinka concerned with minimum housing was chosen as the best receiving the main prize.

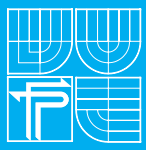
New Associated Professors and Professors

No new associated professors was appointed as a professors in 2004. Two professorships were awarded.

An important event was the decoration on the occasion of the 105th BUT anniversary of Ing. arch. Miroslav Masák who honorary doctorate was conferred upon him for his work.

Faculty of Business and Management

Faculty of Business and Management (FBM)
Technická 2896/2, 616 69 Brno (until 30. 6. 2004)
Kolejní 2906/4, 612 00 Brno (since 1. 7. 2004)
tel.: +420 541 141 111
e-mail: dean@fbm. vutbr. cz, e-mail: name@fbm. vutbr. cz
http://intra.fbm.vutbr.cz/, http://www.fbm.vutbr.cz



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Dean doc. Ing. Miloš Koch, CSc.

Dean's Aide prof. Ing. Karel Rais, CSc., MBA
in matters of business activities

Vice-deans doc. Ing. Vojtěch Koráb, Dr., MBA
for science and research, deputy dean
prof. RNDr. Ivan Mezník, CSc.
for faculty development
doc. Ing. Mária Režňáková, CSc.
for teaching
doc. Ing. Vladimír Chalupský, CSc., MBA
for international relations

Faculty Secretary Ing. Václav Meluzín

Chairman of the Academic Senate Ing. Viktor Ondrák, Ph.D.

Chairman of the Scientific Board doc. Ing. Miloš Koch, CSc.

Departments

Department of Applied Disciplines (terminated its activity on 31st August 2004)
headed by Ing. Jiří Kříž, Ph.D.
Department of Post Graduate Studies – Brno Business School (terminated its activity on 31st August 2004)
headed by Ing. Oldřich Šašinka, MBA
Department of Economics
headed by doc. Ing. Alena Kocmanová, Ph.D.
Department of Informatics (since 1st September 2004)
headed by Ing. Jiří Kříž, Ph.D.
Department of Management (since 1st September 2004)
headed by PhDr. Iveta Šimberová, Ph.D.
Department of Finance (since 1st September 2004)
headed by Ing. Věra Minaříková, Ph.D.
Department of Post Graduate Studies – Brno Business School (since 1st September 2004)
under the aegis of Ing. Miloš Koch, CSc. – as dean of the faculty

The faculty offers the following degree programmes

Bachelor's degree programmes:	Tax Consultancy
	Managerial Informatics
Master's degree programmes:	Corporate Finance and Business
	Company Management
Doctor's degree programme:	Company Management

Lifelong Learning Programmes: Tax Consultancy, Managerial Informatics
Corporate Finance and Business
Company Management

Offered are also Master of Business Administration (MBA) programmes jointly with Nottingham Trent University in Great Britain and Dominican University, Chicago, USA.

In cooperation with Nicolaus Copernicus University in Torun (Poland), the faculty organizes international marketing studies.

Aims and objectives of study

The faculty offers the accredited Economics and Management degree programmes and the System Engineering and Informatics Bachelor's degree programme. Offered are also the Tax Consultancy Bachelor's degree programmes, intended for tax and accounting experts and Managerial Informatics providing education for those interested in information systems and technologies. Graduates of business-oriented Bachelor's degree programmes desiring to obtain qualification for finance and business may enrol on the Corporate Finance and Business programme for a Master's degree. Students who have obtained a Bachelor's degree completing a technically oriented programme, may go on studying enrolling on a Company Management programme for a Master's degree to become experts in business and management of medium and large enterprises. Talented students with a Master's degree may enrol on a Company Management Doctor's degree programme, which is designed to educate top experts in corporate management and research.

Lifelong Learning

Brno Business School provides lifelong learning courses in economics, management, and marketing its pivotal programme being the Master of Business Administration study offered jointly with Nottingham Trent University in Great Britain and Dominican University of Illinois at Chicago, USA. In cooperation with Nicolaus Copernicus University in Torun, Poland, the faculty organizes international management and marketing studies for top management executives. The British Business Management and Finance Bachelor's degree programme is offered in cooperation with Nottingham Trent University in Great Britain. In view of an amendment to the Higher Education Act that provides, after successful completion of a lifelong learning programme, for admission to and graduation from a Bachelor's programme using a combined form of study graduation, the faculty management decided not to offer this programme any longer. This is the reason why, in the academic year 2004/2005, no more students were admitted to the first year of the British Business Management and Finance Bachelor's degree programme with only the second- third- and fourth-year students remaining.

New Associated Professors and Professors

One member of the academic staff was approved as associate professor. Two academics received professorships having successfully presented their theses to the Scientific Board of the Faculty.

Preparation and Accreditation of New Fields of Study

A council for degree programmes is meeting regularly to discuss the possibilities of offering further education options, currently preparing for re-accreditation the Economics and Management programmes of the Corporate Finance and Business and Company Management fields.

The Most Important Achievements in Science and Research

The research conducted at the faculty maintains its good standart as evidenced by a grant obtained from the sixth Grant EU "AGATE" programme for a project to be worked on by a team headed by prof. Ing. M. Dohnal, DrSc. Participating institutions: the Netherlands, Germany, and Belgium.

Teaching Assessed by Students

A Board for Degree Programmes is working at the faculty over the year to deal with conflicting situations by submitting immediate proposals to the dean and Academic Senate. Twice a year, the dean conducts a confidential enquiry among students. The results are then discussed by the Academic Senate of the faculty. They also serve as feedback for assessing the quality of teaching and teachers.

Development and Transformation Projects

The faculty has been assigned a development programme for the Company Management courses of the Economics and Management Doctor's degree programme to be taught in English. For one project, the faculty won funding from the Higher Education Development Fund.

International Relations

International activities continued to be extended also in this year: these included mostly one- to two-semester student stays abroad within the Socrates/Erasmus programme and study at Whitewater University in Wisconsin, USA. English teaching went on in courses for a group of international students from European and US partner universities. By academics visiting the traditional partner universities in Great Britain, Spain, Finland, Germany, and France, cooperation was further strengthened. New opportunities emerged to extend cooperation to countries in Central and Eastern Europe (Poland, Russia, Ukraine).

Faculty Development

1. In harmony with the BUT Mission Statement, teaching should acquire a new quality as required by the EU from the "European Universities".
2. All degree programmes should be accredited by ECTS.
3. Both Bachelor's and Master's programmes should be extended.
4. Educational options should be extended mostly by the combined form of study.
5. Cooperation should be improved between faculties to extend the offer of courses organized by two or more faculties.
6. Cooperation should be strengthened on the preparation of interdisciplinary study and degree programmes to meet the requirements of the practice.
7. Cooperation with companies should be strengthened on assigning the themes of Bachelor's and Master's degree projects.
8. The offer of study aids should be extended with the e-learning forms having a priority.
9. Study materials should be prepared for specialized courses to be taught in English.
10. Talented students representing the faculty should receive every support.

Other Activities At the Faculty

• „Business and Economic Development in Central and Eastern Europe", The Twelfth International Conference, Faculty of Business and Management, Brno University of Technology, 10.–11.09.2004. Conference Proceedings: ISBN 80-214-2717-5.

• „Management, Economics and Business Development in the New European Conditions", International Conference, Faculty of Business and Management, Brno University of Technology, 28.–29.05.2004, Rozdrojovice, Brno. Conference proceedings: ISBN 80-214-2661-6.

• „Avoiding Risks and Strategic Behaviour of Enterprises in the Czech Republic After EU Accession", Scientific Colloquium, Faculty of Business and Management, Brno University of Technology 21.04.2004. Conference Proceedings: ISBN 80-214-2653-5.

• „New Trends for a New Europe: Research for Entrepreneurship", International Conference, Faculty of Business and Management, Brno University of Technology, 21.–22.10.2004. Conference Proceedings: ISBN 80-214-2753-1.

• „New Trends in the Development of Industries ", a conference held on 24.–25.11.2004. Conference Proceedings: ISBN 80-214- 2787-6.

• Participation in the Leonardo da Vinci programme (EU).

• The faculty participated in the Modular Training Programme. European Dynamic SalesMan-CZ/03/B/F/PP-168008.

• The Day of Open Doors (January and December). 6th FBM Students' Ball. Competition in rhetoric in cooperation with the BUT Centre of Education and Consultancy. The faculty participated in the Gaudeamus education fair.

• 9th meeting of former teachers with the faculty officials. The faculty management met with the top management of Tomas Bata University in Zlín.

• Over the year, selected academics lectured at partner European universities both teaching and participating in international conferences.

Faculty of Chemistry (FC)
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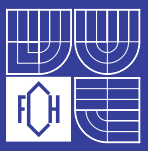

Faculty of Chemistry

menu >

Dean prof. Ing. Jaroslav Fiala, CSc.

Vice-Deans
prof. Ing. Ladislav Omelka, DrSc.
for creative activity, deputy dean
doc. Ing. Oldřich Zmeškal, CSc.
for education
doc. RNDr. Ivana Márová, CSc.
for external relations
doc. Ing. Michal Veselý, CSc.
for faculty development and promotion

Faculty Secretary Ing. Renata Herrmannová

Chairman of the Academic Senate RNDr. Božena Kábelová

Departments

Department of Physical and Applied Chemistry
headed by doc. Ing. Miloslav Pekař, CSc.
Department of Chemistry and Technology of Environmental Protection
headed by prof. RNDr. Milada Vávrová, CSc.
Department of Material Chemistry
headed by doc. RNDr. Vladimír Čech, Ph.D.
Department of Chemistry of Foodstuffs and Biotechnology
headed by doc. Ing. Miroslav Fišera, CSc.

Aims and Objectives of Study

- transition to three-tier structure of study – Bachelor' s, Master's, and Doctor's degree programmes,
- credit system enabling study in several fields,
- broad range of degree programmes offered,
- the degree programmes and fields of study offered designed to reflect the needs of the current and future practice
- selected specialized courses taught in English,
- extensive computer-aided support of all degree programmes,
- an option to study for a Europe-wide recognized EUR ING degree.

In all the degree programmes, the study may take both a full-time and combined form. The combined form combines distance and full-time study (attending lectures once a week with laboratory practice taking place in a single block during the semester).

programme	degree programmes	fields of study
3-year Bachelor's degree programmes:		
B2801	Chemistry and chemical technologies	Engineering chemistry
B2901	Chemistry and technology of foodstuffs	Chemistry of foodstuffs
B2901	Chemistry and technology of foodstuffs	Biotechnology
2-year follow-up Master's degree programmes:		
N2805	Chemistry and technology of environmental Protection	Chemistry and technology of environmental protection
N2806	Applied chemistry	Applied chemistry
N2820	Chemistry, technology, and properties of materials	Chemistry, technology, and properties of materials*
N2808	Chemistry and technology of materials	Chemistry of Materials
N2901	Chemistry and technology of foodstuffs	Chemistry of foodstuffs and biotechnology
5-year Master's degree programmes:		
M2805	Chemistry and technology of environmental protection	Chemistry and technology of environmental protection
M2806	Applied chemistry	Applied chemistry
M2808	Chemistry and technology of materials	Chemistry of materials
M2901	Chemistry and technology of foodstuffs	Chemistry of foodstuffs and biotechnology
3-year Doctor's degree programmes:		
P1404	Physical chemistry	Physical chemistry*
P1405	Macromolecular chemistry	Macromolecular chemistry*
P2805	Chemistry and technology of environmental protection	Chemistry of environmental protection
P2820	Chemistry, Technology, and properties of materials	Chemistry, Technology, and properties of materials*
P3911	Materials Science	Chemistry of materials
		Materials engineering

** marked programmes include parallel courses taught in Czech and English*

New Associated Professors and Professors

One member of academic staff successfully presented his thesis at the faculty and became associated professor, another two members of academic staff fulfilled the criteria and received associate professorship outside BUT, one faculty staff member was successful in receiving professorship from the Faculty of Mechanical Engineering.

Doctoral students

In 2004 sixteen doctoral students of the faculty successfully presented their theses and received a Ph.D. degree.

Concise list of the most important events

In May a workshop was held at the faculty on the involvement of universities in the preparation and implementation of a concept of crisis management and protection of population, next a seminar on element trace analysis focussing in particular on problems of identifying heavy metals in environmental objects by modern instrumental techniques.

In March a Laboratory of Physical Chemistry of Biopolymers was established shared with CPN, s. r. o. The objective of the laboratory is to study the physical and chemical properties of the halyuron acid and its derivatives with potential applications in pharmacy, medicine, and cosmetics. The laboratory is located at the Department of Physical and Applied chemistry.

In November the first year of a lifelong-learning training course in applied chemistry for secondary-school teachers took place. The course was attended mostly by teachers from the South Moravian region.

The Most Important Achievements in Science and Research

Research at the faculty concentrated mostly on the successful completion of two research plans. At the same time, a new draft research plan was drawn up by the faculty to be implemented beginning in 2005. The faculty became involved in work on projects funded by other grant agencies: in 2004, apart from the above-mentioned research planes, a total of 7 projects were worked on funded by the Grant Agency of the Czech Republic (4 POST-DOC projects, 1 doctoral project, 2 standard projects), 2 projects within the KONTAKT programme, 2 COST projects, and 23 projects receiving subsidies from the Higher Education Development Fund. Also 5 transformation and development projects were being implemented.

Assessment of the quality of instruction/teaching by Students

At the end of each semester, students may assess the teaching. In 2004 an enquiry was used in electronic form to be filled in by students on registration for an examination. The enquiries are then processed and the results placed at the faculty website. They serve as a useful document used by the faculty management to better organize and by the departments to improve teaching.

Student Competitions

Constant attention is paid by the faculty to organizing student competitions. Also in 2004 the traditional STUDENT FCH 2004 competition took place for the faculty Bachelor's and Master's degree students in which, for the fist time, also students from the faculty of chemistry of Slovak Technical University in Bratislava took part. On the same date, a competition of the faculty doctoral students was held. One of the criteria of being admitted to the competition was the submission of the full text of a contribution and, in the case of doctoral students, also its presentation in a major world language. All the contributions were published in the conference proceedings.

In October, several students from the faculty took part in a Slovak nationwide student competition held at the Faculty of Chemistry and Technology of Foodstuffs of Slovak Technical University in Bratislava. Our students won one first and two third prizes. In May, one doctoral student of the faculty took part in a „Prix de Chimie" competition organized annually by the French Embassy in Prague. One Master's degree student won a prize of the „Česká hlava – Chance, a. s., Gaudeamus foundation .

Preparation and Accreditation of New Degree Programmes

Because of the great interest in study of the chemistry of foodstuffs, the faculty began to offer a Chemistry and Technology of Foodstuffs Bachelor's degree programme both in full-time and combined form with Chemistry of Foodstuffs and Biotechnology fields of study.

In order to promote teaching in a major world language, the following parallel English Doctor's degree programmes were accredited: Physical Chemistry, Macromolecular Chemistry and Chemistry, Technology, and Properties of Materials. Also an Engineering Chemistry parallel English Doctor's degree programme was submitted for accreditation to begin in the academic year 2005/2006.

The accreditation commission also granted permission to extend the accreditation of all four existing follow-up Master's degree programmes. The Chemistry, Technology, and Properties of Materials follow-up Master's degree programme was accredited as a parallel programme taught in English.

The accreditation commission was also asked to lift the restrictions on the accreditation of a suspended Chemistry and Technology of Environmental Protection Doctor's degree programme. The programme should be divided into two fields of study, namely „Environmental Chemistry" and „ Technology of Environmental Protection". The programme will again be offered beginning in the academic year 2005/2006.

The accreditation commission also granted permission to extend the accreditation of the Chemistry, Technology, and Properties of Materials Doctor's degree programme offered jointly with the Institute of Scientific Instruments of the Czech Academy of Sciences.

At the end of 2004 the Accreditation Commission was asked for accreditation of a Crisis Management and Protection of Population Bachelor's degree programme.

Development and Transformation Projects

In 2004 the faculty was involved in 5 transformation and development projects. The first one was a specialized development project designed to introduce a Crisis Management and Protection of Population Bachelor's degree programme. The remaining four projects were among the integrated development programmes of Brno University of Technology. The faculty was involved in a university development programme for disabled students and in projects designed to develop the modular structure of degree programmes, teaching in English and support of lifelong learning programmes.

Faculty of Fine Arts

Faculty of Fine Arts (FFA)
Rybářská 125/13/15, 603 00 Brno
tel.: +420 541 146 850
http://www.ffa.vutbr.cz

menu >

Dean prof. PhDr. Jan Sedlák, CSc. (from 01.01. to 31.01 2004 authorized to manage the faculty)
PhDr. Petr Spielmann, dr.h.c. (since 01.02. 2004)

Vice-Deans
Mgr. Richard Fajnor
for education (since 01.04. 2004)
PhDr. Pavel Ondračka
for strategic development (since 01.04.2004)
for education (from 01.02.2001 to 01.04. 2004)
deputy dean (from 01.02. 2004 to 01.04. 2004)
Ak. soch. Zdeněk Zdařil
for development and material equipment
doc. Dr. Jiří H. Kocman
for creative activities and external relations
deputy dean (since 01.04.2004)

Faculty Secretary Mgr. Jaroslava Bílá

Chairman of the Academic Senate Mgr. Irena Armutidisová

Fields of study • Studios, Department and Sections

Sculpture	Studio of Sculpture 1 doc. ak. soch. Michal Gabriel Studio of Sculpture 2 doc. ak. soch. Jan Ambrůz
Painting	Studio of Painting 1 doc. ak. mal. Petr Veselý Studio of Painting 2 doc. ak. mal. Martin Mainer Studio of Painting 3 doc. MgA. Petr Kvíčala
Graphic Arts	Studio of Graphic Arts ak. mal. Margita Titlová-Ylovsky Studio of Drawing doc. Mgr. Josef Daněk
Graphic Design	Studio of Graphic Design Mgr. Václav Houf Studio of Paper and Book doc. Dr. Jiří H. Kocman
Conceptual Trends	Studio of Intermedia doc. prom. ped. Václav Stratil Studio of Environment ak. mal. Vladimír Merta
Video–multimedia–performance	Studio of Video Arts prof. ak. mal. Peter Rónai

	Studio of Multimedia Mgr. Richard Fajnor Studio of performance doc. ak. soch. Tomáš Ruller
Industrial Design	Studio of product Design ak. soch. Zdeněk Zdařil Studio of Body Design doc. Mgr. Jana Preková

Department of the Theory and History of Arts	Mgr. Blahoslav Rozbořil (until 29.02.2004) prof. PhDr. Jan Sedlák, CSc. (since 01.03.2004)
Section of Photography	Mgr. Irena Armutidisová
Section of Information Technologies	Ing. Jaroslav Maloch, CSc.
Section of Video Arts	Ing. Dalibor Vlašín

Fields of Study of the Bachelor' degree programme

KKOV 82-16-711 Fine Arts – painting – free creation
KKOV 82-16-721 Fine Arts – sculpture – free creation
KKOV 82-16-730 Fine Arts – graphic arts
KKOV 82-16-746 Fine Arts – graphic design
KKOV 82-16-747 Fine Arts –conceptual trends
KKOV 82-16-748 Fine Arts – video–multimedia–performance
KKOV 82-17-7 Industrial Design

Fields of Study of the Master' degree programme

KKOV 82-16-811 Fine Arts – painting – free creation
KKOV 82-16-821 Fine Arts – sculpture – free creation
KKOV 82-16-830 Fine Arts – graphic arts
KKOV 82-16-846 Fine Arts – graphic design
KKOV 82-16-847 Fine Arts – conceptual trends
KKOV 82-16-848 Fine Arts – video–multimedia–performance
KKOV 82-17-8 Industrial Design

After receiving a positive opinion of the Accreditation Commission of 4th July ref. no. 20172/2003-30, the Ministry of Education of the Czech Republic decided to extend the accreditation of the Fine Arts Master's Degree programme to include courses in taught English until 25th January 2006.

Aims and Objectives of Study

The degree programmes offered by the Faculty of Fine Arts cover a broad spectrum of fine arts ranging from the classic arts to new media. The study at the faculty has several aspects. The primary one is creative – cultivating richness of imagination, individualism as well as the urgency of the content's mission. It is mainly this aspect that requires a strong personality of the teacher. Here also another aspect is at play – the techniques, technologies, forms, and state-of-the-art methods have to be mastered, willingness and

courage to experiment have to be encouraged. Important is also a theoretical background helping the students grasp the meaning of their own creative activity, be aware of the historical, regional, and traditional contexts and understand its methodological, philosophical, an social justification. Currently, also the aspect of salvaging and preserving work of arts, the aspect of restoration is beginning to be seen as relevant.

At present, the study at the faculty consists of two stages: graduates of the four-year Bachelor's degree programme should master the exigencies, technical and technological skills of the profession being aware of the nature of their own artistic talents and being able to develop them. In the two-year Master's degree programme that follows, the students are taught how to take an individual approach to sophisticated artistic concepts and develop artistic distinctiveness. Studio teaching at both study stages is complemented by both required and optional theoretical lectures and courses. Required are also English courses, with German and Roman languages courses recommended. The faculty management considers introducing a third, doctoral stage of study in some of the fields.

The faculty is striving to cooperate with other BUT faculties mostly in the area of technology, with Masaryk University, Janáček Academy of Music and other universities in the Czech Republic and abroad. An audio studio, for example, was built at the faculty, which, as preliminarily agreed, will also be used by the Faculty of Music of the Janáček Academy of Music and Performing Arts or by the Prague academy, with students of the faculty, in turn, being able to use some facilities of these universities. Intensive student mobility is going on at the faculty involving institutions and artistic schools abroad. Joint events with these institutions are planned.

The faculty resides in two buildings: at Rybářská 125/13/15 and at Údolní 495/19. To cope with the permanent lack of space the faculty was assigned a building formerly occupied by the BUT Faculty of Business and Management in Gorki street. The building is so dilapidated and its architectural value so high that a survey and reconstruction project had been ordered from renown architects who made and presented a survey report and reconstruction proposal. The implementation of the reconstruction, however, is so prolonged that the faculty's problems with space cannot be removed in this way. For a long time, the faculty has been making every effort to concentrate its premises in a single building or at least in buildings not to far from each other. With this in mind, attempts have been made to either share the buildings at the corner of Údolní and Úvoz streets with the BUT Faculty of Architecture or obtain the "Municipal Court" building in the Šilingrovo square or the reconstructed buildings at Údolní 494/19, in Gorkého/Jaselská streets and those occupied today by the Department of Mathematics and Physics of Masaryk University next to the building of BUT rectorate.

The aim of education at the faculty is to prepare students for an active artistic role in society and for society, which is among the essential prerequisites of future development of a truly humane society. The graduates will find their jobs (those of Bachelor's degree programmes mostly as mid-position managers, those of Master's degree programmes as freelance artists) in media, public cultural institutions, designing works of arts decorating the working environment and public areas, making industrial designs, in museums, galleries, theatres, or they may teach at artistic schools. Due to the current situation when cultural activities find little support, there are very few jobs ensuring subsistence. We see more opportunities coming in future for restoration specializations (restoring photographs, paper, and modern works of arts).

Important events in 2004

The year 2003 saw the tenth anniversary of the Faculty of Fine Arts. To recall its achievements, the faculty organized an exhibition in the Brno House of Arts in November 2003 and in the Václav Špála Art Gallery in Prague in January and February 2004.

The faculty is making every effort to promote cooperation with the public. Among the most important events of 2004 was the establishment of the Gallery of the Faculty of Fine Arts at Údolní 495/19. In 2004 it hosted an exhibition of works by Woody Vašulka, dr.h.c., and the BUT and Terry Haass exhibition. Together with the Brno House of Arts the faculty put on a series of public lectures by members of the faculty staff. In cooperation with other institutions exhibitions are held of works by the faculty teachers and students.

The Most Important Artistic Achievements in 2004

As in the previous years, the members of academic staff participated in the most prominent cultural and artistic activities in the Czech Republic being among the standard distinctive representatives of the Czech arts abroad.

New Associated Professors and Professors

- December 2004 – prom. ped. Václav Stratil was appointed associate professor at the University of Fine Arts in Bratislava.
- December 2004 – doc. ak. soch. Tomáš Ruller delivered an inauguration lecture to become professor at the University of Fine Arts in Bratislava.

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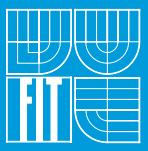

Faculty of Information Technology

menu >

Dean prof. Ing. Tomáš Hruška, CSc.

Vice-Deans
prof. RNDr. Milan Češka, CSc.
for creative activity
doc. Ing. Vladimír Drábek, CSc.
for education
prof. Ing. Jan M. Honzík, CSc.
for external relations, deputy dean
Ing. Zdeněk Bouša
for development

Chairman of the Academic Senate Ing. Jaroslav Zendulka, CSc.

Faculty Secretary Ing. Zdeněk Bouša

Departments
Department of Information Systems
headed by doc. Ing. Jaroslav Zendulka, CSc.
Department of Intelligent Systems
headed by doc. Dr. Ing. Petr Hanáček
Department of Computer Graphics and Multimedia
headed by doc. Dr. Ing. Pavel Zemčík
Department of Computer Systems
headed by prof. Ing. Václav Dvořák, DrSc.

The faculty offers the following accredited degree programmes:

- **Information Technologies Bachelor's degree programme** (a three-year programme opened in the academic year 2002/2003 with first graduates in the academic year 2004/2005)
- **Electrical Engineering and Computer Science Master's degree programme** (a five-year programme to be closed at the end of the academic year 2006/2007)
- **Electrical Engineering and Computer Science follow-up Master's degree programme** (a three-year programme to be closed at the end of the academic year 2006/2007)
- **Information Technologies Doctor's degree programme** (a three-year programme)
- **Information Technologies follow-up Master's degree programme** (a two-year programme to be opened in the academic year 2005/2006 with the following specializations: Information Systems, Computer Graphics and Multimedia, Intelligent Systems, Computer Systems and Networks)

The degree programmes offered by the faculty are concerned with the technology and software of computer systems. This includes the theoretical computer science and theoretical background of computing as well as their practical applications in the analysis, design, operation, and maintenance of computer systems and networks, data input facilities, and transfer equipment and other computer applications.

Important Event

In the year 2004, the Faculty of Information Technology marked its third year of existence as an independent faculty of Brno University of Technology. The major objective was to open the third year of an

entirely new Bachelor's degree programme with an enrolment of over 1,030. Important was also to complete the restructuring of the organization of the Dean's office and to recruit and train good staff.

The important events in 2004 include:

- Microsoft Day at the faculty on 7th January 2004,
- the traditional well-organized Great Ball of the faculties of information technology and electrical engineering and communication held at the Voroněž hotel with prominent personalities attending on 30th January 2004,
- 4 new projects received grants from the Grant Agency of the Czech Republic reaching a total of 12 projects funded by this agency,
- 5 new projects received grants from the Higher-Education Development Fund,
- 5 projects worked on funded by the Ministry of Education,
- 3 EU funded projects (including a new AMI project – solution co-providers and team leaders from the faculty: prof. Ing. Hynek Heřmanský, doc. Dr. Ing. Jan Černocký, doc. Dr. Ing. Pavel Zemčík – and 2 EU projects submitted),
- participation in the "6NET, Large-Scale International IPv6 Pilot Network" EU project and involvement in the "GN2, Multi-Gigabit European Academic Network" EU project within the framework of the Programmable Hardware activity of the CESNET, z.s.p.o. research plan with Ing. Jan Kořenek being a solution co-provider for the faculty,
- 3 projects funded by the CESNET Development Fund were being implemented, participation in work on 2 subtasks of the CESNET research plan an acceptance of 1 CESNET development project,
- the "Tools for Fast Hardware Development – Accelerated Built-In Image and Video Processing Applications" project received a grant from the Grant Agency of the Czech Academy of Sciences with Dr. Ing. Pavel Zemčík being a solution co-provider for the faculty,
- Engineering works – Ing. Přemysl Kršek, Ph.D.: the Transfer 3.0 Medicinal Modelling System: software system designed for 3D display and segmentation of tissues and to create 3D geometric models of tissues,
- newly built laboratories: – laboratory of medicinal engineering applications specializing in generating 3D geometric models of tissues from CT/MR data and in producing physical models of tissues (in cooperation with the Faculty of medicine at Masaryk University in Brno and the St. Anne Teaching Hospital),
- faculty staff participated in the judging of exhibits fro awarding the Crystal Disc prize at the INVEX fair (Dr. Ing. Otto Fučík, prof. Ing. Jan M. Honzík, CSc., doc. Dr. Ing. P. Zemčík),
- the MOSIS´04 (Modelling and Simulation of Systems) conference was co-organized from 19th to 21st April 2004 with the Faculty of Electrical Engineering of VŠB-TU Ostrava as the main organizer,
- the ISIM´04 (Information Systems Implementation and Modelling) conference was co-organized from 19th to 21st April 2004 with the Faculty of Electrical Engineering of VŠB-TU Ostrava as the main organizer,
- 11th Annual IEEE International Conference and Workshop on the Engineering of Computer Based Systems, ECBS 2004 was organized at the BUT Centre from 24th to 27th May 2004. Prof. Ing. Miroslav Švéda, CSc. was the conference director, prof. Ing. Václav Dvořák, DrSc. was chaired the organization committee with Ing. Lukáš Sekanina, Ph.D., and Ing. Richard Růžička, Ph.D. as members,
- Socrates International IP (Intensive Programme Project) was organized from 21st June to 2nd July 2004 by prof. Ing. Jan M. Honzík, CSc.,
- activity was started in the "Re-qualification of Disabled Persons" three-year international Leonardo da Vinci programme.
- the STUDENT EEICT 2004 student competition conference was co-organized with the Faculty of Electrical Engineering and Communication as the main organizer.

• ASIS 2004, XXVIth International Autumn Colloquium ADVANCED SIMULATION OF SYSTEMS – was attended by prof. RNDr. Milan Češka, CSc., and doc. Ing. Zdeňka Rábová, CSc., from 6th to 9th September 2004,
• the faculty was presented at the GAUDEAMUS 2004 education fair held from 19th to 22nd October 2004,
• new faculty senators were elected on 19th October 2004,
• on 7th December 2004, prof. Ing. Tomáš Hruška, CSc. was elected dean of the faculty by the Academic Senate.

The Most Important Achievements in Science and Research

Meduna, A. a Švec, M.: Grammars with Context Conditions and Their Applications, Wiley, New York, 2005, p. 225 (to appear).

Grammars with context conditions have been under scrutiny in the theory of formal languages for a number of years, but this theory lacked a monograph discussing possible properties of this important class of formal models in a unified and systematic manner. Moreover, it has been proved recently that, on the basis of grammars with context conditions, algorithms can be written that have major applications in bioinformatics particularly in molecular biology. This was the reason why a number of papers were written at the faculty on such grammars and their applications. All of them were published by renowned international journals such as Theoretical Computer Science or Fundamenta Informatica. The outcomes of the research are then summed up in the monograph by Alexander Meduna, A. and Martin Švec entitled Grammars with Context Conditions and Their Applications, Wiley, New York, 2005, p. 225 (to appear).

Doc. RNDr. Alexander Meduna, CSc., is the author of the monograph Automata and Languages, Springer, London, 2000, p. 892, for which he received the 2004 BUT Rector Prize. He is also the author of another 50 papers published in international computer science journals. Ing. Martin Švec, who is a doctoral student supervised by doc. Meduna, is a co-author of five papers published in journals and author of a number of conference contributions.

Student Competitions

At the Student EEICT conference, students from the faculties of information technology and electrical engineering and communication compete in presenting their papers. In 2004 the student conference was held on 22nd April also attended and sponsored by major companies producing electrical equipment and information technologies. Apart from providing the space and time for students to present their papers, the conference is also an excellent opportunity to strengthen the relations between the faculties and their industrial partners.

Assessing the quality of Teaching

The Boards for Degree Programmes are in charge of the assessment of the quality of teaching in the degree programmes offered by the faculty. Such assessment takes place at the level of:
• curricula and their updating and innovation,
• courses.

One of the documents used to asses the quality of teaching and teachers are the results of enquires among students. The enquiry forms are available to everyone in electronic format in the information system, being automatically collected and processed. The results are displayed as histograms showing the distribution of typically five possible answers to typical questions.

other BUT units

CENTRE OF INFORMATION SERVICES (CIS)
Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
http://www.vutbr.cz

CENTRE OF EDUCATION AND CONSULTANCY (CEAC)
Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
http://www.cvp.vutbr.cz

THE INSTITUTE OF FORENSIC ENGINEERING (IFE)
Údolní 244/53, 602 00 Brno
tel.: +420 541 141 111
http://www.usi.vutbr.cz

CENTRAL LIBRARY (CL)
Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
http://www.vutbr.cz

VUTIUM PRESS
Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
http://www.vutbr.cz/to.cs/nakl/

CENTRE OF SPORTS ACTIVITIES (CESA)
Technická 2896/2, 612 00 Brno
Tel.: +420 541 141 111
http://www.cesa.vutbr.cz

BUT HALLS OF RESIDENCE AND CANTEENS (HRC)
Kolejní 2905/2, 612 00 Brno
tel.: +420 549 255 366, fax: +420 541 211 266
http:// www.skm.vutbr.cz

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CENTRE OF INFORMATION SERVICES (CIS)

Director Ing. Jaromír Marušinec

In 2004, CIS already existed in its new organisation chart as drawn up at the end of 2003 working on the development of university information technologies described earlier in this report.

Legal and Management Department

In 2004 this department

- performed administrative work related to information technologies
- coordinated and managed CIS and administered information technologies at BUT
- administered the university software
- coordinated the implementation of the new SAP, ApolloVUT, and StudisVUT information systems
- performed analyses in preparation of a project to change the chip pass technology to MIFARE

Department of Backbone Management

Headed by Ing. Vladimír Záhořík

In 2004 this department

- put the Wi-Fi BUT network service into routine operation
- managed the operation of the optical communication infrastructure
- performed hardware and software maintenance of the network servers
- took safety measures in protection of the BUT computer network
- in cooperation with the authorized persons managed the faculty networks
- was in charge of connecting schools and non-profit organizations to the academic backbone network
- took over the administration and development of the BUT telephone network and mobile communication

Department of Operation

Headed by Ing. Milan Škrhák

In 2004 this department

- administered workstations, domain, e-mail, and network servers at the Rectorate
- managed the printing of chip-passes for BUT staff and students
- administered multimedia facilities recording their loans
- maintained rooms needed for CIS training

Department of Management Systems

Headed by Ing. Petr Šaroun

In 2004 this department

- during SAP installation, cooperated with the methodologists of the management and human resources departments of the Rectorate
- finished the implementation of SAP running it in its first year

- trained SAP users
- cooperated with other universities within the SAP Coordination Centre Association
- implemented a pilot project of the implementation of a system to support invoicing by using bar codes

Department of Databases

Headed by Ing. Martin Charvát

In 2004 this department

- administered the BUT Central Database (CDB) based on the Oracle 9i platform preparing transition to Oracle 10g
- produced documentation of data structures
- designed and controlled the integration of the faculty data sources into a central data warehouse
- integrated SAP with other systems at BUT
- submitted reports to other entities such as the Ministry of Education, SIMS registry, RIV, CEP, etc.
- printed BUT diplomas, and nostrification certificates,

Department of Development

Headed by Ing. Rudolf Musil

In 2004 this department

- developed new models of the Apollo interface for science, research, and teaching
- designed a new Internet and intranet BUT portal
- developed new BUT portal web interface modules – (Studis and Web4Teacher)
- supervised a number of students' degree projects
- trained the instructors and key users of the new information system
- implemented a SAP add-on application to monitor spending on projects

CENTRE OF EDUCATION AND CONSULTANCY (CEAC)

Director Ing. Vlastimil Bejček, CSc.

In 2004 CEAC had the following departmens:

Department of Lifelong Learning
Department of Higher-Education Consultancy
University of the Third Age

The Centre of Education and Consultancy provides information, education, and coordination necessary to systematically promote lifelong learning at BUT.

The centre's foremost objectives include:

– to create favourable conditions to make the lifelong-learning management and development more efficient in harmony with the BUT Mission Statement, Czech and EU laws, and international treaties on education,

– to offer lifelong-learning courses designed for different target groups both at BUT and in the public meeting their particular needs,

– to create communication interface between BUT and the public making it possible to offer counselling services to help the BUT graduates find jobs and their role in society, to support education, research and consultancy services at faculties.

The educational programmes offer:

– pedagogic education
– managerial education
– engineering and legal education
– language education

The higher-education programme includes:

– study consultancy
– psychological consultancy
– personnel and labour consultancy and services
– pedagogic consultancy
– project consultancy and services

The Centre also offers a comprehensive programme of internal education of BUT staff and a programme designed for senior citizens enrolled at the University of the Third Age.

Next the Centre offers consultancy services in pedagogic methodology both to BUT faculties and external customers.

Its activities also help develop the regional, national, and international cooperation of BUT concerning the lifelong learning programmes.

Important Events:

- The Ministry of Education accredited the Crisis Planning and Management degree programme
- Initial seminar took place on European regulations in the industrial practice
- The GAUDEAMUS education fair took place
- The Centre of Education and Consultancy Services took active part in the Autodesk Academia FÓRUM annual conference

The department of lifelong learning provided consultancy services and coordinated the following European projects:

IST Retraining of Disabled Persons – part of the Leonardo da Vinci programme. A total of 10 institutions cooperate on the project mostly from countries of Central and Eastern Europe in an effort to create a system of retraining courses for disabled persons.

EQUIPE – part of the Socrates programme. Now also the final version is being drafted of a follow-up EQUIPE Plus project with BUT as a contact place in the network of lifelong-learning educational institutions in the Czech republic.

EUROmonitor – the Centre of Education and Consultancy Services informs the faculties on the funds offered by the EU funds.

For further information, see Table IV. – 6

THE INSTITUTE OF FORENSIC ENGINEERING (IFE)

Director prof. Ing. Albert Bradáč, DrSc.
Deputy Director JUDr. Miroslav Kledus

Teaching programmes at the Institute include:

a) a lifelong-learning programme under Section 60 of Act no. 111/1998 Coll. intended for forensic experts and candidates (Section 4, Paragraph 1 Letter b/ of Act no. 36/1967 Coll. on forensic experts and interpreters) with the following fields of study: road accidents, repairs and assessments of motor vehicles and machinery; civil engineering; economics – real estate and personal property assessments, basics of forensic engineering. In 2004, 121 students graduated from the Institute, 3 four-semester courses and 1 one-semester course were opened, new courses were offered on the PC Crash road accident simulation programme;

b) an accredited Doctor's degree programme of the 39-47-9 Forensic Engineering field, offered by the faculties of civil and mechanical engineering in cooperation with the Institute with 70 doctoral students enrolled; 3students received a Doctor's degree in 2004.

Science and Research, Creative Activities, Conferences

In cooperation with EVU – European Society for the Research and Analysis of Accidents and the Association of Forensic Experts of the Czech Republic, the Institute held a traditional conference of technical forensic experts accompanied by a ball of experts on January 2004, a conference on the current issues of forensic experts specializing in road accidents in June as part of an accompanying programme to the Autotec´04 fair, in most regions of the Czech Republic, it participated in the training of experts on the amendment to the executive regulation to the Property Assessment Act.

Activities of Forensic Experts

The Institute's forensic experts offer their opinions in the following fields: transport, electronics, power engineering, electrical engineering, economics, metallurgy, projecting, civil engineering, mechanical engineering, water management. A total of 64 expert opinions were made at the Institute most of them revising ones requiring an interdisciplinary approach.

The Institute informally cooperates with the Department of Justice on a continual basis providing expert consulting for courts, prosecuting attorneys, police investigators, for forensic experts working in the fields covered by the Institute and for forensic medicine experts. Also lectures were given for the Justice Academy judges.

Publishing

The Institute publishes a Forensic Engineering journal in the CERM Academic Press intended for technical and economic forensic experts.

The Institute's Certification Body

A certification body is registered with the Institute accredited by the Czech Institute for Accreditation under serial number P 3072 as an unbiased and independent body issuing certificates for experts under the ČSN EN 45 013 standard. In 2004, 37 new experts were certified by the Institute with another 36 candidates attending a specialized preparation course. A total of 96 experts received certification for real property assessment, 3 experts for personal property, machinery, and equipment assessment, 3 experts for company assessment, and one expert for road accident assessment. In 2004 transition was initiated to the ČSN EN 150/IEC 17024 standard.

CENTRAL LIBRARY (CL)

Director Mgr. Nataša Jursová (util 31st March 2004)
Ing. Martin Fasura (since 1st April 2004)

The BUT Central Library is the coordinator of library services. It is responsible for the operation and maintenance of the of the Aleph500 library system servicing all the BUT libraries, purchasing foreign journals and information databases. It also keeps the information published at the BUT Internet Library Portal up to date.

Aleph500 Library System

The system has been in full operation at the BUT libraries since the academic year 2003/2004.

Because of different library systems being used at the libraries of the faculties of information technology and civil engineering, conversion to this system was only finished in 2004. Thanks to this unification, repairs could be undertaken to update the data stored in the BUT Central Catalogue.

At the end of the year, the Z39.50 server was put into operation thus enabling shared cataloguing and incorporation of the libraries in the Unified Information Gateway project – even if only in a testing mode.

Thanks to this new state-of-the-art library system, important steps could be undertaken towards unifying the processes necessary for its smooth and efficient operation.

The existing method of marking the collections with bar code labels was not consistent with the standard. Since 2004 the BUT libraries have been using the nationwide recognized format, which guarantees unified identification within the Czech Republic.

Also the external reader identification has been unified using a chip card as the medium to make the identification more reliable.

BUT Library Portal

A BUT Libraries link has been added to the portal providing access to all BUT-library-related information. Here, the user may find a concise description of the BUT libraries with links to websites containing more detailed information, a list of services offered, information sources available, etc. New Ask BUT Library and FAQ discussion forums were introduced.

In cooperation with the Centre of Information Services, new Central Library websites were integrated into the portal design.

The Central Library put into operation a new internal portal of the BUT libraries. Here, apart from a discussion forum, the library staff may find instructions for use of the Aleph system, statistics of its use, etc..

Electronic Information Sources

To extend the library collections, funding is provided by the faculties, as well as from the university budget (to buy foreign journals and information databases). Acquisitions as part of university activities are carried out by the Central Library based on agreements with the pertinent faculties.

Access to some broadband information sources is possible thanks to participation in consortia, for some others, funding is channelled from the BUT budget.

The most widely used databases include:

– Web of Knowledge – ProQuest5000
– Dialog – EIFL Direct
– Science Direct – MathSci
– Beilstein – ChemNetBase

Virtual Polytechnic Library and Interlibrary Loans

The Central Library offers to its readers the following services:

– loans defined by the Central Library Rules
– interlibrary loans/international loans, Virtual Polytechnic Library
– access to electronic information sources
– computer-equipped study rooms
– copying, printing, and binding of documents

Interlibrary loans are made possible thanks to an international network of libraries. As obtaining a document in electronic format takes very little time, there has been a growing interest in and demand for such services recently.

Information Courses

Following a recommendation by the Rector's Board, information courses have been offered to first-year students since the academic year 1995/1996. With the exception of the Faculty of Civil Engineering, these courses are organized by the Central Library.

The information education aims to acquaint the students with the basic concepts and ideas they may need when using the information sources and with the library operation.

In 2003, electronic format of information was tested by displaying specialized articles and a questionnaire at the Central Library website. In 2004 this form was redesigned to match the graphic layout of the BUT Portal.

Apart from the basic information courses, the Central Library also offers courses for the BUT academic staff in the basic skills needed for work with the information databases.

At the end of the year, preparations were under way of a new concept of the information courses tailored to different types of users. The new main subject appears to be orientation towards using the electronic information sources. These are not used sufficiently at present. Links to the degree courses are still missing, too.

Higher-Education Development Fund

Grants, above all those from the Higher-Education Development Fund, are an important source of funding used to equip the libraries with state-of-the-art technology and to buy new sources of information and library software applications. This year, for the second time, rules have been published for submitting projects – one project per university – concerning university libraries. The Central Library is the coordinator of this joint project.

In 2004 a BUT project for easy access to sources of information at the BUT libraries was successful in receiving a grant from the Higher-Education Development fund. Thanks to this funding, the operation of the Aleph500 system could be improved – by upgrading the server configuration, eliminating data loss by installing a backup drive and power supply. Faculty libraries were further equipped by new library card printers, bar code and chip card readers. The library of the Faculty of Business and Management was equipped with state-of the-art computers.

Cooperation

The BUT Central Library was a coordinator of the library services providing rooms and technical equipment for training and education courses held at BUT. Cooperation with the University of the Third Age continued confirming the experience that the meeting of different generations in libraries is of mutual benefit for all participating parties and provides motivation to further education.

VUTIUM PRESS

Director PhDr. Alena Mizerová

Publishing and Editing

In 2004 the University published 277 titles. Traditionally, the faculties published conference proceedings, study materials, textbooks, promotion leaflets; VUTIUM Press prepared for publishing series of monographs, scientific writings, textbooks, manuals, university monthly, conference proceedings, translated titles for a broad spectrum of experts both in the classic book form and electronically. Electronic format is also used for publishing a series of lectures presented by the newly appointed associate professors and professors, abridged Doctor theses and the BUT News monthly.

In 2004 VUTIUM Press organized several seminars devoted to copyright issues and questions of editor education. In cooperation with the Brno Centre of European Studies, a pilot seminar was held on the possibilities of studying the book and book culture specialization with lectures given by PhDr. Anna Kareninová, RNDr. Vladimíra Pistorius, and PhDr. Jiřina Šmejkalová.

The entire BUT book production was presented by VUTIUM Press at exhibitions in the Czech Republic and at international book fairs in Frankfurt am Main, London, Bratislava, and Taipei. VUTIUM Press also

arranged a 4th joint exhibition of 17 higher-education institutions and universities as part of the Prague Book Fair. For the Brno universities and Brno Centre of European Studies, VUTIUM Press organized a joint presentation at the 2nd Book Fair in Brno at which prof. PhDr. Milan Jelínek, CSc. gave a lecture on the metamorphoses of the Czech language as part of a series entitled Chances of University Presses in the European Book Space.

For the number of titles published by VUTIUM Press, see Table XV. – 1a, the editing and publishing done for the entire Brno University of Technology is summarized in Table XV. – 1b.

CENTRE OF SPORTS ACTIVITIES (CESA)

Director PaedDr. Jaroslav Bogdálek

In 2004, the Centre of Sports Activities offered various courses to students at 5 performance levels and in 42 disciplines. Over 7,700 students have registered for these courses with their interest in most diverse forms of sports activities growing.

The Centre also offers educational programmes, specialized seminars, training and accreditation courses to its instructors and all those interested. It lines up teams representing BUT and prepared 3 athletes for the 3rd Czech Academic Games in Prague, which ranked among the best by the number of medals they had won.

Thanks to CESA, BUT students may go in for 18 different sports in their leisure.

The sports and pedagogic activities of the Centre were presented at the Gaudeamus education fair and at the international Sportlife fair.

Sports Courses

Over 7,700 BUT students had registered for one of the 42 specialized sports courses in 2004.

– the optimisation of the electronic registration being completed, more than 3000 students can log on simultaneously at peak times,

– a new relaxation-recondition centre was opened for BUT students and teachers on the premises of the Faculty of Civil Engineering and the Machina fitness centre on the Pod Palackého vrchem campus was revamped with top quality sports equipment.

The following traditional sports events were held by the Centre in 2004:

- Olympic Day Race
- Tomahawk Moravia Workshop Brno
- Mechanical Engineering Staircase Race
- Aerobic Show
- AquaViva Swimming Contest
- Christmas Sports Games

and others.

The best athletes were announced and rewarded by the rector of BUT at the end of the year:

Major sporting achievements at the Czech academic championships:

car slalom:		
• UŠELA Martin	FME student	1st place CCR, M zones – 1st place
athletics:		
• HRABOVSKÝ Petr	FCE student	2nd place CAG 2004, 400 m
• MIKULENKA Peter	FME student	2nd place CAG 2004, 3000 m hurdles
• PETŘÍKOVÁ Irena	FCE student	2nd place CAG 2004, 3000 m
• BAAR Pavel	FME student	3rd place CAG 2004, decathlon
• ČERVENKA Jan	FCE student	1st place CAG 2004, spear
badminton:		
• BERNAČÍK Stanislav	FCE student	3rd place CAG 2004, double
• ŘEHOŘ Martin	FME student	3rd place CAG 2004, double
• ŠPLÍCHAL Tomáš	FEEC student	2nd place CAG
fitness:		
• PETEREK Michal	FEEC student	1st place, 2004 World Junior Championship
floorball:		
• KOTLAS Michal	FA student	2nd place World Championship, member of the Czech team
judo:		
• DAŇKOVÁ Pavla	FCE student	3rd place, CAG 2004, 60 kg
• KOČNAR Antonín	FEEC student	3rd place, CAG 2004, 73 kg
• MEITNEROVÁ Jitka	FCE student	3rd place, CAG 2004, 78 kg
• BEZUNK Antonín	FME student	2nd place, CAG 2004, 81 kg
• PROKOP Václav	FEEC student	3rd place, CAG 2004, 100 kg
karate:		
• VĚCHET Stanislav	FME student	1st place, CAG 2004, KATA TEAM
• HANZL Jaroslav	FCE student	1st place, CAG 2004, KATA TEAM
body building:		
• KRÁL Michal	FBM student	1st place, CCR, 9th place World Championship up to 75 kg
orientation race:		
• JIRKA Michal	FEEC student	3rd place, CAG 2004, H20 classic racecourse
• STARÁ Zdenka	FC student	3rd place, CAG 2004, D21, short racecourse, classic racecourse
• SMOLA Michal	FEEC student	1st place, Amateur World Championship, classic racecourse, 1st place relay race, 2nd place, Amateur World Championship, short racecourse 2nd place CCR, short racecourse
• DLABAJA Tomáš	FME studen	1st place ACCR, relay race, 6th place – individual short racecourse, 8th place, classic racecourse, 3rd place, CCR, classic racecourse.

swimming:		
• DURNA Pavel	FME student	2nd place, 2004 CAG, 100 m backstroke
• DURNA Petr	FME student	2nd place, 2004 CAG, 100 m breaststroke
beach volleyball:		
• BRÍDL Lukáš	FEEC student	3rd place 2004 CAG
• LÍPA Viktor	FME student	3rd place 2004 CAG
swimming with fins:		
• ŠVEJDA Jakub	FEEC student	3rd place, 2004 CAG, 100 PP
road motorcycles:		
• FILLA Michal	FME student	13th place, EM, 2nd place CCR
aerobic:		
• KVAČEK Tomáš	FCE student	3rd place, EUROTEAM EM 7th place 2004 World Championship – men
gymnastics:		
• VLK Martin	FCE student	1st place, 2004 CAG
sports climbing:		
• SOBOTKA Miroslav	FIT student	3rd place 2004 CAG
table tennis:		
• HEINCLOVÁ Adéla	FCE student	3rd place, 2004 CAG
• PINNEROVÁ Eliška	FBM student	3rd place, 2004 CAG, double
rowing:		
• ODEHNAL Martin	FEEC student	2nd place, 2004 CAG, 2xM, 1xM LV, AWC – 6th place

BUT HALLS OF RESIDENCE AND CANTEENS (HRC)

Director Ing. Jaroslav Grulich

In its facilities, BUT provides accommodation and meals for students, teachers, and the public. The BUT Halls of Residence and Canteens offer 6,687 beds for students in the following locations:

- in the Pod Palackého vrchem halls of residence (3 130 beds)
- in the Purkyňovy halls of residence (2 248 beds)
- in the Mánesovy halls of residence (261 beds)
- in the Listovy halls of residence (1 030 beds)

Accommodation

The Pod Palackého vrchem halls of residence

The halls of residence are located within a complex of accommodation, catering, leisure, and sports facilities of Brno University of Technology. Four buildings serve for accommodation. There are (cell-type) double rooms and triple rooms each with its own bath. Part of the rooms are connected to the Internet. The sports facilities offered include a fitness centre, gymnasium, boulder centre – climbing wall, indoor cycling, all supervised by experts from the Centre of Sports Activities. Among other services offered is a post office,

library. However, both the post office and library were closed in 2004. The complex also houses a student club and a cinema. A doctor's practice is also directly on the premises.

The Purkyňovy halls of residence

The halls of residence are situated in Královo Pole which is a quiet part of the city. The rooms are situated in four blocks. There are double and triple rooms with baths shared by several rooms on the same floor. Part of the rooms are connected to the Internet. Available is a computer room, fitness centre, TV rooms. A doctor's and a dentist's practices are on the premises.

The Mánesovy halls of residence

The halls of residence are again situated in Královo Pole. Standard rooms (a single room and a double room with a common bath alternate) are situated in two buildings. Part of the rooms are connected to the Internet. The students may use a sauna and an outdoor sports ground.

The Listovy halls of residence

The halls of residence are situated in the immediate vicinity of the city centre. There are double rooms with shared baths on each floor. Part of the rooms are connected to the Internet. A gymnasium, fitness centre, playing ground and TV rooms are available.

Meals

A canteen forms an integral part of each hall of residence (except the Mánesovy halls of residence). In addition, there are also canteens serving the BUT faculties and the Rectorate:

- The Pod Palackého vrchem canteen at Kolejní 2, 612 00 Brno (112 places)
- The Mozzarella Pizzeria at Kolejní 2, 612 00 Brno (110 places)
- Meals are served for staff at Kolejní 2, 612 00 Brno (48 places)
- The Purkyňova canteen at Purkyňova 93, 612 62 Brno (300 places)
- The Purkyňova snack bar at Purkyňova 93, 612 62 Brno
- The Q Restaurant at Technická 2, 616 69 Brno (160 places)
- The BUT Centre Café at Antonínská 1, 601 90 Brno (24 places)
- The Kounicova canteen at Kounicova 46/48, 602 00 Brno (336 places)
- The Maruška snack bar at Technická 8, 616 69 Brno (64 places)
- The V Restaurant at Veveří 95, 662 37 Brno (96 places)
- The Purkyňova snack bar at Purkyňova 118, 612 00 Brno (20 places)

The Mozzarella Pizzeria was newly opened offering special pizza dishes. Unlike the canteens it has a constant menu and a wider assortment of drinks.

For further information, see Table XII. – 1, 1a and XII. – 2.

Tables

menu >

III. – 1 BUT ACADEMIC SENATE

doc. Ing. František Zbořil, CSc.	chairman
Mgr. Václav Božek, CSc.	vice chairman and chairman of the Chamber of Academics
Ing. Jaroslav Švec	vice chairman and chairman of the Chamber of Students

Chamber of Academics:	**Chamber of Students:**
Mgr. Irena Armutidisová (FFA) – *from 12. 10. 2004* Mgr. Václav Božek, CSc. (FCE) doc. RNDr. Josef Dalík, CSc. (FCE) RNDr. Pavel Dobis, CSc. (FEEC) Mgr. Richard Fajnor (FFA) – *until 31. 3. 2004* Ing. Ivana Groligová, CSc. (FBM) doc. Dr. Ing. Petr Hanáček (FIT) Ing. Helena Hanušová, CSc. (FBM) RNDr. Božena Kábelová (FC) RNDr. Vlasta Krupková, CSc. (FEEC) – *from 1. 6. 2004* Ing. Vladimír Kutnohorský, CSc. (FEEC) – *until 31. 5. 2004* doc. Ing. Zdeňka Lhotáková, CSc. (FA) doc. Ing. Eva Münsterová, CSc. (FME) doc. MUDr. Vladimír Novotný, CSc. (FFA) prof. Ing. arch. Alois Nový, CSc. (FA) Ing. Jiřina Omelková, CSc. (FC) RNDr. Pavel Popela, Ph.D. (FME) doc. Ing. František Zbořil, CSc. (FIT)	Lukáš Berta (FFA) Lenka Burgerová (FA) – *until 10. 2. 2004* František Drtil (FEEC) – *until 30. 6. 2004* Mgr. Marcel Hádlík (FCE) Ing. Pavel Jelínek (FME) Pavel Kvintus (FA) – *from 6. 4. 2004* Jan Myšulka (FC) Bc. Monika Sovíková (FBM) – *until 9. 11. 2004* Ing. Jaroslav Švec (FIT) Veronika Zderadičková (FBM) – *from 7. 12. 2004*

Working Commissions of the Academic Senate	
Legislation Commission:	***Economic Commission:***
Mgr. Václav Božek, CSc. Lenka Burgerová – *until 10. 2. 2004* Ing. Ivana Groligová, CSc. doc. Ing. Zdeňka Lhotáková, CSc. – *chairman* doc. Ing. Eva Münsterová, CSc. Ing. Jiřina Omelková, CSc. Ing. Jaroslav Švec	doc. RNDr. Josef Dalík, CSc. František Drtil – *until 30. 6. 2004* Mgr. Richard Fajnor – *until 31. 3. 2004* doc. Dr. Ing. Petr Hanáček Ing. Helena Hanušová, CSc. RNDr. Božena Kábelová RNDr. Vlasta Krupková, CSc. – *from 1. 6. 2004* Ing. Vladimír Kutnohorský, CSc. – *until 31. 5. 2004* prof. Ing. arch. Alois Nový, CSc. RNDr. Pavel Popela, Ph.D. – *chairman* Bc. Monika Sovíková – *until 9. 11. 2004*
Pedagogic Commission formed on 23. 11. 2004:	
RNDr. Pavel Dobis, CSc. – *chairman* Mgr. Marcel Hádlík Ing. Helena Hanušová, CSc. RNDr. Vlasta Krupková, CSc. Jan Myšulka	

AS representatives in the BUT Building Commission	AS representatives in the Higher Education Council
prof. Ing. arch. Alois Nový, CSc. Lenka Burgerová – *until 10. 2. 2004* Mgr. Marcel Hádlík	doc. Ing. Eva Münsterová, CSc. – *vice chairwoman, member of presidium* Mgr. Václav Božek, CSc. – *member of assembly* František Drtil – *CU Student Chamber – until 5. 4. 2004, CU Student Chamber (substitute) – from 6. 4. 2004 to 30. 6. 2004* Lenka Burgerová – *CU Student Chamber (substitute) – until 10. 2. 2004* Ing. Pavel Jelínek –*CU Student Chamber – from 6. 4. 2004*

III. – 2 BUT SCIENTIFIC BOARD IN 2004

name	position, workplace	field of research
prof. Ing. RNDr. Jan Vrbka, DrSc.	rector, BUT	mechanics of solids
prof. Ing. Jiří Kazelle. CSc.	vice-rector, BUT	electrical and electronic technology
prof. RNDr. Josef Jančář. CSc.	vice-rector, BUT	macromolecular chemistry
doc. RNDr. Miloslav Švec. CSc.	vice-rector, BUT	applied physics
prof. Ing. Karel Rais. CSc.. MBA	vice-rector, BUT	economics and management
prof. Ing. Vladimír Báleš, DrSc.	rector, Slovak Technical University	chemical engineering
prof. RNDr. Jaroslav Cihlář, CSc.	FME	materials science, chemistry of materials
prof. Ing. Tomáš Čermák. CSc.	rector, VŠB-TU Ostrava	heavy-current electrical engineering
Ing. Miroslav Čermák, CSc.	chairman of the board of directors of the Stavoprojekta. a. s. building company	building structures
Ing. Jiří Devát	managing director, Microsoft, s.r.o.	theory of control and automation
Ing. Ivan Dobiáš, DrSc.	Institute of Thermodynamics, Czech Academy of Sciences	nonlinear dynamic systems
prof. Ing. Rostislav Drochytka, CSc.	vice-dean, FCE	building materials engineering
prof. Ing. Jaroslav Fiala. CSc.	dean, FC	materials science, chemistry of materials
prof. Ing. Jan M. Honzík. CSc,	vice-dean, FIT	information technology
prof, Ing. Tomáš Hruška. CSc,	dean, FIT	information technology

doc. Ing. Josef Chybík CSc.	dean, FA	structures in architecture
doc. Ing. Miloš Koch, CSc.	dean, FBM	economics and management
prof. RNDr. Miroslav Liška. DrSc,	FME	applied physics
prof. Ing, Miroslav Ludwig. CSc.	rector, University of Pardubice	organic chemistry
doc. RNDr. Petr Lukáš, CSc.	director, Institute of Physics, Czech Academy of Sciences	physics of materials
prof. Ing. Ladislav Musílek, CSc.	vice-rector, Czech Technical University in Prague	experimental physics
prof. Ing. arch. Alois Nový, CSc.	FA	architecture
prof. Ing. Emanuel Ondráček, CSc	rector's aide	mechanics of bodies
prof. Ing. Petr Sáha, CSc.	rector, Tomas Bata University in Zlin	materials engineering
prof. PhDr. Jan Sedlák, CSc.	dean, FFA until 31st January 2004	architecture
prof. RNDr. Eduard Schmidt, CSc.	vice rector, Masaryk University	physics of solid substances
prof. Ing. Jana Stávková, CSc.	vice rector, Mendel University of Agriculture and Forestry in Brno	statistics
Dr. Ing. Markus Steiner	Škoda Auto a.s.	design technology and informatics
prof. Ing. Jiří Stráský, CSc.	FCE	concrete structures
prof. RNDr. Václav Suchý, DrSc.	rector, University of Veterinary and Pharmaceutical Sciences in Brno	pharmacology
prof. RNDr. Ing. Petr Štěpánek, CSc.	dean, FCE	concrete structures
Ing. Dan Ťok, CSc.	managing director, Jihomoravská plynárenská, a.s.	power engineering
doc. PhDr. Milan Uhde	Barvičova 95, 602 00 Brno	theatrology
prof. Ing. Josef Vačkář, CSc.	dean, FME	manufacturing technology
prof. Ing. Petr Vavřín, DrSc.	rector emeritus	cybernetics, automation and measurement
brig. gen. doc.Ing. František Vojkovský, CSc.	rector, Military Academy of Brno until 31.08.2004 rector, University of Defence from 01.09.2004	aeronautics
prof. Ing. Radimír Vrba, DrSc.	dean, FEEC	electrical and electronics technology
prof. RNDr. Alexander Ženíšek, DrSc.	FME	mathematics, numeric method

III. – 3 BUT BOARD OF TRUSTEES

Ing. Vladimír Jeřábek, MBA	chairman	
Ing. Richard Kuba, CSc.	deputy chairman	
PhDr. Martin Profant RNDr. Petr Duchoň Ing. Jiří Škrla	Ing. Václav Petříček, CSc. Ing. Stanislav Bělehrádek doc. Ing. Karel Sellner, CSc. Ing. Petr Karas, CSc.	Ing. Helena Šebková, CSc. doc. Ing. Jiří Volf, CSc. Ing. Stanislav Juránek

IV. – 1a NUMBERS OF ACCREDITED DEGREE PROGRAMMES AND FIELDS OF STUDY

field group	master field group code	degree programmes/fields of study				total programmes/ fields
		Bc.	Mgr. follow-up	Mgr.	Ph.D.	
science	14	0	0	0	2/2	2/2
engineering	23 to 39	12/43	15/68	9/36	19/33	55/180
economics	62	2/2	1/2	0	1/1	4/5
culture and arts	82	1/7	1/7	0	0/0	2/14
BUT		**15/52**	**17/77**	**9/36**	**22/36**	**63/201**

IV. – 1b NUMBERS OF ACCREDITED DEGREE PROGRAMMES AND FIELDS OF STUDY BY FACULTY

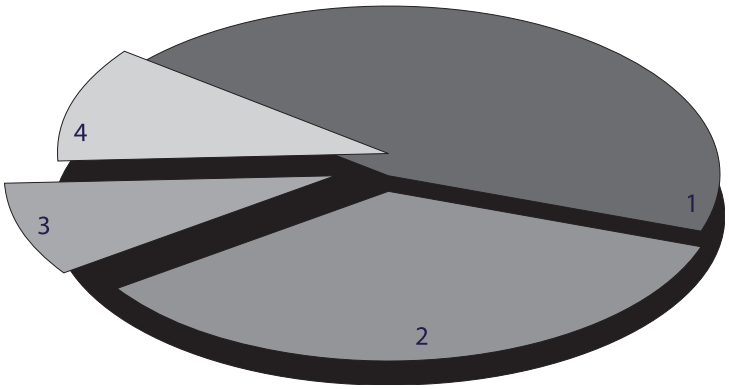
faculty	Bc.		Mgr. follow-up		Mgr.		Ph.D.		total	
	progr.	fields	progr.	fields	progr.	fields	progr.	fields	progr.	fields
FCE	3	14	2	6	2	6	3	7	10	33
FME	2	14	3	39	1	21	8	8	14	82
FEEC	2	9	2	12	1	4	2	10	7	35
FIT	2	2	1	1	1	1	1	1	5	5
FC	2	3	5	5	4	4	5	6	16	18
FA	1	1	1	1	0	0	1	2	3	4
FFA	1	7	1	7	0	0	0	0	2	14
FBM	2	2	1	2	0	0	1	1	4	5
total	**15**	**52**	**16**	**73**	**9**	**36**	**21**	**35**	**61**	**196**

IV. – 2a STUDENT NUMBERS OF 31ST OCTOBER 2004

field group	master field group code	students in degree programme				total students
		Bc.	Mgr. follow-up	Mgr.	Ph.D.	
science	14	0	0	0	96	96
engineering	23 to 39	7 476	544	6 602	1 780	16 402
economics	62	826	922	0	111	1 859
culture and arts	82	149	117	0	0	266
BUT		**8 451**	**1 583**	**6 602**	**1 987**	**18 623**

IV. – 2b TOTAL STUDENT NUMBERS OF 31ST OCTOBER 2004

programme type		study form		total
		full-time	combined	
Bc.	Bachelor's degree	7 950	501	8 451
Ing./Mgr.	follow-up Master's degeree	1 217	366	1 583
Ing./Mgr.	Master's degree	6 237	365	6 602
Ph.D.	Doctor's degree	1 026	961	1 987
total		**16 430**	**2 193**	**18 623**



IV. – 2c NUMBERS OF STUDENTS BY FACULTY

faculty	type of degree programme				total
	Bc.	Mgr. follow-up	Mgr.	Ph.D.	
FCE	1 094	0	3 103	545	4 742
FME	1 912	374	1 848	619	4 753
FEEC	2 674	23	770	384	3 851
FIT	1 051	7	385	106	1 549
FC	386	20	496	147	1 049
FA	359	120	0	75	554
FFA	149	117	0	0	266
FBM	826	922	0	111	1 859
total	**8 451**	**1 583**	**6 602**	**1 987**	**18 623**

IV. – 2d NUMBERS OF STUDENTS BY PROGRAMMES

facul.	programme code / programme name	male students	female students	study form		total
				full-time	combin.	
FCE	B3607/ Civil Engineering	676	221	897	0	897
	B3609 / Building	102	23	125	0	125
	B3646 / Geodesy and Cartography	44	28	72	0	72
	M3607/ Civil Engineering	2 234	657	2 568	323	2 891
	M3646/ Geodesy and Cartography	128	84	212	0	212
	P3607 / Civil Engineering	327	143	222	248	470
	P3646/ Geodesy and cartography	14	3	9	8	17
	P3917/ Forensic Engineering	36	22	21	37	58
FME	B2341 / Mechanical Engineering	1 632	119	1 445	306	1 751
	B390I / Applied Sciences in Engineering	139	22	161	0	161
	M230I / Mechanical Engineering	1 693	155	1 848	0	1 848
	N230I / Mechanical Engineering	284	15	180	119	299
	N390I / Applied Sciences in Engineering	68	7	75	0	75
	P2302 / Machinery and Equipment	228	12	137	103	240
	P2303/ Manufacturing Technology	66	23	35	54	89

	P3901 / Applied Sciences in Engineering	96	4	53	47	100
	P3903 / Cybernetics and Control Technology	7	1	0	8	8
	P3910 / Physical and Materials Engineering	93	14	53	54	107
	P3913/ Applications of Natural Sciences	26	7	15	18	33
	P3920 / Metrology and Testing	16	9	15	10	25
	P3917/ Forensic Engineering	17	0	3	14	17
FEEC	B2612/ Electrical Engineering and Computer Science	58	0	58	0	58
	B2643 / Electrical and Electronic Engineering Communication and Control Technology	2 554	62	2 462	154	2 616
	M2612/ Electrical and Electronic Engineering	740	30	770	0	770
	N2612/ Electrical and Electronic Engineering	23	0	23	0	23
	P2643/ Electrical and Electronic Engineering Communication and Control Technology	374	10	227	157	384
FIT	B2612/ Electrical Engineering and Computer Science	26	0	26	0	26
	B2646/ Information Technology	1 000	25	1 025	0	1 025
	M2612/ Electrical Engineering and Computer Science	373	12	385	0	385
	N2612/ Electrical Engineering and Computer Science	7	0	7	0	7
	P2646 / Information Technology	104	2	69	37	106
FC	B2801 / Chemistry and Chemical Technology	77	75	134	18	152
	B2901 / Chemistry and Technology of Foodstuffs	53	181	211	23	234
	M2805 / Chemistry and Environmental Technology	53	79	116	16	132
	M2806 / Applied Chemistry	27	51	74	4	78
	M2808 / Chemistry and Technology of Materials	63	47	105	5	110
	M2901 / Chemistry and Technology of Environmental Protection	33	143	159	17	176
	N2805/ Chemistry and Technology of Environmental Protection	0	3	3	0	3
	N2820 / Chem., Technol. and Properties of Materials	1	0	1	0	1
	N2901 / Chemistry and Technology of Foodstuffs	0	16	11	5	16
	P1404/ Physical Chemistry	23	38	41	20	61
	P1405/ Macromolecular Chemistry	21	14	25	10	35
	P2805/ Chemistry and Technology of Environmental Protection	6	13	4	15	19
	P2820 / Chem., Technol. and Properties of Materials	7	7	12	2	14
	P3911 / Materials Science	14	4	5	13	18
FA	B3501 / Architecture and Town-Planning	198	161	359	0	359
	N3501 / Architecture and Town-Planning	74	46	120	0	120

	P350I / Architecture and Town-Planning	40	35	38	37	75
FFA	B8206/ Fine Arts	69	80	149	0	149
	N8206/ Fine Arts	54	63	117	0	117
FBM	B6208/ Economics and Management	275	331	606	0	606
	B6209/ Systems Engineering and Computer Science	163	57	220	0	220
	N6208/ Economics and Management	507	415	680	242	922
	P6208/ Economics and Management	74	37	42	69	111
BUT		**15 017**	**3 606**	**16 430**	**2 193**	**18 623**

IV. – 3a NUMBER OF DROP-OUTS

field group	master field group code	students in degree programme				total students
		Bc.	Mgr. follow-up	Mgr.	Ph.D.	
science	14	0	0	0	0	0
engineering	23 to 39	985	533	1 489	128	2 680
economics	62	67	144	0	20	231
culture and arts	82	6	3	0	0	9
BUT		**1 058**	**680**	**1 489**	**148**	**2 920**

IV. – 3b DROPOUT RATE IN DEGREE PROGRAMMES OF 31.10.2004 (students enrolled until 31.10.2003)

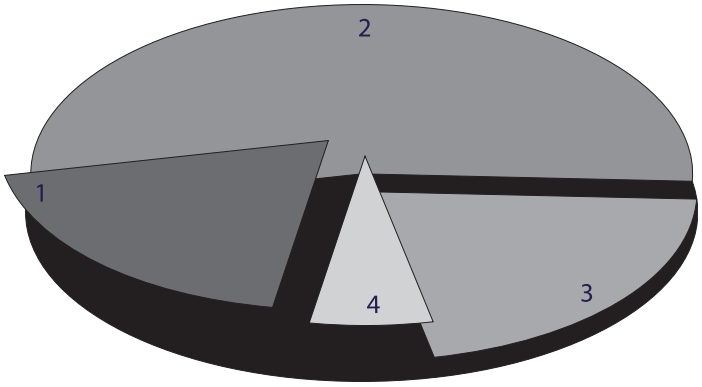
faculty	Bc.			Mgr. follow-up			Mgr.			Ph.D.			total		
	enrolled	dropped out	%	enrolled	dropped out	%	enrolled	dropped out	%	enrolled	dropped out	%	enrolled	dropped out	%
FCE	0	0	-	0	0	0	4 024	722	17,94	465	21	4,52	4 489	743	16,55
FME	1 248	400	32,05	343	65	18,95	2 833	578	20,40	629	52	8,27	5 053	1 095	21,67
FEEC	1 713	397	23,18	47	6	12,77	1 175	73	6,21	353	32	9,07	3 288	508	15,45
FIT	699	129	18,45	16	5	31,25	513	16	3,12	103	5	4,85	1 331	155	11,65
FC	110	43	39,09	13	1	7,69	696	100	14,37	137	8	5,84	956	152	15,9
FA	337	16	4,75	114	1	0,88	0	0	0	70	10	14,29	521	27	5,18
FFA	146	6	4,11	114	3	2,63	0	0	0	0	0	0	260	9	3,46
FBM	594	67	11,28	953	144	15,11	0	0	0	116	20	17,24	1 663	231	13,89
total	**4 847**	**1 058**	**21,83**	**1 600**	**225**	**14,06**	**9 241**	**1 489**	**16,11**	**1 873**	**148**	**7,90**	**17 561**	**2 920**	**16,63**

IV. – 4a NUMBERS OF GRADUATES

field group	master field group code	graduate numbers				total students
		Bc.	Mgr. follow-up	Mgr.	Ph.D.	
science	14	0	0	0	2	2
engineering	23 to 39	307	171	1 421	156	2 055
economics	62	151	334	0	11	496
culture and arts	82	35	41	0	0	76
BUT		**493**	**546**	**1 421**	**169**	**2 629**

IV. – 4b NUMBERS OF GRADUATES BY FACULTY

faculty	programme type				total
	Bc.	Mgr. follow-up	Mgr.	Ph.D.	
FCE	0	0	490	26	516
FME	217	83	428	64	792
FEEC	12	24	313	29	378
FIT	5	4	91	14	114
FA	65	60	0	8	133
FC	8	0	99	17	124
FBM	151	334	0	11	496
FFA	35	41	0	0	76
BUT	**493**	**546**	**1 421**	**169**	**2 629**



IV. – 4c NUMBERS OF GRADUATES BY DEGREE PROGRAMME

faculty	degree programme	male students	female students	international	Total
FCE	M3607	345	106	2	451
	M3646	18	21	0	39
	P3607	19	4	0	23
	P3646	1	0	0	1
	P3917	2	0	0	2
FCE total		**385**	**131**	**2**	**516**
FME	B2341	200	17	1	217
	M2301	393	35	3	428
	N2301	48	6	2	54
	N3901	28	1	2	29
	P2302	22	0	2	22
	P2303	4	1	1	5
	P3901	12	1	1	13

	P3903	7	1	1	8
	P3910	9	1	0	10
	P3913	2	0	0	2
	P3917	1	0	1	1
	P3920	3	0	0	3
FME total		**729**	**63**	**14**	**792**
FEEC	B2612	12	0	0	12
	M2612	305	8	9	313
	N2612	23	1	0	24
	P2643	28	1	2	29
FEEC total		**368**	**10**	**11**	**378**
FIT	B2612	5	0	0	5
	M2612	89	2	3	91
	N2612	4	0	0	4
	P2646	14	0	0	14
FIT total		**112**	**2**	**3**	**114**
FC	B2801	4	3	1	7
	B2901	0	1	0	1
	M2805	10	10	0	20
	M2806	5	20	0	25
	M2808	12	4	0	16
	M2901	12	26	0	38
	P1404	0	1	0	1
	P1405	0	1	0	1
	P2805	5	5	0	10
	P3911	5	0	0	5
FC total		**53**	**71**	**1**	**124**
FA	3501R	37	28	2	65
	N3501	33	27	0	60
	P3501	6	2	0	7
FA total		**76**	**57**	**2**	**133**
FFA	B8206	17	18	3	35
	N8206	23	18	1	41
FFA total		**40**	**36**	**4**	**76**
FBM	B6208	67	84	5	151

	N6208	170	164	5	334
	P6208	6	5	0	11
FBM total		**243**	**253**	**10**	**496**
BUT total		**2 006**	**623**	**47**	**2 629**

IV. – 4d BUT DOCTORAL GRADUATES IN 2004

fac.	name	thesis and supervisor
FCE	Ing. Dušan Janoštík	Applications of Modern Operations Research Methods in the GIS Environment. Supervised by doc. Ing. Jaroslav Puchrík, CSc.
FCE	Ing. Jiří Zach	Determining the Heat Conductivity Coefficient Value Using a Non-Stationary Measurement Tool. Supervised by doc. RNDr. Ing. Stanislav Šťastník, CSc.
FCE	Ing. Jiří Kala	Analysing the Impact of Wind on Building Structures. Supervised by Ing. Vlastislav Salajka, CSc.
FCE	Ing. Jitka Párová	Bells and Belfries. Supervised by doc. Ing. Milan Vlček, CSc.
FCE	Ing. Milan Šmahel	Forensic Issues Concerning Real Division of Property In Common Property Settlement. Supervised by prof. Ing. Albert Bradáč, DrSc.
FCE	Ing. Petr Hýzl	Using Bituminous Membranes in Road Design. Supervised by doc. Ing. Jan Kudrna, CSc.
FCE	Ing. Dušan Stehlík	Improving Road Subgrades. Supervised by doc. Ing. Jan Kudrna, CSc.
FCE	Ing. Jan Vaněrek	Standardizing Expert Opinions On Defects, Failures, and Emergencies of Building Structures. Supervised by prof. Ing. Rostislav Drochytka, CSc.
FCE	Ing. Jitka Balíková	Reflex Foils In Light Peripheral Structures. Supervised by doc. Ing. Miloslav Novotný, CSc.
FCE	Ing. Bronislav Bechník	Direct Impact of Humidity on the Energy Balance of a Passive Construction. Supervised by doc. Ing. Luboš Pazdera, CSc.
FCE	Ing. Nikol Kohutová	Verifying the Possibility of Modifying Polymer-Cement Mixtures by Waste Material. Supervised by doc. Ing. Ildikó Rouseková, Ph.D.
FCE	Ing. Bronislav Remeš	Waste Water Treatment Plants with Intermittent Operation. Supervised by doc. Ing. Petr Hlavínek, CSc.
FCE	Ing. Ondřej Vaculín	Influence of Climate Change on the Water Resource Management at Březová nad Svitavou. Supervised by doc. Ing. Jaroslav Hlaváč, CSc.
FCE	Ing. Pavel Valkovič	Expert Systems Used to Support the Planning of Reconstruction of Water Piping. Supervised by Ing. Ladislav Tuhovčák, CSc.
FCE	Ing. Miroslav Vořechovský	Stochastic Fracture Mechanics and Size Effect. Supervised by prof. Ing. Drahomír Novák, DrSc.

FCE	Ing. Ivana Kameníčková	Evaluation Criteria for the Flow Character of Water Leaking Through Technical Fabric. Supervised by doc. Ing. Jaroslav Maleňák, CSc.
FCE	Ing. Martin Hromádko	Impact of Desulphurizated Combustion Gases of the Service Life of Cooling Towers. Supervised by prof. Ing. Rostislav Drochytka, CSc.
FCE	Mgr. Petr Benešovský	Static Electricity Inside Buildings. Supervised by doc. RNDr. Tomáš Ficker, DrSc.
FCE	Ing. Petr Frantík	Non-Linear Behaviour of Mechanical Structures. Supervised by Ing. Zbyněk Keršner, CSc.
FCE	Ing. Petr Novotný	Selected Problems of Coupled Structures. Supervised by prof. Ing. Jiří Stráský, CSc.
FCE	Ing. Vojtěch Pálinkáš	Monitoring Geodynamic Phenomena in the Gravity Field at the Pecný Geodetic Observatory. Supervised by doc. Ing. Josef Weigel, CSc.
FCE	Ing. Artur Ries	Analysing the Needs and Requirements of the Marketing Procedures of Non-Profit Organizations. Supervised by Ing. Oldřich Šašinka, MBA.
FCE	Ing. Petr Pelc	Model Financing of Building Contracts for Smooth Company Development. Supervised by doc. Ing. Bohumil Puchýř, CSc.
FCE	Ing. Roman Mahr	Using Project Management to Build Telecommunications Networks. Supervised by Ing. Oldřich Šašinka, MBA.
FCE	Ing. Rostislav Zídek	Modelling Concrete Structures Influenced by Geometric Non-Linearity, Rheology of Concrete from Stepwise Construction. Supervised by prof. Ing. Jiří Stráský, CSc.
FCE	Ing. Jaroslav Hrůza	Modern Rational Technologies in Building Construction. Supervised by Mgr. Petr Lízal, CSc.
FME	Ing. Ildikó Putzová	Modelling the Process of Cutting With Emphasis On Grinding and Integrity of the Processed Surface by Applying Neural Networks and Fuzzy Logic. Supervised by prof. Ing. Karel Kocman, DrSc.
FME	Ing. Vít Jan	Kinetics of the Precipitation of Carbides in Heatproof Steels. Supervised by doc. Ing. Rudolf Foret, CSc.
FME	Ing. Jiří Malášek	Mixing and Compacting Particular Substances. Supervised by prof. Ing. Jaroslav Medek, CSc.
FME	Ing. Pavel Hutař	Two-Parameter Description of Small Fissures Influenced by the Stress Field of General Concentrators. Supervised by prof. Ing. Zdeněk Knésl, CSc.
FME	Ing. Robert Grepl	Using Complete Dynamic Models to Design and Control a Walking Robot. Supervised by doc. Ing. Čestmír Ondrůšek, CSc.
FME	Ing. Petr Kotrbáček	Experimental Research and Mathematical Modelling of Steels in Half-Liquid Condition. Supervised by doc. Ing. Miroslav Raudenský, CSc.
FME	Ing. Vladimír Krutiš	Influence of Heat Treatment of Bosses on the Solidification of Metal. Supervised by doc. Ing. Jaromír Roučka, CSc.

FME	Ing. Václav Potácel	Technological Aspects of the Surface Structure During Final Machining. Supervised by doc. Ing. Jaroslav Prokop, CSc.
FME	Ing. Tomáš Ranzenhofer	Modelling and Simulating Random Events in Engineering Processes. Supervised by doc. Ing. Branislav Lacko, CSc.
FME	Ing. Radvan Sedláček	The SEA Method and Examining High-Frequency Oscillation of Systems with Non-Linearities. Supervised by doc. Ing. Vojtěch Mišun, CSc.
FME	Ing. Michal Seltenreich	Determining the Residual Service Life by Neural Networks. Supervised by doc. Ing. Miloš Vlk, CSc.
FME	Ing. Daniel Smutek	Applying Stochastic Heuristic Methods to Steiner's Problem in Graphs. Supervised by doc. RNDr. Ing. Miloš Šeda, Ph.D.
FME	Ing. Alena Škuderová	To the Analysis of Internal Dynamics of a Strongly Non-Linear parametric System with Kinetic Constraints. Supervised by prof. Ing. Ctirad Kratochvíl, DrSc.
FME	Ing. Mbona Samuel António	WEB Servers Load Balance – The Inbalanced Approach. Supervised by doc. RNDr. Ing. Miloš Šeda, Ph.D.
FME	Ing. Petr Augustin	Spectra and Sequences of Load For Fatigue Tests of Aviation Structures Proved by the Safe Life and Damage Tolerance Approaches. Supervised by prof. Ing. Antonín Píštěk, CSc.
FME	Ing. Josef Bednář	Fuzzy Searching. Supervised by doc. RNDr. Zdeněk Karpíšek, CSc.
FME	Ing. Pavel Foretník	Noise Certification of Small Aircraft. Supervised by prof. Ing. Bohuslav Sedláček, CSc.
FME	Ing. Krunoslav Franjkovič	Analyse der Verkehrsunfälle mit HSW – Verlätzung. Supervised by prof. Ing. Zdeněk Kolíbal, CSc.
FME	Ing. Ivan Hejl	Design of a Methodology for Optimum Design of a Worm-Gearbox in the Pro/ENGINEER and Pro/MECHANICA Systems Taking into Account All the Operational Conditions While Maintaining High Reliability and Long Service Life. Supervised by doc. Ing. Dušan Kolář, CSc.
FME	Ing. Martin Holl	Experimental Testing of the Methods of Calculation Estimate of the Aerodynamic Characteristics of a Profile With a Flap. Supervised by doc. Ing. Vladimír Daněk, CSc.
FME	Ing. Pavel Imriš	Training Aviation Personnel in the Czech Republic in the Environment of EU Rules Unification. Supervised by prof. Ing. Bohuslav Sedláček, CSc.
FME	Ing. Jaroslav Jiruše	Investigation of Surface Structures of Materials by LEED. Supervised by doc. RNDr. Tomáš Šikola, CSc.
FME	Ing. Jan Jurka	Guaranteeing the Quality of Links of Entities in the Activities of Structured Socio-Economic Processes Using the Typological Optimization Method. Supervised by doc. Ing. Vladimír Horáček, CSc.
FME	Ing. Martin Kouřil	Methodology of Measurement and Evaluation of Stability and Controllability of an Aircraft. Supervised by doc. Ing. Vladimír Daněk, CSc.

FME	Ing. Tomáš Kozlovský	Applying Artificial Intelligence to the Diagnostics of Insulation Materials. Supervised by doc. Ing. Miloš Hammer, CSc.
FME	Ing. Tomáš Kujal	Increasing the Throughput on the Airport-Airspace Interface. Supervised by prof. Ing. Bohuslav Sedláček, CSc.
FME	Ing. Radomil Matoušek	Selected Methods of Artificial Intelligence – Implementation and Application. Supervised by doc. Ing. Pavel Ošmera, CSc.
FME	Ing. Jiří Maxa	Methodology for Choosing a PDM System For an Industrial Enterprise. Supervised by doc. Ing. Josef Šupák, CSc.
FME	Ing. Eva Molliková	Relationship Between the Technology of Production, Structure, and Mechanical Properties of Polypropylene Filled With Magnesium Hydroxide. Supervised by prof. RNDr. Bohumil Vlach, CSc.
FME	Ing. Vít Novozámský	Safety of Operation and Reliability of the Aircraft of the General Aviation of the Czech Republic. Supervised by doc. Ing. Miroslav Raudenský, CSc.
FME	Ing. Roman Prášek	Modelling and Assessing Interventions in Corporate Systems. Supervised by doc. Ing. Vladimír Horáček, CSc.
FME	Ing. Josef Procházka	Temperature Analyses of a Slip-On Gearbox Using the Cax Methods. Supervised by doc. Ing. Dušan Kolář, CSc.
FME	Ing. Dušan Shejbal	System Tools Guaranteeing the Conformity of Czech Products. Supervised by prof. Ing. Josef Vačkář, CSc.
FME	Ing. Róbert Šošovička	Methodology of Measuring and Assessing the Flight Performance of an Aircraft. Supervised by doc. Ing. Vladimír Daněk, CSc.
FME	Ing. Pavel Štarha	Numerical Methods of Analysing Pictures of a Human Retina. Supervised by prof. RNDr. Miloslav Druckmüller, CSc.
FME	Ing. Petr Unucka	Investigating Equilibrium States in Multi-Component C-Cr-Fe-Mo-X Systems. Supervised by doc. Ing. Rudolf Foret, CSc.
FME	Ing. Karel Velechovský	Drawing Straight Lines Using Fresnel's Diffraction. Supervised by prof. RNDr. Jiří Komrska, CSc.
FME	Ing. Libor Vlček	Numerical 3D Analysis. Supervised by Ing. Vladislav Kozák, CSc.
FME	Ing. Martin Vrbka	Deformation Stress Analysis of a Physiologically and Pathologically Developed Hip Joint. Supervised by Ing. Zdeněk Florian, CSc.
FME	Ing. Jakub Zlámal	Simulating Electrostatic Ion-Optical Systems. Supervised by doc. RNDr. Bohumila Lencová, CSc.
FME	Ing. Jiří Cídl	Mathematical Model of a Steam Turbine with Suppressed Vacuum. Supervised by doc. Ing. Ivan Švarc, CSc.
FME	Ing. Olga Davidová	Use of Frequency Methods In Designing Discrete Control Systems. Supervised by doc. Ing. Ivan Švarc, CSc.
FME	Ing. Jiří Hlinka	Methods Used To Assess the Reliability of Aviation Technology. Supervised by doc. Ing. Miroslav Vondrák, CSc.

FME	Ing. Jaroslav Jirků	Educative Detectors. Supervised by doc. RNDr. Ing. Miloš Šeda, Ph.D.
FME	Ing. Martin Plhal	Calculating a Landing Facility Considering the Materials and Geometric Non-Linearity. Supervised by prof. Ing. Antonín Píštěk, CSc.
FME	Ing. Martin Svadbík	Volume Models as a New Tool to Determine Manufacturing Time in Foundry. Supervised by prof. Ing. Jaroslav Čech, CSc.
FME	Ing. Radek Poliščuk	Applying Colour Vision to Investigation of Elastic-Hydrodynamic Lubrication. Supervised by doc. Ing. Martin Hartl, Ph.D.
FME	Ing. Martin Antoš	A System For Optical Tomography. Supervised by prof. RNDr. Miroslav Liška, DrSc.
FME	Dipl.-Ing. Heinrich Wällermann	Analysis, Design and Development of a Process for the Compensation of Parasitic Motion Couplings between the Seeker Head and Airframe of a Guided Missile and Assessment of its Feasibility. Supervised by prof. Ing. Zdeněk Ehrenberger, DrSc.
FME	Ing. Karel Soukup	Control of an All-Directional Undercarriage of a Mobile Robot. Supervised by doc. Ing. Branislav Lacko, CSc.
FME	Ing. Martin Petrenec	Cyclic Plasticity of Stainless Steels – Effective and Internal Stress and Dislocation Arrangement. Supervised by prof. RNDr. Jaroslav Polák, DRSc.
FME	Ing. Ladislav Žák	Assessing the Formability of Superficially Finished Sheets. Supervised by doc. Ing. Karel Novotný, CSc.
FME	Ing. Milan Nejedlý	A Treatise On Fluorides As Heat Carriers and Use of Ultrasound Flow Indicator In Their Environment. Supervised by prof. Ing. Oldřich Matal, CSc.
FME	Ing. Peter Chudý	Dynamics of the Movement of an Aircraft Considering the Non-Rigidity of Its Structure. Supervised by doc. Ing. Vladimír Daněk, CSc.
FME	Ing. Jiří Chlebek	Reducing the Accident Rate of the CR General Aviation Aircraft Traffic. Supervised by prof. Ing. Bohumil Sedláček, CSc.
FME	Ing. Petr Stojan	Thermodynamics with a Finite Time: Transforming Solar Energy to Mechanical One. Supervised by doc. RNDr. Petr Dub, CSc.
FME	Ing. David Kollhammer	Mathematical Modelling of Vehicle Control. Supervised by prof. Ing. František Vlk, DrSc.
FME	Ing. Jiří Petráš	Detecting and Localizing Acoustic Emissions in Constructions. Supervised by doc. Ing. Pavel Mazal, CSc.
FME	Ing. Pavel Doležel	Experimental Line for Synchrotron Radiation. Supervised by RNDr. Vladimír Kolařík, CSc.
FME	Ing. Pavel Novotný	Simulating the Dynamics of a Driving Gear – Central Module of a Virtual Engine. Supervised by prof. Ing. Václav Píštěk, DrSc.
FME	Ing. Pavel Houška	Distributed System of Walking Robot Control. Supervised by doc. RNDr. Ing. Tomáš Březina, CSc.
FME	Ing. Stanislav Věchet	Modified-Q-Learning-Based Design of Robust Control. Supervised by doc. RNDr. Ing. Tomáš Březina, CSc.

FME	Ing. Tomáš Marada	Q-Learning-Based Control of the Transition States of an Asynchronous Motor. Supervised by doc. RNDr. Ing. Tomáš Březina, CSc.
FME	Ing. Tomáš Návrat	Deformation-Stress Analysis of a Hip Joint with a Surface Substitute Applied. Supervised by Ing. Zdeněk Florian, CSc.
FEEC	Ing. Petr Budiš, Ph.D.	Investigation of Gas Flow in a HV-Switch Interrupter. Supervised by doc. Ing. Zdeněk Vávra, CSc.
FEEC	Ing. Michal Chmela, Ph.D.	Allocation of Losses in a Transmission System. Supervised by doc. Ing. Evžen Haluzík, CSc.
FEEC	Ing. Radovan Jiřík, Ph.D.	Restoration and Analysis of Ultrasonic Images. Supervised by prof. Ing. Jiří Jan, CSc.
FEEC	Ing. Miloslav Richter, Ph.D.	2D- and 3D-Reconstruction Methods. Supervised by prof. Ing. Petr Vavřín, DrSc.
FEEC	Ing. Jaroslava Orságová, Ph.D.	Localising a Ground Connection in a Radial Network Using a HDO Signal. Supervised by doc. Ing. Evžen Haluzík, CSc.
FEEC	Ing. Ladislav Sládeček, Ph.D.	Complete Linearisation of Stochastically Controlled Systems. Supervised by prof. Ing. Petr Vavřín, DrSc.
FEEC	Ing. Stanislav Goňa, Ph.D.	Analysis and Design of Planar Reflector Antennas. Supervised by prof. Dr. Ing. Zbyněk Raida
FEEC	Ing. Pavel Kučera, Ph.D.	Formal Methods in Industrial Communication. Supervised by doc. Ing. František Zezulka, CSc.
FEEC	Ing. Tomáš Macho, Ph.D.	Use of Orthogonal Functions In Dynamic System Identification. Supervised by doc. Ing. Pavel Jura, CSc.
FEEC	Ing. Jiří Ptáček, Ph.D.	Controlling Performance Flow in Interconnected Electrification Systems. Supervised by doc. Ing. Evžen Haluzík, CSc.
FEEC	Ing. Zoltán Nagy	Digital Measurement of Geometric Dimensions of Objects With Sub-Pixel Precision. Supervised by Ing. Vladislav Škorpil, CSc.
FEEC	Ing. Radomír Svoboda	Generating and Measuring Gradient Magnetic Fields in an NMR Spectrometer. Supervised by prof. Ing. Zdeněk Smékal, CSc.
FEEC	Ing. Kamil Švancara	Adaptive Optimal Controller with Identification Based on Neural Networks. Supervised by prof. Ing. Petr Pivoňka, CSc.
FEEC	Ing. Sameh Mohammed Khatib	Immobilization of Bioactive Compounds and Correlation Analysis on the Screen-Printed Sensors. Supervised by prof. Ing. Jaromír Brzobohatý, CSc.
FEEC	Ing. Radovan Novotný	Empiric Approach to Optimising the Seasoning Process. Supervised by prof. Ing. Jaromír Brzobohatý, CSc.
FEEC	Ing. Bohumil Hnilička	Contributions on Identification in Closed-Loop and Control Design (Application to DVD Players). Supervised by prof. Ing. Petr Pivoňka, CSc.
FEEC	Ing. Michal Olšák	Electronically Controlled Analogue Selective Functional Blocks. Supervised by prof. Ing. Kamil Vrba, CSc.

FEEC	Ing. Zdeněk Bradáč	Management of Decentralized Automation Systems. Supervised by doc. Ing. František Zezulka, CSc.
FEEC	Ing. Radek Štohl	Detection System for Electrical-Separation Methods of Analysing Chemical Substances. Supervised by doc. Ing. Ludvík Bejček, CSc.
FEEC	Ing. Josef Šandera	Design and Reliability of the Connection in 3D Electronic Systems. Supervised by doc. Ing. Ivan Szendiuch, CSc.
FEEC	Ing. Daniel Orel	The Modelling of Thermal Effects of Diagnostic Ultrasound on Human Embryonic Tissues. Supervised by doc. Ing. Jiří Rozman, CSc.
FEEC	Ing. Petr Dohnal	The Influence of a Magnetic Field upon the Plasma of an Electric Arch. Supervised by prof. RNDr. Vladimír Aubrecht, CSc.
FEEC	Ing. Jaroslav Heinz	Study of Energy Exchange between an Electric Arch and the Surrounding Environment. Supervised by Ing. Josef Šenk, CSc.
FEEC	Ing. Radek Javora	Analysing and Simulating Ferroresonant Phenomena in Electrical Energy Systems. Supervised by doc. Ing. Vladimír Blažek, CSc.
FEEC	Ing. Petr Létal	Local Spectroscopy of Semiconductor Structures Using an Optical Scanning Tunnelling Microscope. Supervised by prof. RNDr. Pavel Tománek, CSc.
FEEC	Ing. Jaroslav Pozdník	Diagnosing the Mechanical Properties of the Commutators of Electric Machines. Supervised by doc. Ing. František Veselka, CSc.
FEEC	Mgr. Pavel Rajmic	Using a Wavelet Transform and Mathematical Statistics to Separate Noise from a Signal. Supervised by prof. Ing. Zdeněk Smékal, CSc.
FEEC	Ing. Petr Skala	Reliability Model of a Distribution Network for Liberalized Environment. Supervised by doc. Ing. Vladimír Blažek, CSc.
FEEC	Ing. Zdeněk Zapletal	Modern Methods of Optimising RLC Prototypes of Frequency Filters. Supervised by doc. Ing. Jiří Sedláček, CSc.
FIT	Ing. Milan Kolka	L-systems: New Results and Applications. Supervised by doc. RNDr. Alexander Meduna, CSc.
FIT	Ing. Martin Hrubý	Heterogeneous System Modelling Environment. Supervised by doc. Ing. Zdeňka Rábová, CSc.
FIT	Ing. Jiří Staroba	Parallel Performance Modelling, Prediction and Tuning. Supervised by prof. Ing. Václav Dvořák, DrSc.
FIT	Ing. Radek Burget	Information Extraction from HTML Documents Based on Logical Document Structure. Supervised by doc. Ing. Jaroslav Zendulka, CSc.
FIT	Ing. Jakub Güttner	Object Databases and the Semantic Web. Supervised by prof. Ing. Tomáš Hruška, CSc.
FIT	Ing. Adam Herout	Hardware Architecture for Point-Based Graphics Rendering. Supervised by doc. Dr. Ing. Pavel Zemčík
FIT	Ing. Radek Kočí	Methods and Tools Used to Implement Open Simulation Systems. Supervised by doc Ing. Zdeňka Rábová, CSc.

FIT	Ing. Bohuslav Křena	Methods Used to Analyse Object-Oriented Petri Nets. Supervised by prof. RNDr. Milan Češka, CSc.
FIT	Ing. Jaromír Marušinec	Artificial Life Simulation in Virtual Reality. Supervised by doc. Ing. Zdeňka Rábová, CSc.
FIT	Ing. Filip Orság	Biometric Security Systems. Supervised by doc. Ing. František Zbořil, CSc.
FIT	Ing. David Řezáč	Stiff Systems of Differential Equations and Modern Taylor Series Method. Supervised by doc. Ing. Jiří Kunovský, CSc.
FIT	Ing. Josef Strnadel	Analyses and Improvement of the Testability of a Numeric Circuit at the Level of Inter-Register Transfers. Supervised by doc. Ing. Zdeněk Kotásek, CSc.
FIT	Ing. František Zbořil	Planning and Communication in Multi-Agent Systems. Supervised by doc. Dr. Ing. Petr Hanáček.
FIT	Ing. Lukáš Burget	Complementarity of Speech Recognition Systems and System Combination. Supervised by doc. Dr. Ing. Jan Černocký.
FA	Mgr., MgA Kateřina Pažoutová	Czech Fine Arts and Architecture of 1960's. Supervised by prof. PhDr. Jan Sedlák, CSc.
FA	Ing. arch. Jiří Skála	Disharmony of the Rural Architecture and Its Removal. Supervised by Ing. arch. Hana Urbášková, Ph.D.
FA	Ing. arch. Jaromil Přidal	Revitalizing Public Space in the Historic City Centres. Supervised by doc. Ing. arch. Miloslav Konvička, CSc.
FA	Ing. arch. Luboš Františák	Urban Block Development and Its Selected Aspects. Supervised by prof. Ing. arch. Jan Koutný, CSc.
FA	Ing. arch. Alena Vychodilová	Working-Environment-Related Concepts of Projecting Administrative Buildings. Supervised by prof. Ing. arch. Ivan Ruller, CSc.
FA	Ing. arch. Josef Slováček	Changes In Society and Their Impact on School Buildings. Supervised by doc. Ing. arch. Vladimír Vychodil, CSc.
FA	Ing. arch. Petr Hubáček	Static Transport Objects in City Centres. Supervised by doc. Ing. arch. Miloslav Konvička, CSc.
FA	Mgr. Miroslav Chytil	Architect Antonín Navrátil and the Phenomenon of a Prostějov Functionalism. Prostějov Architecture Between 1918 and 1948. Supervised by doc. Ing. arch. Jarmila Ledinská, CSc.
FC	Ing. Veronika Smetková	Development of Methods for Determining the Forms of Ecotoxicologically Important Elements in Natural Systems. Supervised doc. RNDr. Hana Dočekalová, CSc.
FC	RNDr. Igor Rusník	Intensifying Waste Water Treatment Technologies To Remove Macro-Nutrients. Supervised by doc. Ing. Ján Derco, CSc.
FC	RNDr. Jaroslav Mega	Potential of the Creation of Trihalogenmethans As a Sensitive Tool For Determining the Quality of Water. Supervised by doc. Ing. Petr Dolejš, CSc.
FC	Mgr. Stanislava Matalová	Influence of Gradual Ageing of Dimethacrylate Composites on the Sorption of Oral Biomaterial. Supervised by prof. RNDr. Josef Jančář, CSc.

FC	Ing. Robert Válek	Structural Causes and Consequences of Creep Anisotropy of Heterogeneous Materials. Supervised by prof. Ing. Jaroslav Fiala, CSc.
FC	Ing. Tomáš Gregor	Use of Biologic Systems for the Sorption of Selected Elements. Supervised by doc. Ing. Miroslav Fišera, CSc.
FC	PhDr. Miroslav Hrstka	Long-Term Impact of an Increased Concentration of Carbon Dioxide on the Activity of the Ribulosa-1.5-bifphsphatecarboxylase/Oxygenase Enzyme In Picea Abies. Supervised by prof. RNDr. Ing. Michal V. Marek, DrSc.
FC	Ing. Radka Kočí	Influence of Stress on the Metabolic Activity of Yeast. Supervised by doc. RNDr. Ivana Márová, CSc.
FC	Mgr. Svatopluk Kokrhel	Changes in the Structures of Calcium Sulphoaluminate Hydrates Brought About By Reactions in Water Solutions. Supervised by doc. Ing. Jaromír Havlica, CSc.
FC	Ing. Josef Krátký	Influence of Additives on the Properties of Inorganic-Organic Composites. Supervised by prof. Ing. Jiří Brandštetr, DrSc.
FC	Ing. Martin Zmrzlý	Properties of Modified Surfaces of Metal Materials. Supervised by prof. Ing. Jaroslav Fiala, CSc.
FC	Ing. Karel Bednařík	Toxicity of Trinitrotoluens and Products of Their Biotransformations. Supervised by prof. RNDr. Zdeněk Friedl, CSc.
FC	Ing. Karolína Benešová	Study of Hyaluronic Acid Modification. Supervised by prof. Ing. Lubomír Lapčík, DrSc.
FC	Ing. Radka Burdychová	Using Microbial Express Systems To Produce Recombinant Proteins. Supervised by prof. Ing. Mojmír Rychtera, CSc.
FC	Ing. Pavla Kotlaříková	Sampling Organic Environment Pollutants Using SPMDs. Supervised by Ing. Josef Čáslavský, CSc.
FC	Ing. Dominik Legut	Electronic Structure, Dissipative Phase Transformation and Stability of Phases. Supervised by prof. RNDr. Mojmír Šob, DrSc.
FC	Ing. Jana Pokorná	Using Bacterial Express Systems In Biotechnology. Supervised by doc. RNDr. Ivana Márová, CSc.
FBM	Ing. Jiří Konečný	Qualitative Assessment of Options Using the Black-Scholes Model. Supervised by doc. Ing. Mirko Dohnal, DrSc.
FBM	Ing. Hana Jonášová	Electronic Public Administration and Its Potential Influence On Businesses in a Region. Supervised by prof. Ing. Jiří Dvořák, DrSc.
FBM	Ing. Oldřich Rambousek	Creating a Strategy of Integration of the Czech Logistic Chains on Czech EU Accession. Supervised by doc. Ing. Marie Jurová, CSc.
FBM	Ing. Libuše Zákravská	Merger of Companies as a Consequence of Globalisation. Supervised by prof. Ing. Petr Němeček, DrSc.
FBM	Ing. Martin Mahel	Process Management of Industrial Production. Supervised by prof. Ing. Karel Rais, CSc., MBA
FBM	Ing. Antonio Milicia	Research of Strategic Thinking. Supervised by doc. Ing. Oldřich Vykypěl, CSc., MBA

FBM	Ing. Kateřina Střelská	Benefits and Barriers of Engineering Companies Providing Customer Services. Supervised by doc. Ing. Vladimír Chalupský, CSc., MBA
FBM	Ing. Vít Chlebovský	Customer Relations Management: Creating and Implementing Basic Concepts. Supervised by doc. Ing. Vladimír Chalupský, CSc., MBA
FBM	Ing. Liběna Teplá	Problems of the Mutual Relationships During Stable Development of Banks and Companies. Supervised by doc. Ing. Antonín Pešek, CSc.
FBM	Ing. Jan Černohorský	Competitiveness Of a Bank and a Business Entity. Supervised by doc. Ing. Antonín Pešek, CSc.
FBM	Mgr. Eva Kolářová	Harmonizing Financial Accounting To Meet International Accounting Standards in Small and Medium Enterprises. Supervised by Ing. Helena Hanušová, CSc.

IV. – 5a APPLICANTS FOR STUDY IN THE ACADEMIC YEAR 2004/2005

field group	master field group code	applications submitted	registered	admittance	admitted	enrolled
science	14	29	29	29	29	26
engineering	21–39	12 062	10 183	7 550	7 123	5 761
economics	62	2 945	2 916	1 103	1 098	924
culture and arts	82	585	585	92	92	90
BUT total		**15 621**	**13 713**	**8 774**	**8 342**	**6 801**

IV. – 5b NUMBERS OF APPLICATIONS SUBMITTED, APPLICANTS ADMITTED AND ENROLLED BY FACULTY

fac.	Bc.			Mgr. follow-up			Mgr.			Ph.D.		
	submitted	admitted	enrolled	submitted	admitted	enrolled	submitted	admitted	enrolled	submitted	admitted	enrolled
FCE	2 745	1 740	1 109	0	0	0	598	348	295	132	108	73
FME	2 396	1 631	1 242	190	188	180	110	108	107	140	103	103
FEEC	2 375	1 814	1 402	7	6	6	0	0	0	97	92	88
FA	507	115	106	71	71	71	0	0	0	26	24	22
FC	751	488	413	14	9	7	0	0	0	39	39	35
FBM	2 078	556	444	830	516	449	0	0	0	37	31	31
FFA	538	45	43	47	47	47	0	0	0	0	0	0
FIT	1 870	672	506	0	0	0	0	0	0	23	23	22
BUT	**13 260**	**7 061**	**5 265**	**1 159**	**837**	**760**	**708**	**456**	**402**	**494**	**420**	**374**

IV. – 6 LIFELONG-LEARNING – WITHOUT U3A AND EXTERNAL POST-GRADUATE STUDY

	no. of participants	no. of courses	no. of lessons
ECADS – international aviation law and EU rules	215	12	214
Other courses:	8	1	16
Practical Project Management	18	2	32
EU Project Preparation	43	2	16
Pre-Project Preparation	6	1	48
Quality Studies	24	1	78
Socrates/Erasmus Czech Course	16	1	16
Quality Assurance Management			
Total other courses:	115	8	206
Total	**330**	**20**	**420**

IV. – 7 BUT INVOLVEMENT IN DEVELOPMENT PROGRAMMES IN 2004

project title	chief investigator	funding received in thous. of CZK
• Support of the implementation of a new modular structure of BUT degree programmes		
	doc. Švec	15 700
• Development of courses taught in English, improvement of language skills, internationalization of degree programmes		
	prof. Rais	6 200
• Development of distance and combined educational forms at BUT		
	doc. Švec	12 775
• Development of lifelong learning at BUT	prof. Rais	3 663
• Support of information and communication technology at BUT	Ing. Marušinec	11 990
• Pilot joint international educational programmes at BUT	prof. Honzík	872
• Student Mobility	prof. Kazelle	2 000
• University of the 3rd Age	prof. Vavřín	2 245
• Multimedia and material support of accredited degree programmes		
	prof. Drochytka	800
• Development of regional higher education in cooperation with a specialized vocational school		
	prof. Liška	800

• Upgrading the technology of the FEEC information system	doc. Provazník	800
• Support of the creative element of education at BUT FA	doc. Chybík	2 400
• The Economics and Management Bachelor's Degree programme of the Economics and Law in Business field of study in its fulltime and combined form		
	doc. Režňáková	800
• Preparation of the Crisis Management and Population Protection Bachelor's degree programme		
	doc. Mašek	800
• Support of the structure development, improvement of the material and technical conditions for teaching in the courses concerned with new media at BUT FFA		
	Mgr. Fajnor	700
• Equipping the BUT FIT branch library	Ing. Lampa	800
• GAUDEAMUS 2004 11th Educational Fair	prof. Honzík	950
• The BUT system of European study units integrated within BCES		
	doc. Dub	1 620
• Development of the Academic Centre of Student Activities	Ing. Švec	1 155
• Improvement of the conditions necessary for the disabled students to be fully involved in the study at the BUT faculties in cooperation with civic associations and other organizations.		
	doc. Švec	1 800

IV. – 8 INVOLVEMENT OF THE UNIVERSITY IN PROGRAMMES RECEIVING FUNDING FROM THE HIGHER-EDUCATION DEVELOPMENT FUND

theme group	successful projects	funding received in thousands of CZK		
		investment	non-investment	total
A	15	20 979	0	20 979
B	1	0	135	135
C	0	0	0	0
E	1	0	690	690
F	58	0	10 099	10 099
G	74	0	8 919	8 919
total	**149**	**20 979**	**19 843**	**40 822**

A – innovation and development of laboratories, studios, and other rooms for practical exercises including libraries and information technologies in higher education
B – teacher education
C – counselling and information centres
E – university libraries
F – innovation of degree programmes
G – student creative activities

IV. – 9a PRIZES AWARDED TO STUDENTS AND GRADUATES IN 2004

Rector's Prize for the best graduates		
	FCE	Ing. Michal Uhrin
	FEEC	Ing. Tomáš Vašíček
	FC	Ing. Daniela Slánská
	FIT	Ing. Ivana Rudolfová
	FFA	MgA. Veronika Kopečková
Josef Hlávka Prize		
	FCE	Ing. Karel Adamec
	FC	Ing. Ondřej Smrtka
	FIT	Jiří Techet
	FFA	MgA. Alfréd Symůnek
Siemens 2004 Prize		
	FEEC	Ing. Pavel Kříž
	FIT	Ing. Tomáš Pečenka
PRECIOSA Foundation Prize		
	FCE	Ing. Petr Frantík
		Ing. David Lehký
	FME	Ing. Jaroslav Boráň
		Radek Jandora
		Ing. Pavel Jánský
		Ing. Miroslav Kolíbal
		Ing. Jindřich Mach
		Klára Maturová
		Ing. Josef Polčák
		Ing. Vladimír Ucekaj
		Ing. Stanislav Vavřík
	FEEC	Ing. Vladimír Malenovský
		Ing. Vít Matoušek
		Ing. Karel Polák
		Ing. Radek Vašíček
	FC	Ing. Jana Cabálková
		Ing. Markéta Štikarovská
		Ing. Miloslav Uher
		Ing. Jiří Zita

IV. – 9b SPECIAL RECTOR'S PRIZES AND AWARDS

Special Rector's Prize	
doc. Ing. Miroslav Kasal, CSc., FEEC	for an outstanding engineering work
doc. RNDr. Alexandr Meduna, CSc., FIT	for an important book published
prof. RNDr. Jaroslav Cihlář, CSc., FME	for outstanding research results
Ing. Miroslav Vořechovský, FCE	for outstanding study results as a doctoral student

Rector Award for a Major Contribution to the Fight for Academic Rights and Freedom	
Ing. arch. Zdeněk Hirnšal Ing. arch. Martin Laštovička Ing. arch. Jiří Slezák	former students of the Faculty of Architecture
Ing. Evžen Sobek Ing. Tomáš Hanáček	former students of the Faculty of Mechanical Engineering
Ing. David Částek Ing. Zdeněk Žák	former students of the Faculty of Electrical Engineering

V. – 1 BUT INVOLVEMENT IN THE IMPLEMENTATION OF RESEARCH PLANS

Research Plan	**Funding received for 2004 in thous. of CZK**
Calculation and physical modelling of the problem of engineering thermofluid mechanics, mechanics of bodies, and inversions	11 263
Progressive functionally gradient and nanostructural materials	14 970
Development of progressive high-precision mechanical technologies	7 611
Environment-friendly and economical modern power engineering technologies	7 649
Experimental research of aerodynamic characteristics in flying laboratories	6 116
Development of methods of modelling water-management and transport systems	6 318
Theory, reliability, and mechanism of displacing statically and dynamically loaded building structures	10 333
Research and development of new materials from waste ensuring their better durability in building structures	7 409
Non-traditional methods of investigation of complex and vague systems	4 724
Research of sources, accumulation, and optimisation of energy use in environmental applications	4 343

Research of electronic communications systems and technologies	8 424
Research of information and control systems	6 846
Automation of technologies and manufacturing processes	4 169
Czech architecture and town planning in a new situation	3 339
Possible development trends at mechanical and electrical engineering companies with special focus on the South Moravian region	2 275
Research of strategic management at Czech companies	2 275
Homogeneous and heterogeneous materials on the basis of synthetic polymers and biopolymers	3 761
Methods of detection, identification, decontamination of toxic substances and removal of existing contamination	2 629
Research of microelectronic systems and technologies	11 075
Research and development of mechatronic systems	5 555
Total funding	**131 084**

V. – 2 BUT INVOLVEMENT IN PROJECTS RECEIVING TARGETED FUNDING

progr. code	R&D support programme name	no. of projects	funding received (thous. of CZK)
GA	Standard grants	119	71 593
GP	Post-doctoral grants	35	7 227
GD	Doctoral grants	5	6 717
LN	Research centres	3	46 757
LZ	Programme of support of newly qualified R&D workers	6	2 186
IF	Safe and economical transport	5	2 548
FI	IMPULS	14	4 535
FT	TANDEM	10	4 039
FF	PROGRES	12	3 995
1H	POKROK	3	1 032
FD	Project consortia	11	3 860
IA	Grants of distinct research nature focussed on the research currently conducted mainly in the Academy of Sciences of the Czech republic	5	883
KJ	Junior research grant projects	6	1 142

1E	Information society (TP2 National Research Programme)	3	1 378
WB	Research and development focussed on the needs of regions	3	1 140
ST	National Security Office	1	376
LA	INGO	4	567
ME	KONTAKT	6	2 311
OC	COST	13	5 565
OE	EUREKA	6	2 928
OK	EUPRO	1	804
Total		**271**	**171 583**

V. – 3 BUT INVOLVEMENT IN PROJECTS RECEIVING FUNDING FROM OTHER DOMESTIC AND INTERNATIONAL SOURCES

progr. code	R&D support programme name	no. of projects	funding received (thous. of CZK)
FP 4	EU 4th Framework Programme	1	365
FP 5	EU 5th Framework Programme	18	12 465
FP 6	EU 6th Framework Programme	6	1 161
RFS-CR	EU Coal and Steel Research Programme	1	1 802
UIC	International cooperation of railway organizations	1	627
MS	Microsoft Grant (Great Britain)	1	558
DV splp.	Bilateral cooperation (Hungary, Germany, Poland, Austria, Slovakia, Slovenia, IVF)	18	822
total		**46**	**17800**

V. – 4 NEW PROFESSORSHIPS AWARDED AT BUT IN 2004

faculty *	name	field of research	date
FCE	Rovnaníková Pavla, doc. RNDr. CSc.	physical and building materials engineering	15th October 2004
FCE	Říha Jaromír, doc. Ing. CSc.	water management and water structures	1st June 2004

FME/FC	Dočekalová Hana, doc. RNDr. CSc.	design and process engineering	1st June 2004
FEEC	Aubrecht Vladimír	theoretical electrical engineering	1st June 2004
FEEC/UTB Zlín	Prokop Roman, doc.	engineering cybernetics	1st June 2004
FEEC	Šolc František	engineering cybernetics	15th October 2004
FA	Koutný Jan, doc. Ing. arch. CSc.	town planning	1st June 2004
FA	Zatloukal Pavel, doc. PhDr.	architecture	15th October 2004
FBM	Dohnal Mirko, doc. Ing. DrSc.	departmental economics and management	1st June 2004
FBM	Rais Karel, doc. Ing. CSc. MBA	departmental economics and management	1st June 2004
FBM	Smejkal Vladimír, doc. Ing. CSc.	departmental economics and management	1st June 2004
VŠB-TU Ostrava / FEEC	Zezulka František, doc. Ing. CSc.	engineering cybernetics	15th October 2004

** - the faculty submitting the proposal*

V. – 5 NEW ASSOCIATED PROFESSORSHIPS AWARDED AT BUT IN 2004

faculty	name	field of research	date
FCE	Šulc Jan, doc. Ing. CSc.	water management and water structures	9th January 2004
FCE	Hrazdil Václav, Ing. CSc.	theory and design of construction	16th November 2004
FCE	Drdácký Miloš, Ing. DrSc.	theory and design of construction	16th November 2004
FCE	Starý Miloš, doc. Ing. CSc.	water management and water structures	16th November 2004
FME	Pata Vladimír, Dr. Ing.	manufacturing technology	7th January 2004
FME	Mazal Pavel, Ing. CSc.	materials science and engineering	7th January 2004
FME/UTB Zlín	Křesálek Vojtěch, RNDr. CSc.	applied physics	14th April 2004
FME	Horáček Milan, doc. Ing. CSc.	manufacturing technology	14th April 2004
FME	Bébar Ladislav, Ing. CSc.	design and process engineering	11th October 2004
FME	Jegla Zdeněk, Ing. Ph.D.	design and process engineering	11th October 2004
FME	Marek Jiří, Ing. Dr.	design and process engineering	8th November 2004
FEEC	Kolařík Vladimír, Ing. Ph.D.	technology of electrical engineering and electronics	2nd November 2004

FEEC	Kuchyňková Hana, Dr. Ing.	heavy-current electrical engineering	17th February 2004
FEEC	Kolka Zdeněk, Dr. Ing.	electronics and communications	27th April 2004
FEEC	Škorpil Vladimír, Ing. CSc.	electronics and communications	27th April 2004
FEEC	Sedlaříková Marie, Ing. CSc.	technology of electrical engineering and electronics	22nd June 2004
FEEC/UTB Zlín	Zelinka Ivan, Ing. Ph.D.	engineering cybernetics	2nd November 2004
FEEC	Jirsík Václav, Ing. CSc.	engineering cybernetics	2nd November 2004
FEEC	Bartušek Karel, Ing. DrSc.	theoretical electrical engineering	22nd June 2004
FEEC	Boušek Jaroslav, Ing. CSc.	technology of electrical engineering and electronics	22nd June 2004
FC	Krčma František, RNDr. Ph.D.	physical chemistry	2nd March 2004
FBM	Kocmanová Alena, Ing. Ph.D.	departmental economics and management	11th June 2004

V. – 6 BUT FIRST DEGREE (GOLD) MEDALS AWARDED IN 2004

prof. Ing. Jiří Brandštetr, DrSc. (FC)

awarded for the credit deserved in renewing the Faculty of Chemistry and for the major contribution to chemistry research conducted at BUT

prof. Ing. Ctirad Kratochvíl, DrSc. (FME)

awarded for the lifelong research of mechanics of solids, teaching in and development of the mechatronics courses at BUT

prof. Ing. Jiří Kratochvíl, DrSc. (FCE)

awarded for the credit deserved in promoting BUT and the major contribution to the development of mathematical modelling of engineering structures and introduction of the finite-element method

doc. Ing. Zdeňka Rábová, CSc. (FIT)

awarded for the credit deserved in promoting BUT and the Faculty of Information Technology

prof. DI Dr. Peter Skalicky (rector, Technische Universität Wien)

awarded for promoting cooperation with BUT and a major contribution to forming a European higher-education space

prof. Ing. Jiří Svačina, CSc. (FEEC)

awarded the credit deserved in promoting BUT and the Faculty of Electrical Engineering and Communication and for a major research contribution in electrical engineering and communications

prof. Dr. Claus Weyrich (Senior Vice President, Siemens)

awarded for the credit deserved in promoting research cooperation between Siemens and BUT

V. – 7 HONORARY DOCTORATES CONFERRED

prof. Ing. Lubomír Lapčík, DrSc.

professor of Tomas Bata University in Zlin
outstanding specialist in physical and colloid chemistry

prof. Ing. arch. Miroslav Masák

Studio Masák, Úvaly u Prahy
outstanding specialist in architecture, authorized architect

prof. DI Dr. techn. DDr.h.c. Peter Herbert Osanna

Institut für Fertigungstechnik, Technische Universität Wien
outstanding specialist in engineering metrology and quality management,

Bohuslav Woody Vašulka

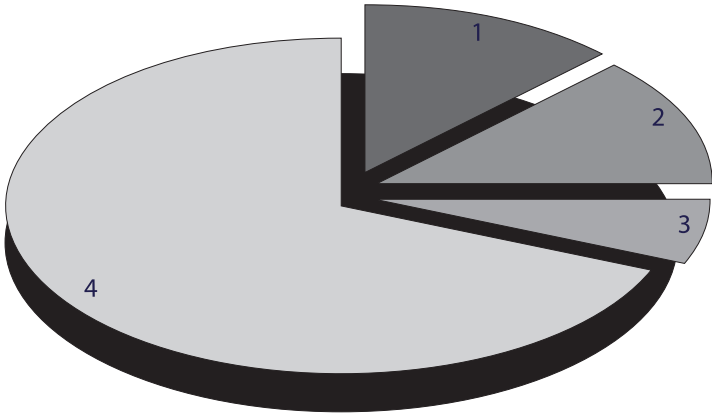
Zentrum für Kunst und Medientechnologie
outstanding specialist in electronic media

Ing. Robert Vích, DrSc., Dr.-Ing.h.c.

Institute of Radio Engineering and Electronics of the Czech Academy of Sciences, Prague
outstanding specialist in digital signal processing

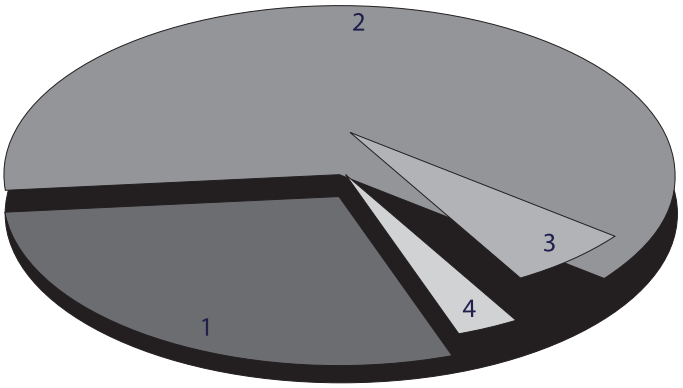
V. – 8 BUT PATENTS, UTILITY MODELS, INDUSTRIAL DESIGNS, AND TRADEMARKS TAKEN OUT BY 1ST JANUARY 2005

BUT	number	%
patents (1)	2	12,50
utility models (2)	2	12,50
industrial designs (3)	1	6,25
trademarks (4)	11	68,75



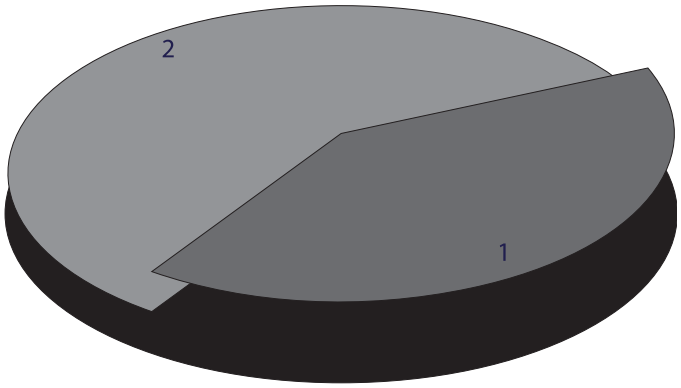
V. – 9 BUT DOMESTIC RESEARCH PROJECTS RECEIVING FUNDING IN 2004

funding source	amount received in thousands of CZK
CR Grant Agency	85 537
Ministry of Education	180 027
Ministry of Industry and Trade	17 462
Other domestic grant agencies	7 467
total	**290 493**



V. – 10 BUT INTERNATIONAL RESEARCH PROJECTS RECEIVING FUNDING IN 2004

funding source	**amount received in thousands of CZK**
targeted subsidies of international projects	12 175
international projects funded from abroad and other sources	17 800
total	**29 975**



VI. – 1 BUT COMPUTER NETWORK NODES AND THEIR CURRENT CONNECTIVITY

locality	access elements			faculty / department
	2002	2003	2004	
Antonínská 1	BlackDiamond	BlackDiamond	BlackDiamond	BUT Centre
Božetěchova 2	BlackDiamond	BlackDiamond	BlackDiamond	FIT
Gorkého 13	PC router	PC router	PC router	FBM (until mid 2004)
Kolejní 2	Summit7i	Summit7i	Summit7iSummit48	BUT halls of residence, Management of BUT Halls of Residence and Canteens
Kolejní 4	-	-	BlackDiamond	FBM, FEEC
Kounicova 46/48	Summit7i	Summit7i	Summit7i	BUT halls of residence
Kounicova 67a	Summit48	Summit48	Summit400Summit48	BUT Rectorate (detached department)

Mánesova 12	Summit48	Summit48	Summit1i	BUT halls of residence
Poříčí 5	Summit1iSummit48	Summit5iSummit48	Summit5iSummit48	FA
Purkyňova 93	Summit7i	Summit7i	Summit7i	BUT halls of residence
Purkyňova 118	twice Summit7iSummit5i/Ix	twice Summit7iSummit5i/Ix	twice Summit7iSummit5i/Ix	FEEC, FC
Rybářská 13/15	Summit 48	Summit48	Summit48	FFA
Technická 2	BlackDiamond, Summit1i	BlackDiamond twice Summit1i	BlackDiamond Summit1i	FME, FBM
Technická 8	Summit1i	Summit1i	Summit1i	FEEC
Údolní 19	Summit1iSummit48	Summit1iSummit48	Summit5iSummit48	FFA
Údolní 53	Summit 5i	Summit5i	Summit5i	FEEC
Veveří 95	BlackDiamond	BlackDiamond	BlackDiamond	FCE
Technická 4	-	Summit24	Summit24	BUT Technology Incubator

VII. – 1 LIBRARY COLLECTIONS AND SERVICES

library	faculty	library units	acquisitions	loans	registered users	interlibrary loans	international loans
Central Library	BUT	6 555	426	250	2 300	715	124
Faculty Library	BUT	22 577	1803	12 430	4 700	1 187	150
Faculty Library	FME	76 307	2 268	9 701	4 607	759	272
Library Information Centre	FCE	97 742	1 827	12 670	5 340	249	86
Faculty Library	FA	15 270	477	3 512	720	41	14
Scientific Information Centre	FBM	12 526	1 621	9 995	1 938	15	25
Faculty Library	FFA	6 417	351	2 750	398	15	10
Faculty Library	FIT	6 560	893	850	1 644	3	20
Faculty Library in Kolejní street	FEEC	1 134	1 134	12	59	0	0
Partial Libraries	FEEC	3 5061	1 259	3 034	760	30	1

VII. – 2 NUMBERS OF SEATS IN STUDY ROOMS

library	faculty	number of seats in study rooms	those with a PC
Central Library	BUT	70	45
Faculty Library	BUT	83	39
Faculty Library	FME	102	17
Library Information Centre	FCE	300	100
Faculty Library	FA	60	7
Scientific Information Centre	FBM	35	9
Faculty Library	FFA	12	2
Faculty Library	FIT	35	23
Faculty Library in Kolejní street	FEEC	34	12
Partial Libraries	FEEC	26	0

VII. – 3 LIBRARY STAFF NUMBERS

library	faculty	with secondary education	with university education	total
Central Library	BUT	5	3	8
Faculty Library	BUT	4	3	7
Faculty Library	FME	5	0	5
Library Information Centre	FCE	9	3	12
Faculty Library	FA	3	0	3
Scientific Information Centre	FBM	3	0	3
Faculty Library	FFA	1	0	1
Faculty Library	FIT	1	1	2
Faculty Library in Kolejní street	FEEC	1	1	2
Partial Libraries	FEEC	7	1	8

VIII. – 1 QUALIFICATION AND AGE OF UNIVERSITY ACADEMIC STAFF

age	academic position					researchers and scientists
	professors	associate professors	senior lecturers	lecturers	instructors	
under 29	0	0	25	75	-	5
30 to 39	1	12	130	72	-	9
40 to 49	8	54	127	21	-	6
50 to 59	39	102	149	3	-	5
60 to 69	61	88	70	1	-	7
over 69	14	10	1	2	-	1

VIII. – 2 NUMBERS OF INTERNAL (FULLTIME) AND EXTERNAL UNIVERSITY STAFF (PERSON AND RECALCULATED NUMBERS)

age		academic position					researchers and scientists	other staff
		professors	associate professors	senior lecturers	lecturers	instructors		
internal	actual number	112.2	265.4	483.8	161.0	-	25.8	1371.2
	recalculated number	95.898	243.667	453.667	151.223	-	21.01	1232.647
external	actual number	184	185	775	298	202	14	2351
	recalculated number	2.12	2.46	6.15	4.75	4.89	0.06	49.36

X. – 1 MUTUAL COOPERATION AGREEMENTS WITH PARTNER UNIVERSITIES ABROAD SIGNED IN 2004

partner university	city	country	agreement date
Technical University of Košice, located in Prešov	Košice	Slovakia	7th February 2004
University of Mondragón, Polytechnic of Mondragón, Corporation of Mondragón	Mondragón	Spain	October 2004
University of Lüneburg	Lüneburg	Germany	October 2004
University of Venda	Thohoyandou	South Africa	October 2004
Harbin Institute of technology	Harbin	China	2004
University of Zagreb	Zagreb	Croatia	2004

X. – 2 SOCRATES/ERASMUS ACTIVITIES

activity	1999/2000	2000/2001	2001/2002	2002/2003	2003/2004
Student Mobility					
number of students	70	110	121	156	225
number of months	311	577	700	993	1 446
Teacher Mobility					
number of teachers	32	43	60	94	103
number of months	33	71	106	132	169

X. – 3 EU PROGRAMMES FOR EDUCATION AND TRAINING

programme	Socrates Erasmus	Socrates				Leonardo
		Comenius	Grundtvig	Lingua	Minerva	
projects	1		1			5
out students	362		6			23
in students	97					3
out teachers	106		2			10
in teachers	19					7
total funding in thousand CZKs	**22 000**		**278**			**3 279**

X. – 4 OTHER PROGRAMMES

programme	Ceepus	Aktion	others
projects	2		2
out students	14		
in students	12		16
out academics	6		
in academics	4		11
total funding in thousand CZKs	393		

X. – 5 OTHER STUDY STAYS ABROAD

programme	**government scholarships**	**bilateral university cooperation**	
		in Europe	**outside Europe**
out students	2	17	3
in students	9	5	8
out academics		47	
in academics		24	1

XII. – 1 STUDENT CARE – ACCOMMODATION, MEALS

Total number of beds in the university halls of residence	6 910
Number of beds available to university students	6 687
Number of beds available to university staff	97
Number of beds available to university guests	96
Number of beds in hired facilities	201
Number of applications for accommodation submitted in the current academic year	9 516
Number of applications for accommodation granted until 31st December 2004	7 398

Monthly charges for accommodation in the halls of residence	university students	university staff	others
A – cell system	1 350 CZK	1 300 CZK	
B – rooms with two and more beds	1 010 CZK		
C – other rooms			
Price of a meal	19 to 26.50 CZK	19 to 26.50 CZK	42,50 to 50 CZK
Total number of meals served in 2004	**1 746 593**	**113 460**	**96 846**

XII. – 1a BUT HALLS OF RESIDENCE

Hall of residence	bed capacity
Kolejní 2	3 336
Purkyňova 93	2 268
Kounicova 46/48	1 042
Mánesova 12	264
Total	**6 910**

XII. – 2 BUT CATERING FACILITIES

facility address	operation type	number of meals
Kolejní 2 – canteen	meals cooked and served	1 500
Kolejní 2 – pizzeria		1 500
Purkyňova 93	meals cooked and served	6 500
Kounicova 46/48	meals cooked and served	2 200
Technická 2	meals cooked and served	700
Technická 8	meals cooked and served	600
Veveří 95	meals cooked and served	900
Technická 2 – canteen	meals served	100
Antonínská 1	meals served	0
Purkyňova 118	meals served	0
total		**14 000**

XIII. – 1 STUDIES, EXPERT OPINIONS, AND SEARCHES MADE (in thousands of CZK)

BUT	
Total	**870**

XIII. – 2 REPAIRS AND OTHER BUILDING PROJECTS FINANCED FROM BUT NON-DEVELOPMENT FUNDS (in thousands of CZK)

project description	amount
Integrated building of FBM and FEEC on the Pod Palackého vrchem campus	87
Hard landscaping for the integrated building	1 138
Interiors for the integrated building	29 808
Renovation of the south wing in Božetěchova street	812
Reconstruction of and annex to the Božetěchova campus	881
Renovation of buildings A1, B2 at Technická	898
Telephone exchange, telephone network for the integrated building	920
Renovation of building U7 at Údolní 53	2 416
FC – renovation of the 3rd and 4th floors	510
Modifications to the technology incubator	44
Renovation of building A2, at Technická	2 506
Repairing the window sills of buildings D1 and D2 at Veveří 95	334
Putting into operation the integrated building	27
Repairing the roof of the building at 31, Vříšť	904
total	**41 285**

XIII. – 3 EMERGENCY REPAIRS FINANCED FROM BUT NON-DEVELOPMENT FUNDS (in thousands of CZK)

BUT	
total	**782**

XIII. – 4 SUBSIDIES FROM THE NON-DEVELOPMENT FUNDS FOR PROJECTS OF NON-DEVELOPMENT NATURE – PART OF THE PROPERTY RENOVATION PROGRAMME

project	amount
Integrated building of FBM and FEEC on the Pod Palackého vrchem campus	12 409
Reconstruction of and annex to the Božetěchova campus	227
total	**12 636**

XIII. – 5 PROJECTS OF BUT HALLS OF RESIDENCE AND CANTEENS (in thousands of CZK)

project description	amount
Halls of residence on the Pod Palackého vrchem campus	2 371
Renovation of offices and health centre in building A06 of the Pod Palackého vrchem halls of residence	804
total	**3 175**

XIII. – 6a SUMMARY OF THE BUT DEVELOPMENT FUNDS SPENT ON BUILDING PROJECTS IN 2004 (in thousands of CZK)

project description	Ministry of Education	BUT	South Moravian Region	City of Brno	State Environmental Fund	total
Integrated building of FBM and FEEC on the Pod Palackého vrchem campus	66 684	51 623				11 8307
Hard landscaping for the integrated building		6 552				6 552
Interiors for the integrated building		1 652				1 652
Renovation of the south wing in Božetěchova street		687				687
Reconstruction of and annex to the Božetěchova campus	11 974	6 053				18 027
Renovation of building A3, 5th and 6th floor at Technická		56				56
Renovation of buildings A1, B2 at Technická		17 419				17 419
State Technical Inspection of buildings A1–3, B2 at Technická		3 056				3 056

Reconstruction of the athletic stadium on the Pod Palackého vrchem campus	5 451	914	5 107	2 000		13 473
Telephone exchange, telephone lines for the integrated building		2 018				2 018
FC – renovation of the 3rd and 4th floor		2 077				2 077
Computer and information network		3 542				3 542
Lecture room at Purkyňova 118		40				40
Construction of the FECT building at Technická 10		1 536				1 536
Multipurpose sports hall on the Pod Palackého vrchem campus		556				556
Halls of residence on the Pod Palackého vrchem campus	31 741	4				31 745
Monitoring system for the integrated building		2 467				2 467
FME – renovation of hall C2		6 044				6 044
Investigations of a hybrid ventilation system in the low-energy building		206				206
Thermal insulation of buildings A and B at Poříčí 5	1 200	219				1 419
Modifications to the technological incubator		254				254
FA – lecture room 118 at Poříčí 5		207				207
Exchange of windows in buildings D1 and D2 at Veveří 95	10 331	2 339				12 670
FA – renovation of the basement at Poříčí		71				71
Installation of thermostatic valves	2 400	51				2 451
Repairs of the heating system of buildings B1 and B2 at Technická		507				507
Renovation of building A2 at Technická 2		24 925				24 925
Installation of a photovoltaic system		-610			610	0
Acoustic modifications to a studio at Údolní 19		240				240
Low-voltage wiring in the integrated building		311				311
Reconstruction of lighting and backup wiring in building U4 at Údolní		675				675
Reconstruction and repair of building no. 31 at Vříšť		124				124
FC – garages and a bike shelter		359				359
Putting into operation of the integrated building		19 051				19 051
Superstructure on building D3 at Technická		187				187
Access road of the Pod Palackého vrchem campus		24				24
Installation of electric alarm system at Technická		540				940
Total	**129 781**	**156 376**	**5 107**	**2 000**	**610**	**293 875**

XIII. – 6b DEVELOPMENT FUNDS SPENT ON PROJECTS OF BUT HALLS OF RESIDENCE AND CANTEENS (in thousands of CZK)

project description	BUT Halls of Residence and Canteens
BUT halls of residence on the Pod Palackého vrchem campus	3 344
Built-in furniture in building A06, of the halls of residence on the Pod Palackého vrchem campus	1 212
Renovation of offices and health centre in building A06, of the halls of residence on the Pod Palackého vrchem campus	873
Renovation of rooms in block A03 in the Pod Palackého vrchem halls of residence	452
Increasing accommodation capacity of building A02 in the Pod Palackého vrchem halls of residence	599
Reconstruction of baths and toilettes in building A07	695
Installing electric fire alarm system in buildings A04 and A05 in the Pod Palackého vrchem halls of residence	761
Ventilation of emergency exit routes in the Pod Palackého vrchem halls of residence	241
Backbone computer network on the Pod Palackého vrchem campus	1 212
PC's of the Kolejnet network in building K1 of the Pod Palackého vrchem halls of residence and the Kounicova halls of residence	1 509
Renovation of a flat in block A02 of the Pod Palackého vrchem halls of residence	408
Renovation of a flat in block A05 of the Pod Palackého vrchem halls of residence	435
Reconstruction of baths and toilettes of the Mánesova halls of residence	1 820
Reconstruction of the B03 entrances of the Purkyňova halls of residence	705
Reconstruction of emergency lighting in the Listovy halls of residence	950
Electronic monitoring system, opening of emergency exits in the Listovy halls of residence	776
Venetian blinds in the Listovy halls of residence	218
Remote opening of emergency exits in the Mánesovy halls of residence	197
Remote opening of emergency exits in the Purkyňova halls of residence	285
Monitoring of electricity supply on the Pod Palackého vrchem campus	24
Optical connection of the Kounicova halls of residence with the BUT Rectorate building	124
Air conditioning system in the server room of the Pod Palackého vrchem halls of residence	55
Total Halls of Residence and Canteens	**16 895**

XIII. – 6c PURCHASES AND TRADING OF LAND, EXCHANGE OF BUILDINGS, RESIDUAL VALUE (in thousands of CZK)

transaction	BUT
Purchases and trading of land	10 645
Exchange of buildings	8 457
Residual value of removed buildings	6 980
Total purchases and trading	**26 082**

XIII. – 6d SUMMARY OF DEVELOPMENT FUNDS SPENT ON BUT BUILDINGS
(in thousands of CZK)

	Ministry of Education	BUT	South Moravian Region	City of Brno	State Environmental Fund	total
Total BUT projects	**129 781**	**199 353**	**5 107**	**2 000**	**610**	**336 851**

XIII. – 7 DEVELOPMENT FUND SPENDING ON MACHINERY AND EQUIPMENT
(in thousands of CZK)

faculty/ department	Asset Development Fund	BUT contracts	grants	donations	foreign subsidies	total
FFA	1 293		554			1 847
FCE	8 878		6 018			14 896
FME	18 120		30 117	447	655	49 339
FIT	2 479		3 254		43	5 776
FA	874		1 450			2 324
FC	4 909		5 183			10 092
FBM	3 318		2 370			5 688
FEEC	12 686		18 016	690		31 392
CEC			220			220
CCIS			11 718			11 718
Rectorate			80			80

BUT Unit	672	2 936				3 608
BACF	5 578					5 578
Total	**58 807**	**2 936**	**78 980**	**1 137**	**698**	**142 558**

XIII. – 8 IMPORTANT (SELECTED) CONSTRUCTION PROJECTS IN 2004

project	total costs in thous. of CZK
Integrated building of FBM and FEEC on the Pod Palackého vrchem campus	130 803
Hard landscaping for the integrated building	7 690
Interiors of the integrated building	31 460
Reconstruction of and annex to the Božetěchova campus	19 135
Renovation of buildings A1 and B2 at Technická 2	18 317
Reconstruction of the athletic stadium	13 473
Construction of a FECT building at Technická 10	1 536
Multi-purpose sports hall on the Pod Palackého vrchem campus	556
BUT halls of residence on the Pod Palackého vrchem campus	37 070
FME – renovation of hall C2	6 044
Exchange of windows in buildings D1 and D2 at Veveří 95	12 670
Renovation of building A2 at Technická 2	27 431
Putting into operation of the integrated building	19 079

XV. – 1a NUMBER OF TITLES PUBLISHED IN VUTIUM PRESS SERIES IN 2004

(by the ISBN and ISSN records)

textbooks	monographs	printed lectures	proceedings	scientific writings	journals	total
1	8	5	6	98	1	119

XV. – 1b TOTAL NUMBER OF TITLES PUBLISHED AT BUT IN 2004

(by the ISBN and ISSN records)

published by	textbooks	monographs	printed lectures	proceedings	scientific writings	journals	total
FA	-	-	-	7	-	1	8
FCE	-	-	23	11	-	-	34
FFA	-	-	-	1	-	-	1
FEEC	-	1	21	16	-	-	38
FC	-	-	4	5	-	-	9
FBM	-	-	22	10	-	-	32
FME	-	-	15	16	-	-	31
Rectorate	-	-	-	5	-	-	5
VUTIUM Press	1	8	5	6	98	1	119
total	**1**	**9**	**90**	**77**	**98**	**2**	**277**

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