ANNUAL REPORT

2005

BRNO UNIVERSITY OF TECHNOLOGY

ANNUAL REPORT ON THE ACTIVITIES OF BRNO UNIVERSITY OF TECHNOLOGY IN 2005

This annual report is being submitted in conformance with the Higher Education Act no. 111/1998 Coll. Its structure is given by the Guidelines for Describing University Activities in 2005 issued by the Ministry of Education, Youth, and Sports. It presents to a wider public data on and major outcomes of all the activities carried out by Brno University of Technology as a Czech and international university and place of research.

Brno University of Technology (BUT)
Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
e-mail: vut@vutbr. cz
http://www.vutbr.cz

Brno University of Technology

TABLE OF CONTENTS

I. FOREWORD

This Annual Report of Brno University of Technology (BUT) presents its development in 2005 providing textual and numerical information on the university's key activities, that is, education, science, research, and creativity in engineering, business, and applied sciences in architecture and fine arts as well as the partnerships and cooperation with universities both at home and abroad and with industries, and other institutions.

The BUT 2005 activities were guided by the university' Mission Statement as adopted and amended recently that sums up our credo - to offer education to all those who wish to study at our university and can come up to the exacting requirements of the study. We are an institution that responds to the current needs of modern society as well as to the interest of the young generation in the new emerging fields of study. The education itself is set in an environment where science and research play a major role stimulating and developing the students' creativity. In its major areas of interest, relating mainly to the Master's and Bachelor's programmes, our university fulfils the criteria of a research university offering also broadly conceived Bachelor's programmes with various follow-up Master's degree study options.

At present, BUT consists of eight faculties and, judging by its study profile, it is a technical university with the widest scope in this country offering a broad range of engineering programmes as well as business and artistic subjects with close relation to engineering fields. This gives rise to ideal conditions for interdisciplinary programmes or study fields (mechatronics, materials engineering, biomedical engineering, industrial design, architecture of building structures, programmes combining engineering and business, informatics and business, etc.) of which some are becoming the basis for further scientific or engineering development. That BUT offers modern and well conceived system of education is also evidenced by the permanent interest of young people in studying at our university. In the academic year 2005/2006, for the first time in the history of BUT, the total number of students exceeded twenty thousand; more exactly, there were 20,563 students on 31st October 2006, which is by 2,140 more than in the previous year. This number also includes 1,948 doctoral students thus testifying to the university's strong links with science and research. The number of graduates from Bachelor's and Master's programmes reached 2 870, which is the highest number among the Czech technical universities. Another favourable fact is that the bulk of our graduates have no problems finding a job and, thanks to the solid professional base they receive, they find opportunities in many spheres of society. The overall university development was also facilitated by the improved infrastructure background: a large reconstruction was started, for example, of the buildings of the Faculty of Information technologies in Božetěchova Street.

From the point of view of each modern university, the European dimension of education is gaining importance at present, the more so now that the Czech Republic has joined the EU. The transformation of education towards a structured continual system with Bachelor's, Master's, and doctoral programmes has already been completed at all the faculties in line with the Bologna process of the creation of a European educational space. Beginning in the academic year 2004/2005, the new system of structured study saw its first-year students at all levels. The international mobility of students and academics also financed from the university's own resources is gradually increasing focussing on the EU countries. Early in 2005, our

university underwent strict evaluation by the European University Association (EUA) receiving good marks. Many recommendations were subsequently incorporated in the BUT Mission Statement for 2006–2010. Brno University of Technology was actively involved in the activities of some noted European associations such as EUA, CESAER, EUCEN, and a number of others. The close cooperation of all Brno universities associated in a Brno Centre of European Studies together with the city of Brno and the South Moravian Region was the main reason why the EUA decided to hold its October 2006 annual conference in Brno.

Science, research, and other creative activities remain the centre of our attention. New research teams have been formed for Research Plans and Research Centres, with more doctoral students and graduates involved. This strengthens the long-term and systematic character of science and research conducted at the university. With the number and total volume of successful grant projects, both domestic and international, including the EU 6th Framework Programme, our university ranks high among the Czech universities and, in some areas, we can bear comparison to good universities abroad. The two first places and one second place won by a team of young researchers from the Faculty of Information Technology in an international language recognition competition held in Washington and the space telecommunication equipment developed by scientists from the Faculty of Electrical Engineering and Communication and brought into orbit by the Discovery and installed in the space station can no doubt be counted among major scientific achievements of 2005.

For a university of our type, cooperation with industries and other organizations is of vital importance. It may take the form of common participation in various grant projects or direct cooperation. I am convinced that, in this field, we can contribute a great deal to the innovation of engineering works in their marketing with positive effects in business. The development of a new VUT 100 small aircraft for 4 to five passengers in close cooperation with EVEKTOR, a. s., in Kunovice may be taken as an example. In 2005, this aircraft was put to rigorous prototype tests, which is a requisite for its successful certification. After two years, the results of a BUT Technological Incubator provide reasons for positive expectations so that its extension to an optimum size is prepared using the EU structural funds and the support given by the South Moravian Region. In 2005, sixteen companies used the services offered by the incubator with their first product being already marketed and one company leaving for the unprotected zone. A well functioning incubator is a good motivation for enterprising graduates or students to start their own companies to which direct their invention. Such abilities should be stimulated nowadays that our future position in Europe and our contribution to the educational and technological development of the EU is and will be at stake.

Building a university is a long-term process depending on the efforts made by all those that 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 alma mater one step further.

In Brno, dated 17th March 2006

prof. RNDr. Ing. Jan Vrbka, DrSc., dr. h. c.
Rector of BUT

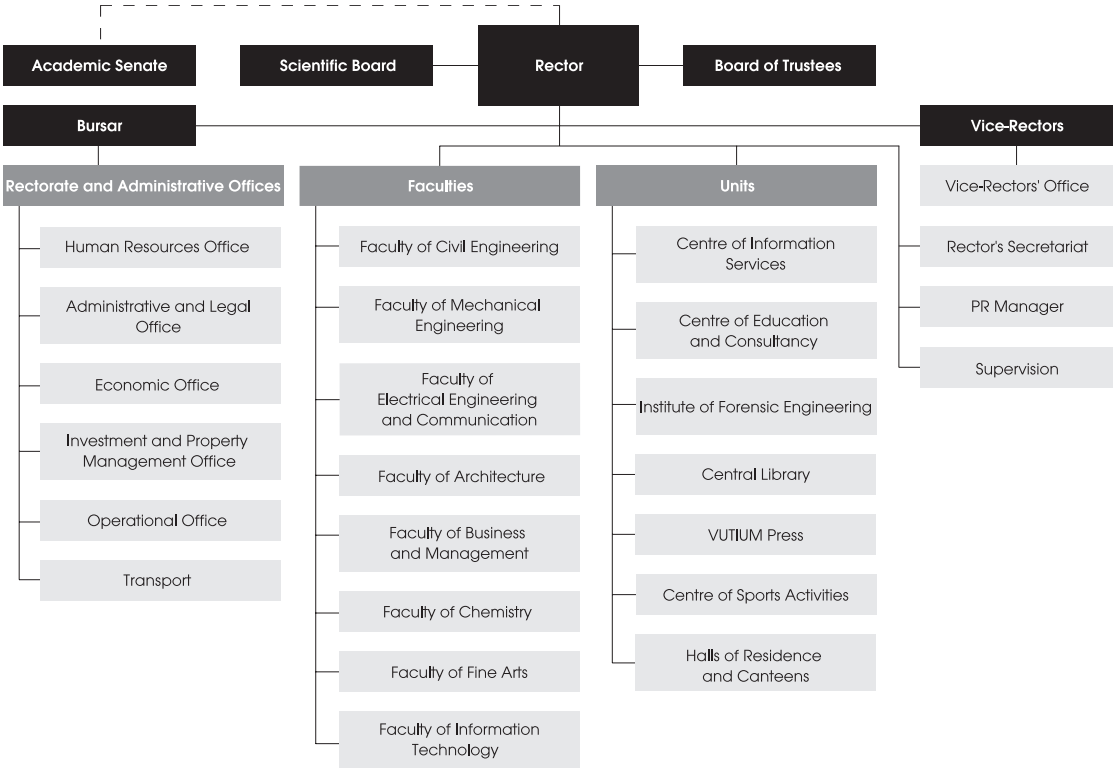
II. BUT LEADING OFFICIALS ORGANIZATIONAL CHART

Rector prof. RNDr. Ing. Jan Vrbka, DrSc., dr. h. c.

Vice-Rector
prof. RNDr. Josef Jančář, CSc.
for creation development
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 student affairs

Bursar Ing. Vladimír Kotek (deputizing from until 31st July 2050)
(regular bursar since 1st August 2005)

PR Manager PhDr. Jitka Vanýsková



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

Activities of the BUT Academic Senate

In 2005 the BUT Academic Senate (AS) convened at 10 regular sessions and 1 special session in Hevlín in September 2005; eight of them were those of the Academic Senate elected for the term 2003–2005 (chaired by doc. Ing. František Zbořil, CSc.) and 3 of the newly elected Academic Senate for the term 2005–2008 (chaired by doc. RNDr. Josef Dalík, CSc.). Next, the Senate's Economic Committee (EC) met 22 times, Legislation Committee (LC) 11 times and its Student Chamber held a number of separate sessions.

At its sessions, the Academic Senate dealt with strictly professional matters and the decisions taken supported the development of BUT. In 2005 the AS adopted a total of 89 decisions including 29 decisions to approve changes in and amendments to BUT's and its faculties' internal regulations, 17 decisions concerning matters of management, 14 decisions on preparing and organizing elections to the Academic Senate and of a new candidate for BUT rector. Other AS decisions appointed AS working committees, and BUT representatives in the assembly and management of the Board of Universities and in the Rector's Consulting Committees. The Academic Senate's key activities included the approval of: the BUT 2005 budget, BUT Annual Activity and Management Report, BUT 2006-2010 Mission Statement and its updated version for 2006. The working commissions contributed a great deal to the preparation of AS sessions.

In January 2005, the LC presented a carefully prepared draft of the new BUT Constitution completed by the Academic Senate during 2004 to be submitted for registration to the Ministry of Education, Youth and Sports of the Czech Republic in January 2005. In 2005 the LC worked on a time schedule of the elections to the Academic Senate and of a new candidate for BUT rector. In connection with elections to the academic senates of the faculties and candidates for deans, the LC recommended to the faculty senates to revise their faculty constitutions and election rules. The LC discussed and adopted the Academic Senate's opinions on and recommendations to the changes in and amendments to the faculties' internal rules. Based on the new BUT Mission Statement, the LC worked out templates for new internal rules of BUT units (charters and organizational guidelines). The LC discussed the proposal of a new wage scale to be effective from 1st April 2005, submitted comments on the BUT 2006-2010 Mission Statement and its updated version for 2006. It discussed a proposal for changing the position of the Institute of Forensic Engineering and the suggestions published to a new university law proposed by the Members of Parliament.

By their matter-of-fact and analytic approach to discussing the economic issues concerning the summer semester of 2005, members of the EC helped establish open and fair relations with a new partner, the deputizing BUT bursar. As always, the key activity of the EC was preparing opinions on the discussion of the BUT 2005 budget in accordance with the rules previously commented on. Analyses were initiated of the effects of the previous years' building activities on the budget. The EC made every effort to find a balanced solution when deciding about the allocation of the university's profit going to great pains to listen repeatedly to the faculty secretaries' arguments. By making a detailed analysis of the BUT wage development and management, the EC helped raise the funds necessary for a wage increase of 7 percent without the need of reallocation among the BUT units. After many years' effort, doc. Zbořil, chairman of the BUT, had succeeded in devising a clear illustration of the overall financial flows from the Ministry of Education via rector's office to the faculties and BUT units. Therefore, at the EC's request, the BUT budget was completed by what is referred to as „Hevlín tables", discussed by the EC at a meeting in Hevlín in June 2004. This has provided the BUT Academic Senate and bursar with a useful analytic tool, which is being further developed

for future budget modifications needed to reflect the development of the outside environment. After reading an analysis of management and list of measures taken, the EC dealt with the financial situation at the Faculty of Architecture in 2005 including an agreement to achieve its balanced budget since 2006. After comparing the positions of BUT units, the EC recommended that the Academic Senate should withhold the budget funds allocated to the BUT units until the economic and legal underlying documents requested are submitted and approved. Since some of their employees had not fully grasped the BUT units' positions, other discussions ensued and their outcomes were then incorporated in the BUT Mission Statement. When discussing the BUT 2006-2010 Mission Statement and its updated version for 2006, the EC stressed the financial backing of the visions being incorporated.

In 2005, the BUT senators were significantly involved in the activities of the Board of Universities with special credit to be given to doc. Ing. Eva Münsterová, CSc., who was as a deputy chairperson of the Board. The chairperson of the AS attended the meetings of the Board' working committee – associating the chairpersons of the academic senates of the Czech public and state universities – where common problems were dealt with and ways of their solutions looked for.

The newly elected BUT Academic Senate convened three times in 2005. The establishing session of the new Academic Senate took place on 25th October. Chairperson of the Election Committee Ing. Kábelová announced the official results of the elections to the faculty Academic Senates. Then the chairperson and deputy chairpersons of both BUT AS chambers were elected by secret ballot (for the results, see the annexed list of the Academic Senators). Next, the legislation, economic, and pedagogic commissions were established. Both the outgoing and incoming senators attended 5 public gatherings of the BUT academic community where candidates for BUT rector were presented. During the second meeting of the BUT Academic Senate on 8th November, prof. Ing. Karel Rais, CSc., MBA. was elected candidate for BUT rector in the first round. The last AS meeting in 2005 took place on 6th December with legislation- and organization-related matters being discussed.

Activities of the Scientific Board

The BUT Scientific Board convened four times in 2005. It had 39 members. The Scientific Board was mainly concerned with the appointments of new professors and associate professors Tables VII. 5 – 10 and 11). For its other activities, see Chapter XII.

Activities of the BUT Board of Trustees

In 2005 the BUT Board of Trustees convened twice. For further information, see Chapter XV.

IV. EDUCATION

IV.1. Fulltime, distance, and combined programmes and fields of study for Bachelor's Master's, and Doctor's degree

A total of 57 accredited Bachelor's Master's, and Doctor's degree were offered in 2005 with 156 fields of study. These fields include a wide spectrum of classic engineering and science ones linking engineering with natural sciences, business, architecture, and fine arts (Table IV. 1 – 1a, 1b).

IV.2. Programmes guaranteed by a public university and offered at a higher vocational school

Brno University of Technology does not offer any programmes at higher vocational schools.

IV.3. Programmes offered outside the university or faculty

Via Faculty of Mechanical Engineering, BUT offers Engineering, Code B2341, a combined Bachelor's degree programme at Žďár nad Sázavou, Jihlava and Uherský Brod.

IV.4. Credit system and its type used

The ECTS is used at all the BUT faculties. On 1st March 2006 BUT will file a request for being granted the right to award the Diploma supplement, completing the collection of documents to be submitted for receiving the ECTS Label.

Since 2005, all BUT graduates have been receiving an English-Czech diploma supplement.

IV.5. Lifelong-learning programmes

The BUT Centre of Education and Consultancy Centrum provides an informational, educational, and coordination background for the lifelong-learning programmes offered at BUT. For detailed information on the Centre of Education and Consultancy Centrum, see Chapter XI.

The lifelong-learning educational programmes include: pedagogic education, managerial education, engineering education, legal education, and language education.

See Table IV.5 – 1b,1c.

IV.6. University of the 3rd Age, its specialization and scope of its courses (in hours), number of students

The BUT Centre of Education and Consultancy Centrum offers a comprehensive programme for senior citizens within a University of the 3rd Age.

Specializations: computers, Internet, architecture, digital photography, chemistry, artificial intelligence, physical education. In 2005, the University of the 3rd Age at BUT offered 29 courses with 858 lessons taught and 897 attendants.

IV.7. Interest in study, number of candidates, results and analysis of admission procedures

In 2005, 16,394 candidates applied for study, which is by 800 more than in the previous year. Out of those 9,253 candidates admitted, 7,553 enrolled (Table IV.7 – 3). The greatest demand was for study at the Faculty of Civil Engineering, Faculty of Business and Management, Faculty of Electrical Engineering and Communication, and Faculty of Mechanical Engineering, in relative numbers then at the Faculty of Architecture, Faculty of Fine Arts, and Faculty of Information Technology. Traditionally great is the demand for study of business and management related fields.

IV.8. Student numbers in Bachelor's, Master's and Doctor's degree programmes

By 31st October 2005, 20,563 students had enrolled with 11,258 students of Bachelor's, 2,296 students of follow-up Master's and 1,948 of doctoral programmes (Tables IV.8 – 2a, 8b, 8c, 8d). In 2004, 18,623 students had enrolled. The Bachelor's degree student numbers are on the increase while the number of students in the long Master's degree programmes has been dropping due to the ongoing restructuring.

The numbers of international students of Bachelor's, Master's, and Doctor's degree programmes:

A total of 1,258 internat. students studied at BUT in 2005 including 1,100 Slovak students (Tab. IV.8 – 8).

IV.9. Numbers of graduates from Bachelor's, Master's, and Doctor's degree programmes including international students

The graduate numbers are shown in Tables IV.9 – 2b, 9b, 9c, 9d. While the numbers of graduates in most programmes are increasing at almost all the BUT faculties, the number of doctoral programmes has been stagnating.

BUT provides support for talented students nominated for prestigious awards (Table IV.9 – 9e).

IV.10. Innovation of programmes offered

The programmes offered at BUT have been continually innovated in terms of both their courses' contents and their structure in accordance with the conditions stipulated by their accreditations.

IV.11. New Bachelor's, Master's, and Doctor's degree programmes: newly offered, prepared (accredited but not yet taught), under preparation (not accredited)

Preparation and accreditation of new programmes are major components of study transformation at BUT. They reflect efforts to modernize our university's programmes and make them more attractive and competitive.

In 2005, the Faculty of Civil Engineering began to offer a newly accredited Architecture of Building Structures Bachelor's degree programme, the Faculty of Electrical Engineering and Communication started a two-year follow-up Electrical and Electronic Engineering, Communication and Control Equipment programme both in Czech and in English, the Faculty of Business and Management received accreditation for its follow-up Economics and Management programme specializing in European Business and Finance, a new Protection of Population Bachelor' degree programme specializing in Crisis Management was launched at the Faculty of Chemistry, with the Chemistry and Chemical Technology Bachelor's degree programme completed by three new fields of study (Consumer Chemistry, Chemistry and Technology of Environment Protection, Chemistry, Technology and Properties of Materials), an application was filed for the accreditation of a Foodstuff Chemistry Doctor's degree programme, an Information Technology follow-up Master's degree programme was started and an English version of this programme accredited at the Faculty of Information Technology and preparation was started at the Faculty of Fine Arts of the application for accreditation of the Art in Public Space and Modern Art Management doctoral programmes.

The preparation of new degree programmes was supported and the quality of teaching improved by projects of the Development Programmes of the Czech Ministry of Education (Tables IV.11 – 11) and projects of the University Development Fund (Tables IV.11 – 10).

IV.12. New trends in training pedagogical staff of all school types

BUT cooperates with secondary schools within the Autodesk Academia and Microsoft IT Academy programmes by organizing "bootcamps", conferences, seminars, and lifelong-learning courses.

IV.13. Quality of the programmes offered with a view of job opportunities for graduates

An enquiry was conducted from October to December into the job opportunities for BUT graduates with 3000 graduates from Bachelor's and Master's programmes of 2003-2005 being sent letters with questionnaires to be completed. Forty-seven letters could not be delivered. A completed questionnaire was returned by 1,615 respondents 664 of them by e-mail. Almost 70 graduates said they were interested in

further cooperation with BUT mostly in the field of lifelong learning. A final report is published at the website of the lifelong-learning programme.

IV.14. New study forms applied

As part of innovation of degree programmes, new study forms are sought and applied. Accreditations of combined programmes are being prepared and the form of teaching is being modernized using computers, audio and video equipment. Teaching laboratories including virtual ones are being upgraded.

IV.15. Number of dropouts, ways of checking the progress of study and their effects (numbers of credits received are checked after each term, year, etc.)

Table IV.15 – 2c shows the number of dropouts after the first year of study. It is traditionally the greatest in engineering programmes, which is caused by these programmes being more demanding, by the structure of candidates wishing to study such fields and by the insufficient attention paid at secondary schools to mathematics and physics, which are necessary to master engineering subjects. Despite a considerable increase in the student numbers, the total number of dropouts remains approximately the same with the relative dropout indicator decreasing.

Under the unified Study and Examination Rules and instructions issued by the deans, the numbers of credits received are monitored after each term and year. Criteria not met constitute a reason for expulsion.

IV.16. Study options offered to disabled candidates

Giving support to students with disabilities has already become a tradition at BUT. Almost all the buildings have been equipped with barrier-free access, funds from development projects were used in the previous years to enhance the possibilities of admitting such students. The support for the handicapped takes various forms at BUT.

IV.17. Joint degrees – programmes offered within the framework of an international consortium of universities (problems, final diploma, etc.)

A Master's joint-degree programme was successfully accredited at the Faculty of Business and Management in cooperation with Nottingham Business School of The Nottingham Trent University and with the Faculty of Finance and Insurance of The University of Economics in Katowice. The graduates will receive a unified diploma signed by all the three rectors.

V. INFORMATION AND COMMUNICATION TECHNOLOGIES

V.1. New University Information Infrastructure Elements

V.1.1 BUT Central Information System

The SAP business and management information system provided reliable services for 406 users.

The assets depreciation system was modified. All the SAP modules were stabilized. The accommodation scholarships are also processed by SAP. A system of transfers to foreign bank accounts was devised.

A backup server was put into operation for the event of productive server failures. The number of application servers was increased from two to four. A development server was installed for the planned upgrade to SAP Version 5.

Also in 2005, BUT provided complete SAP outsourcing services for the Janacek Academy of Music in Brno.

The development of the BUT Apollo Central Information System continued as planned in 2005. The development of the following modules was finished:

- Student trips abroad, monitoring student trips.
- International Scholarships, for sending scholarships to students abroad via SAP.
- The module for the accommodation scholarships, including the calculation of entitlements, collection of notices, bank account reports, and payments was integrated into SAP.
- The module for the lifecycle of BUT passes, with automatic orders to an external supplier, support of mugshot processing, monitoring payments for ISIC cards and official records of the fast processing and returning of cards at study departments via contact-free chip readers.
- User phone book with a fast search option for users and operators.
- Advanced search for persons in the BUT organizational chart.
- Payment matching for payments of various fees by students into the bank account.
- Admission procedure for doctoral programmes listing fields of study.
- The timetable module was completely redeveloped.

The core of the study system was rewritten to support individual study plans. The system of study progress checks and statistics was further extended. Most of the Apollo modules are used at all the faculties. Only the faculties of civil engineering and information technology have their own study layer. The Faculty of Electrical Engineering and Communication uses its own interface to the common central database. A faculty layer of the Central Information System was installed at the Faculty of Business and Management replacing its own faculty study system.

The science and research module was mostly taken over from the old BRUTIS interface into Apollo in the following modules

- Events including conferences and exhibitions
- Creative activities including architects' products
- Products and works of art
- The Publications module was rewritten
- The Projects module was rewritten
- The module for storing the research and development reports in the Register of R&D Outcomes database was enhanced to monitor each year's individual indicators.

The first part of a large Document Management and Workflow system concerning the Central Register of Agreements was analysed and implemented as a pilot project at the Rectorate.

In 2005, electronic registration of health insurance was installed and diploma supplements issued for the first time at all the BUT faculties.

New clustering technology was used for the first time at the BUT web portal to ease off the users' load and provide simultaneous access to tens of thousands of users with almost immediate response. This technology was tested on concurrent all-university electronic signing up for sports. The new parts of the portal can be used by students to submit an application for accommodation scholarship and check on its status, get individual timetables for students and teachers, etc. The system of registration for exam dates was changed. A pilot module was launched at the Faculty of Chemistry for students to mark lessons. Students may now order an ISIC card on the web.

In 2006, the Information System should be extended to include teachers' workloads, tuition fees, complete science and research module, new accommodation scholarship module and a preliminary social scholarship module, signature book, documentation and database integration process monitoring module, interfaculty teaching, and MyProperty modules.

V.1.2 Technology of intelligent BUT passes

In 2005 a large project was launched at BUT to upgrade the technology of contactless chip cards used as passes by the BUT staff and students. Transfer from the H4000 to the MIFARE technology necessitated the replacement of 246 contactless card readers and 21 760 card passes. For the fist time, the students were given an option to use a student pass with an ISIC licence. In 2006 the implementation is foreseen of the banking function of the passes for new students. The new pass technologies will make it possible to use the smart pass technology with cards serving as secure repositories of electronic signature certificates.

V.2. Connecting the university end stations to Cesnet2

V.2.1 Fast 10Gb/s backbone network

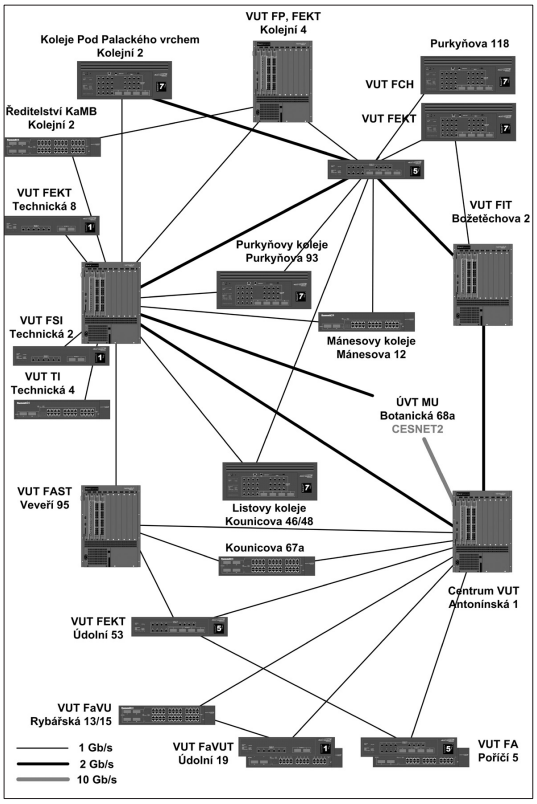
In 2005 the development of the BUT backbone network concentrated on the following activities:

- installing devices supporting the 10 Gb/s rate
- increasing the number of Gb ports as needed in local areas
- improving the network safety and developing the network administration information system
- connecting local areas as construction work is finished
- standardizing the equipment of the backbone nodes
- developing the BUT WiFi network

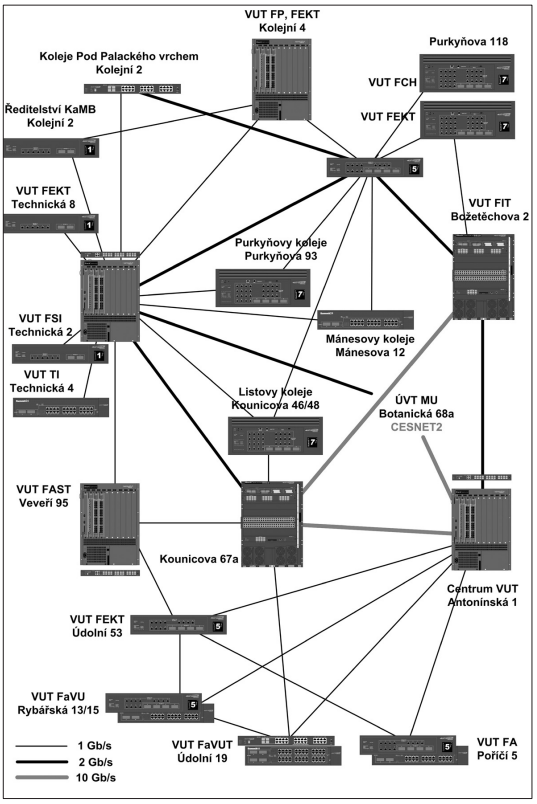
The backbone was enhanced by the L3 10 Gb ExtremeNetworks switches of the SummitX450 type and the BlackDiamond-Aspen chassis. Two new 10 Gb routes were put into operation: at Antonínská 1 – Kounicova 67a and at Božetěchova 2 – Kounicova 67a. The nodes with an increase in operation requirements were continually strengthened (this particularly applies to the BUT halls of residence; in 2005 the number of student connections marked a sharp increase from 3,500 to 5,300).

The following diagram shows the present status of the BUT Gigabit backbone network as compared with the situation early in 2005. The figure does not include connections with capacities less than 1 Gb/s or connections linking BUT with other academic entities (Brno universities and the Academy of Sciences) – with the exception of the connection to the CESNET2 network via the Institute of Computer Science node at Botanická 68a.

Beginning of 2005



End of 2005



When developing the BUT high-speed backbone network, great emphasis was placed on the equipment of the network nodes in localities. The nodes are equipped step by step to maintain a certain standard that guarantees smooth network operation (lockable switchboards, UPS devices, air/conditioning units, access via a modem, etc.). The network was enhanced by a system supervising the accessibility of localities and the state of the routes as well as the operating conditions at access nodes (the temperature and power supply).

The information system of the NETIS backbone network was extended by additional modules collecting and analysing safety incidents in the BUT network. The entire process, from reporting to resolving an incident, was automated.

For a list of the BUT computer network nodes and their current connection status, see Table V. – 1.

V.2.2. The BUT telecommunication network

The BUT telephone exchange was modernized in 2005 with the central control units upgraded. In the part of the project designed to upgrade the telecommunication network, success was marked in modernizing the Avaya system at Antonínská 1 used to connect the subscriber stations at the Rectorate and BUT units (Computer and Information Services Centre, Centre of Education and Consultancy, BUT Central Library) This system is now used to transfer the identification of the caller and to provide other services expected of modern subscriber stations.

The number of subscriber stations was increased by 180 with new Avaya and InterBell phone sets and the Ateco charging software was upgraded to communicate with the BUT telephone exchange via IP.

To ensure the operation of the BUT telecommunication network in 2005, a contract was made with 1Tel, a company providing a wide spectrum of services including servicing and support in the event of hardware and other failures of the communication network. Later in 2005, preparations were started at the Computer and Information Services Centre for handing over the administration to Lucen, s. r. o., a company to be in charge of the BUT telephone network from 1st February 2006.

V.2.3. Fibre optic cables laid in 2005

- A project was started in 2005 to build an underground fibre optic and metal cable route on the campus at Technická 2. The cable will start at the computer node A6/200 in the main campus building passing through the F2 CESA building to a new multifunctional sports hall and stadium.
- The existing end-servers were moved to new locations in the Purkyňova and Kolejní halls of residence. (New structured cabling had to be laid at Purkyňova outside the unsatisfactory cellars.)

The new fibre optic cable routes to be laid in 2006:

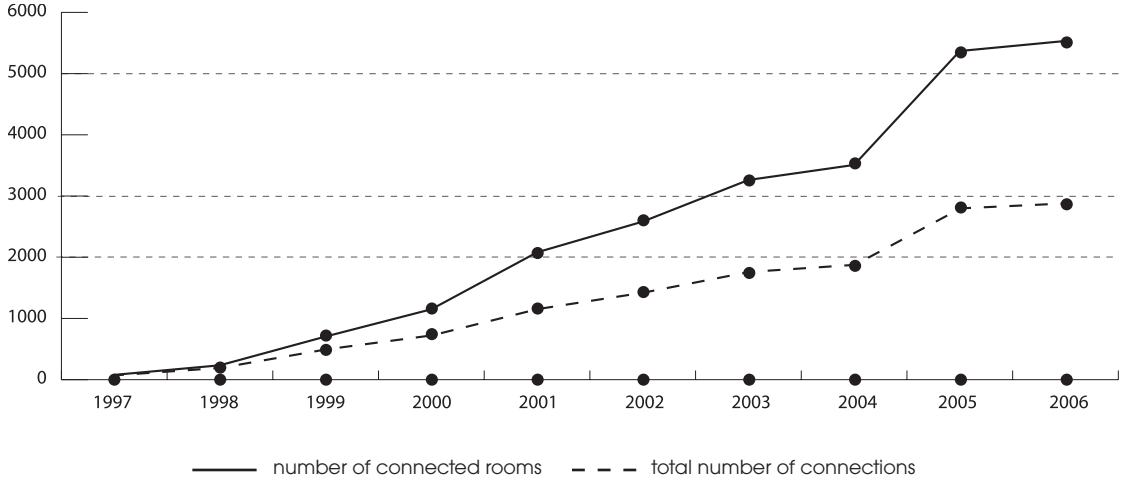
- The above mentioned routes on the Technická campus.
- The backbone fibre optic cable routes will be relocated and the server moved to a new building at Božetěchova 1, 2.

V.2.4. The student network in the BUT halls of residence

In its ninth year of existence, the KolejNet computer network is no longer run by the BUT Halls of Residence and Canteens its administration being transferred to the Computer and Information Services Centre. A new KolejNet information system was built during the transfer and integrated into the accommodation system at the halls of residence. During 2005, a total of 5 369 physical student connections were reached with 4986 connections being actually used by 6735 users. Now the gigabit KolejNet network is larger than the rest of the BUT network. The KolejNet network covers 13 buildings on 4 BUT campuses. The 272 active components are placed in 41 rooms and 3 node halls with 25 main servers.

Seventy-eight percent of beds and 95 percent of rooms are now connected. The connection rate is 100 Mbit/s with individual blocks being linked at 1 Gbit/s and the campuses connected with 1 Gbit/s and 2 Gbit/s backbones to be increased to 10 Gbit/s. The volume of the data transferred between the connections goes beyond any measurable dimensions reaching petabytes.

Growth of the KolejNet gigabit student network



V.3. E-learning

In 2005, a team of representatives from BUT faculties and other units worked on a project to choose a suitable e-learning system. The team specialists analysed the systems currently available and paid visits to those Czech universities where e-learning systems are used on a larger scale.

In the end, a Moodle open-source e-learning system was implemented for extended testing and fully integrated into the study system including the lists of students, teachers, and all the subjects taught at BUT. The application is also available to all the BUT fulltime students and teachers at elearning.vutbr.cz.

VI. UNIVERSITY LIBRARIES AND INFORMATION SERVICES

VI.1. 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 Tables VI.1. – 1.

VI.2. Availability of electronic sources of information

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 subscribed to by other consortium members. For the years 2004 to 2008, the Ministry of Education announced a 1N programme that guarantees on-line access to renowned information databases or 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.

Shift was marked towards new forms of traditional sources in the library and information services as several tens of e-books were purchased. Since 2004, such electronic publications have been available. In 2005 access was improved to the Safari database which allows monthly replenishment of titles guaranteeing access to state-of-the-art materials. It is information technologies that are mostly in focus.
Table VI.2. – 2 shows the numbers of seats in study rooms.

VI.3. Library and information services

Also in 2005, the BUT library infrastructure was enhanced at two levels: user-friendly background was improved with more seats in study rooms, 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 collections.

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

VI.4. 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

Since some 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 is used maybe judged from Table VI.1 – 1.

VI.5. 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 third consecutive year using digitalized text and electronic enquiries. The incorporation in the study

plans is diverse. A revision of the information spectrum provided is planned for 2006 placing emphasis on work with electronic sources of information and incorporation in the university future e-learning system.

VI.6. Staff – qualification centre, lifelong learning

Library staff attend lifelong-learning courses offered by BUT units as well as courses on special library and information subjects guaranteed by major libraries in the Czech Republic and abroad.
Table VI.6 – 3 shows the numbers of employees in BUT libraries and their education.

VI.7. 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.

In 2005 the library received funding from the University Development Fund for a project to buy new hardware in support of the library and information services provided by the faculties of information technology and electrical engineering and communication. This project also aimed to put into operation another Aleph500 module for interlibrary loan service. System training was organized in the academic year so that the system can be configured to meet requirements of the staff trained to provide this service. Productive operation began in the academic year 2005/2006.

VII. RESEARCH AND DEVELOPMENT

In 2005, the research activities and creation of BUT academic staff were further advancing with an increased proportion of doctoral students participating. Due to the unbalanced distribution of institutional funding of research, the minister of education was sent a request for additional funding to be used to stabilize the teams created in the previous period until they could raise funding from other resources. The request was granted, with BUT receiving over 10 million CZK in support of 3 teams (FIT, FEEC, FCE). The average age of the research teams is 32 years, which is also a good sign. At BUT, research activities are carried on in many engineering, business fields, and creation process in 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 main 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 2005, there were 8 research plans and one research centre (CLKV) (see Tables VII.5 – c, d). 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 the targeted research funding covering projects within grant systems such as the Grant Agency of the Czech Republic, and grant agencies of other ministries, these were most of all the Ministry of Industry and Trade, Ministry of Transport and Communications with BUT having one centre and participating in the programmes of other centres (Table VII. – 5d). In this area, BUT has long been among the most successful universities 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 233 million CZK in 2005. The total volume of funding received from the three sources supporting research and creative activities at BUT exceeded 418 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 VII. – 5a, b, c. Compared with 2005, the number of projects has increased by 5.3 % and the total volume of funding by 29.9 %. 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 researchers 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 Chemical Engineering 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. Here the faculties of mechanical, civil, and electrical engineering as well as the faculty of chemistry should be given extra credit.

Efforts to promote the transfer of the outcomes of research to the industrial practice led to reorganizing the knowledge transfer department. In 2005, 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 this project, BUT cooperates with new partners including the Centre of Transport Research and South Moravian Innovation Centre. The RCO project ranks among the best in the Czech Republic serving as an example for other regions. Of special importance is the training of a number of doctoral students to give assistance to those who want to submit applications for RP projects. This is a unique method of improving the services offered to research workers who want to participate in the EU RP programmes.

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.

VII.1. R&D Fields in which the university specializes

In 2005, a SWOT analysis was carried out of creativity at BUT 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

Artistic activities 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 an important factor in setting further priorities of research at BUT.

VII.2. Specialization of research plans at the university

Eight new research plans were started at BUT in 2005. It was decided that, on 3rd and 4th March 2005, final audits by the rules of the Ministry of Education should take place of the research plans worked on from 1999 (2000) to 2004. The public audits were carried out at a high professional and social standard with the audit board passing good to excellent verdicts on most of the RP audited. Discussions with the solution providers went to great lengths and the overall effect of the audit was positive not only for the solution providers but also for their teams.

Research plans at BUT:

- Drochytka – building materials (FCE)
- Stehlík - environmental technologies (FME)
- Jančář - polymeric materials (FC)
- Svačina - communication technology (FEEC)
- Cihlář - advanced materials (FME)
- Vrba - microelectronics and nanotechnologies (FEEC)
- Březina - use of computers, robotics and its applications (FME)
- Kazelle – energy sources and use (FEEC)

VII.3. University R&D departments unique in the Czech Republic, their equipment and major results in 2005

There are some very special research teams at BUT including:

- Testing laboratory of aviation technology (FME))
- Laboratory for high-pressure and high-temperature syntheses of ceramics (FME)
- Laboratory of structural analysis of metals (FME)
- Functional model of the Znojmo hydroengineering structure (FCE)
- Functional model of the bottom outlet of the Les Království hydroengineering structure (FCE)
- Laboratory of optoelectronic systems used to measure the parameters of the speed of flow (FCE)
- Associated laboratories for testing bearing structures (FCE)
- Laboratory of directional and satellite communication (FEEC)
- Laboratory for voice communication with computers (FEEC)
- Laboratory of Cybernetics (FEEC)
- Laboratory for synthesis of macromonomers (FC)
- Laboratory for the preparation of fibre composites (FC)
- Laboratory for biopolymers (FC)
- Laboratory of shock failure of non-metal materials (FCH)

VII.4. Cooperation in the Czech Republic

SKANSKA CZ, a. s., ŽELEZNIČNÍ STAVITELSTVÍ, a. s., AQUATIS, a. s., ČESKOMORAVSKÝ CEMENT, a. s., METROSTAV, a. s., SAINT-GOBAIN ORSIL, s. r. o., GEODIS, s. r. o., BRNĚNSKÉ VODÁRNY A KANALIZACE, a. s., BOSH Diesel, HONEYWELL, SIEMENS, MESSING, BVV, AUTOPAL, s. r. o., ŠKODA AUTO, a. s., HONEYWELL, E.ON BOHEMIA, s. r. o., SIEMENS, AMIS (AMI Semiconductor), ON SEMICONDUCTOR, ABB, s. r. o., T-MOBILE, PRVNÍ BRNĚNSKÁ STROJÍRNA, a. s., HABITANT, a. s., SVITAP JHJ, KAUČUK KRALUPY, a. s., ALIACHEM, a. s., GUMOTEX, a. s., CPN, s. r. o., DELTA MLÝNY, a. s., EUROCORP, s. r. o., SYNPO, a. s., FATRA, a. s.

VII.5. International cooperation with universities

University of Connecticut, USA, University of Massachusetts, USA, University of Berkeley, USA, University of Colorado Boulder, USA, Universita di Trento, Italy, Universita Pisa, Italy, Universita di Genova, Italy, Technical University Hamburg-Harburg, Germany, University of Kaiserslautern, Germany, Technische Universität Wien, Austria, Technische Universität Graz, Technical University of Izhevsk, Technical University of Warsaw.

Firms: Dow Chemicals Europe, Switzerland, PPG, Inc., USA, Aisin Europe Manufacturing, Toyota Group, Honeywell, USA, Bosch Diesel, Germany, Visteon, USA.

VII.6. Major Projects

Major R&D projects receiving funding from the state budget in which the university participates (Table VII. – 5d).

VII.7. Use of institutional support for specific research at universities

Institutional support for specific research as part of research conducted at a university is closely related to education provided for students. The doctoral students at BUT may participate in grant projects at faculties. Funding is also available for supporting students' activities necessary for the completion of their studies (costs related to participation in international and national conferences, purchases of specialized literature, etc.).

VIII. ACADEMIC STAFF

VIII.1. For qualification and age of the academic staff, see Table VIII.1 – 6.

VIII.2. For total and recalculated numbers of academic and non-academic staff, see Table VIII.2 – 7.

VIII.3. For numbers of full-time and part-time academic staff, see Table VIII.2 – 7.

VIII.4. A comprehensive programme of internal education of BUT staff was offered by the Centre of Education and Counselling, see Chapter XI.

VIII.5. For new associated professorships and professorships awarded at BUT, see Tables VIII.5 – 10 and 11.

IX. ASSESSMENT OF ACTIVITIES

IX.1. Quality assessment system at BUT (including the lifelong-learning programmes)

At BUT, quality assurance is performed at two levels:

- accreditation of degree programmes and accreditation of the university granted for selected activities in accordance with the part of the University Act concerned with accreditation committees
- internal and external quality assessment conducted to ensure permanent improvement of the university activities and environment

Selected activities of the university and its faculties were regularly assessed in 2000–2004. Systematic and extensive quality assessment took place during 2005 at several levels with good or almost good results:

• EUA Trends IV evaluation performed as part of preparations for the Bologna meeting of ministers at Bergen (May 2005). For this evaluation, BUT was chosen as the sole representative of the Czech universities

• Overall evaluation of the university and its activities by a committee of EUA experts within the long-term Institutional Evaluation Programme made at the request of BUT

• Pilot evaluation of the university's selected activities as part of a future national quality assessment system (a project of the Ministry of Education and Centre for Higher Education Study)

All the above assessment procedures were performed using a similar pattern: internal audit an evaluation report were made and subsequently passed to the assessed entity. Then, the members of the evaluation board visited the university to check on the data submitted and issued a final evaluation report including recommendations for improvement. A follow-up visit was agreed after about two years to see the improvement achieved.

The materials created as part of the evaluation process both in paper and electronic form are available to anyone interested at BUT. The conclusions and recommendations of the evaluators have been analysed and used at different strategic levels such as during the creation of the BUT 2006–2010 Mission Statement and to prepare various research or implementation projects (University Development Fund, Ministry of Education, Youth, and Sports, European Social Fund, etc.).

Evaluation system of the lifelong-learning courses

The BUT lifelong-learning courses are organized by the Centre of Education and Counselling. The quality of all the courses is monitored. After each course, evaluation questionnaires are completed. The suggestions and comments by the students and teachers are then incorporated in study materials. Both the lecturers and education provider are notified of the evaluation.

The following courses were offered in 2005 (the number of students in each course is shown in brackets: Project Preparation (18), Planning and Managing Crisis Situations (8), Quality Management (3), Erasmus Intensive Language Course (29), International Aviation Law (112), Complementary Pedagogic Studies (24), Czech for Foreigners - intensive course (10).

In addition, internal lifelong-learning (language and specialized) courses are offered to BUT staff and students; the system of quality assessment for these courses is the same as above.

IX.2. Results of the BUT internal and external assessment (SWOT analysis)

The SWOT analysis at BUT was carried out as part of the internal assessment and the university's own report for the EUA commission in the following areas: education, management, external relations, research and development. It was conducted by a BUT vice rector's task force for strategic development consisting of representatives of the Rectorate, faculties and other BUT units. The results of this analysis comprising 9 pages are included in the evaluation report. As such they are available to the public both in paper and electronic form. They were used for making strategic decisions and adopting measures within BUT.

IX.3. Education quality assessment by students (assessment by students and other partners)

The BUT students have been assessing the quality of education provided since 1998 - at different faculties in different scopes, with different frequencies and using different methods. Also the results of the assessments are applied in different ways and with different intensity. Measures entailed by such assessments are taken with prudence even though with rigour in the event of repeated shortcomings, which appears to bring good results while strengthening the confidence of students in the university as institution. This assessment is generally recognised as a good means to increase the students' involvement in the degree programme quality assurance and, as such, is supported by the leading officials of the university and faculties.

Every two years, enquiries are made among the BUT graduates to see how they assess the knowledge and skills acquired during their studies and their application in practice after some time.

In cooperation with the Labour Offices, we have also started systematic monitoring of the employment of graduates. See Chapter IV.13.

The employers' satisfaction with BUT graduates and their suggestions and recommendations concerning possible changes in degree programmes can also be determined during the Company Days events held annually by faculties to give the graduates an overview of the jobs available. Here agreements may also be made with future employers concerning part-time cooperation already during the studies (on-the-job training, themes for degree projects, etc.).

The results of the enquiries among students, graduates, and BUT customers are appreciated and consistently used.

IX.4. Evaluation of the accomplishment of the BUT 2000–2005 Mission Statement

An analysis and evaluation of the accomplishment of the BUT 2000–2005 Mission Statement and its amendments for particular years was carried out by the BUT vice-rector for strategic development, who also made a PowerPoint presentation for the BUT and faculty leading academics at a workshop held at the BUT Centre on 1st July 2005. The presentation and the ensuing discussion of the participants was an official event to start the preparations for the BUT 2000–2005 Mission Statement and for the 2006 development (and other) projects. The concepts of the new strategic documents created were also influenced by the Bergen communiqué and by the conclusions from the above mentioned (IX.1.) international and national BUT quality assessments.

The above evaluation of the BUT 2000–2005 Mission Statement is available both in paper and electronic form; it consists of seven chapters dealing with: the use of the intellectual potential of the young generation, higher education and labour market trends, degree programmes and education, lifelong-learning, information technologies, research and development, academic staff, assessment of the quality of activities (education, creativity, management), international cooperation, management and organisation, financing, and BUT investment programme.

The key objectives of the BUT 2000–2005 Mission Statement have been met and, in some respects, even more has been achieved such as the total number of BUT students depending on the attractiveness of the programmes and their applicability after studies). It has also been agreed that some of the objectives remain unfulfilled because, during the mission period, they became irrelevant. Some of the Mission Statement points have only been achieved partially due to their original formulation being overambitious (the proportion of programmes taught in a foreign language). Some ideas have been transferred to the BUT 2006–2010 Mission Statement.

IX.5. Conclusions to be drawn for the next period

The Bergen documents, the structure of the BUT 2006–2010 Mission Statement made by the Ministry of Education, Youth, and Sports for the Czech higher education, and the experience gathered from the processes of BUT quality assessment by various entities have led to the concepts of a BUT 2006–2010 Mission Statement in which quality is the key element and the subject of many concrete measures intended for the academic environment. An important task that BUT is facing is the establishment of a permanent BUT department for quality assessment and the determination of its priority objectives. The year 2005 was critical for BUT in terms of high priority given to quality assurance. Every effort is made to make quality assurance a commonplace requirement as part of the BUT corporate culture.

X. INTERNATIONAL COOPERATION IN EDUCATION

X.1. Direct international cooperation between universities

Inter-university cooperation – in the 2005 inter-university cooperation, stress was placed on developing the cooperation based on the existing agreements. A framework agreement was signed with the University of Žilina. Next the final wording of an agreement with the Newcastle University (Australia) was approved, signed by BUT, and sent in to be signed.

Ministry of Education development programmes – in 2005, 89 students stayed abroad with a total length of stay of 249.5 months and 2.495 million CZK spent. These stays took place either within the framework agreements concluded between universities or as free movers (73 students). The programmes are specially designed to support stays of student at foreign universities. For further information see Table X.1 – 1.

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 to students, doctoral students and BUT scientists with scholarships granted by this foundation.

X.2. BUT involvement in the EU programmes for education and vocational preparation

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 student mobility had also received considerable help from the university, which used its own Mobility Scholarship Fund to provide additional funding. The numbers of student and teacher stays have risen over the last 5 years, see Table X.2 – 1.

The length of a stay at a foreign university in the academic year 2004/2005 averaged to 6.4 months per student and 1.5 weeks per teacher.

Faculties also provided a considerable amount of funding for teacher stays. In the academic year 2004/2005, the faculties spent almost 478,000 CZK on teacher mobility.

Preparation visits – one preparation visit took place resulting in the signing of a bilateral student and teacher mobility agreement with Instituto Politecnico de Coimbra in Portugal.

Monitoring visits – 3 visits took place under the existing bilateral agreements.

DTU Lyngby University College Arhus in Denmark, UJF Grenoble in France, and Hogeschool voor Wetenschap&Kunst Brussels and Gent in Belgium.

International students – thanks to the growing cooperation with universities abroad, mainly within the Socrates/Erasmus programme, the number of students from abroad coming for study stays at our university has increased. These are mostly short stays of 3 to 12 months. In 2005 our university was visited by as many as 135 students. An International Student Club was established provided with an equipped room where BUT students are informed about the universities and the countries they want to visit.

The Socrates/Erasmus international students were paid accommodation scholarships.

Socrates/Erasmus language courses – these included Czech courses for international students coming to stay at BUT as part of the S/E programme. EU funds were used to pay for the courses.

Audit of the Socrates/Erasmus programme performed by the National Agency (NA) – no shortcomings of the teacher mobility had been found. Certain discrepancies detected in the student mobility were eventually cleared.

EU Programmes – in 2005, two Leonardo da Vinci 2005–2007 student mobility project applications were submitted. One project was for 40 students of the Faculty of Architecture, Faculty of Business and Management, Faculty of Electrical Engineering and Communication, Faculty of Information Technology, and Faculty of Mechanical Engineering. The second application was for 8 fresh graduates from the Faculty of Architecture. The first stays under these projects took place in the summer of 2005. For further information see Tables X.2 – 2 and 3.

IST Retraining of Disabled Persons – a Leonardo da Vinci programme. Ten institutions cooperate on this project, mostly from the countries of Central and Eastern Europe aiming to create a system retraining courses for the disabled in each country. This is a three-year project to be finished by 30th August 2007.

EQUIPE – a Socrates programme. A project concerned with the benchmarking of the European universities and quality improvement in lifelong learning. The project was successfully completed in September 2005 followed by another three-year EQUIPE Plus project in which BUT serves as the contact place for a network of institutions providing lifelong-learning in the Czech Republic.

EILC – a Socrates Erasmus programme. An intensive Czech course for international students.

Promotion of BUT abroad – the BUT information booklet in English for the Socrates/Erasmus international students was updated and reprinted providing information on BUT faculties, Brno, and Czech Republic. Up-to-date versions of Brno and BUT guides are being published. We have also made contributions to the updated version of the book The Brno Universities published with the support of the Brno Municipality and the Centre of European Studies.

X.3. International student and teacher mobility (contributions and problems such as recognition of courses studied abroad)

The international student and teacher mobility is managed and organized in line with the BUT Mission Statement, which means that efforts are made for as many students as possible to spend part of their studies at a partner university abroad. This certainly brings professional and personal benefits to each such student as evidenced by the positive reactions of students included in their final reports on study stays abroad. All these reports are published at the BUT website.

Also the stays of teachers are much appreciated and fulfil the purpose for which they were implemented.

There are, however, also problems connected with the stays abroad of students and acad. staff.

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 many partner universities, the semester lengths vary
- the number of courses taught in English is not sufficient at some of the partner universities
- insufficient language skills and initiative of some students preparing for stays abroad
- since the acad. year 2004/2005, the grants supporting stud. mobility have shrunk considerably
- students are little interested in staying in the new EU countries

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. Since the academic year 2004/2005, the fund has also been used to partially (about 50%) compensate for the decrease in the Socrates/Erasmus grant paid in all the stays. In 2005, 2,765 CZK were paid out of this fund in student support. The beneficiaries were 424 Socrates/Erasmus and 102 non-Socrates/Erasmus students.

In organizing teacher mobility there are problems with getting additional financing from the faculties in the event of more expensive stays, which is the case with some of the teachers. The faculties themselves are not always willing to appreciate the additional efforts the teachers have to exert to prepare their lectures abroad.

XI. ACTIVITIES OF FACULTIES AND BUT UNITS

For activities of faculties and BUT units, see pp. 36 –90.

XII. 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 join together the potential of the Brno universities in an effort 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 2005:

- Study units with European dimension prepared at the Faculty of Mechanical Engineering
- Study units with European dimension finished at the Faculty of Civil Engineering
- Study units with European dimension prepared at the Faculty of Chemistry
- Materials with European dimension published and events organized as part of the "Chances of University Presses in the European Book Space" activity coordinated by VUTIUM Press
- Successful Marketing and Distribution, another seminar of the "Chances of University Presses in the European Book Space" series, held

Important conferences, seminars, honorary doctorates, anniversaries

BUT organized conferences, student competitions, and seminars at the BUT Centre and at the faculties. For more information, see Calendar of Events at www.vutbr.cz.

On the occasion of its 105th anniversary, the Faculty of Mechanical Engineering held a public meeting of its academic community and Scientific Board to award an honorary doctorate to prof. Ing. FrantišekTrebuň, CSc., of the Technical University of Košice.

Doc. Ing. arch. Jaroslav Drápal, CSc was awarded a first-degree (gold) medal for his distinguished services rendered in architectural education.

BUT non-pedagogic activities

- As in the previous years, BUT sponsored the GAUDEAMUS education fair held from 1st to 4th November 2005 on the Brno fair ground
- BUT participated in the 1st AEDUCA lifelong-learning fair in Olomouc on 25th –26th November 2005
- The BUT Centre of Education and Counselling provided comprehensive assessment of the U3V Infrastructure Development project implemented at 17 public universities; the assessment took place at the South Bohemian University in České Budějovice

BUT U3V activities

- Preparation of the ADD-LIFE, Grundtvig 1 project, Vienna
- Preparation of the EFOSEC project within the framework of the European Federation of Senior Students (EFOS), Magdeburg
- Internet for senior citizens, Brno

Concerts, exhibitions, lectures, debates

For academics and for the public, BUT organized conferences, exhibitions, and discussions on topical political or social subjects.

BUT Choir

Cooperation went on in 2005 with VOX IUVENALIS – a BUT choir. Apart from Christmas and Easter concerts and a "Seriously Unserious Concert" for academics and for the public, VOX IUVENALIS gave seven concerts outside the university, participated in two international competitions winning one second and one first place, and released a CD entitled "About Love".

BUT News university monthly

PR Manager PhDr. Jitka Vanýsková, 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.

XIII. STUDENT CARE

XIII.1. Changes in accommodation brought about by changes in financing

The year 2005 saw major changes in student accommodation. Since the academic year 2005/2006, the Ministry of Education, Youth, and Sports has changed the rules for subsidizing the accommodation of university students by directing subsidies in the form of accommodation scholarships to all the students eligible rather than to the halls of residence on a per-student basis. It is up to each student, no matter where they are accommodated, to use the scholarship.

As the subsidy formed 49 % of the revenue from student accommodation in the last year, its removal brought about the necessity of almost doubling the accommodation price for students. To minimize the impact on students staying at the halls of residence, a number of measures were taken to keep the costs of

accommodation low. Although between 2004 and 2005 the prices soared (by about 82 %), the measures taken still managed to push them down by 14 % compared with the loss caused by the abolishment of the subsidy considering that the price increase comprised also a compensation for the increase of the VAT basis (3.9 %), the rate of inflation (1.9 %) and the increase in costs above the rate of inflation (mostly those of energy). As a result, the increase in the price paid by the students could be reduced by more than 20 %. Using the twelve-month-contract option with a 60% reduction during the two months of holidays brings in another reduction of 14 %.

The increase in the accommodation price in the otherwise non-liberalized housing market posed a major threat to the competitiveness of the halls of residence. As a compensation, the cost-reduction measures were complemented by better services provided.

Other far-reaching changes in 2005 concerned the internal student accommodation standards. The rules of operation at individual accommodation facilities were abolished or integrated into new Rules of the Halls of Residence, considerably simplified, modernized, and liberalized. The Accommodation Contract was redrawn in a similar way, with provisions added to protect the parties from improper conduct including punitive instruments. A system of pre-payments improved the situation by reducing the number of persons blocking the capacity of a hall of residence without really wanting to be accommodated there. The risk resulting from leaving a hall of residence without payment was reduced by requiring a prepayment at the beginning of accommodation. Leaving halls of residence before the date stated in the contract without due notice was penalized since this conduct, always non-advised and thus unpredictable, reduced the possibilities of using the accommodation capacity for complementary activities in the past.

The new student accommodation conditions in the academic year 2005/2006 brought a number of simplifications and new alternatives. The eligibility criteria for accommodation at the halls of residence considerably reduced the number of students on the accommodation lists, the halls-of-residence accommodation during the holidays was made more profitable with students being offered long-term, up to three-year continual contracts without having to apply each year.

Thanks to all these measures, there was no drop in the halls-of-residence occupancy and thus their financial stability; on the contrary, in the last quarter of 2005, the occupancy rose by 1.7 % on the last years.

Student care

For student care – accommodation, catering, see Table XIII.1 – 9.

XIII.2. Accommodation facilities

For BUT accommodation facilities, see Table XIII.2 – 1

XIII.3. Catering facilities

For BUT catering facilities, see Table XIII.3 – 1

XIII.4. Scholarships awarded

For scholarships awarded by BUT, see Table XIII.4 – 1

Information and counselling services

For information and counselling services, see Chapter XI. – Centre of Education and Counselling

Physical education and sport

Students' sport and physical education needs are taken care of by the BUT Centre of Sports Acti-vities. Apart from the physical education courses and special sports courses that are part of degree programmes students can go in for sports in their leisure at the BUT University Sports Club. Here, facilities are offered throughout the year for recreational and competition sports in cooperation with the Centre of Sports Activities.

The Centre of Sports Activities full-time staff work with the best athletes studying at BUT thus creating corresponding training conditions for the athletes representing the university. For students interested in sports-related education, the Centre of Sports Activities offers courses accredited by the Ministry of Education, Youth, and Sports giving them an opportunity to work as trainers and gym instructors. The themes of degree projects are often taken from the sports environment. For detailed information on the placement of the BUT athletes in the 2005 Academic Championship, see Chapter XI.

BUT support for activities common to all public universities

Academic Centre of Student Activities (ACSA) – is a nationwide project organized by BUT. The centre's main activity consists in providing support for the student representatives of all the Czech universities, mostly by offering them consulting, and training in the development of academic self-government.

In 2005 ACSA offered eight seminar types with 262 students from 22 universities attending. Also organized by ACSA was the 5th national conference concerned with the current role and position of university students endorsed by the prime minister and BUT rector. Next, projects were launched entitled „Systemizing the processes of quality assessment by the students in the Czech republic " and "What is our attitude to Bologna? or The Bologna process as seen by the student representatives of the V4 countries ". For more information on all other activities, please visit www.acsa.vutbr.cz.

XIV. UNIVERSITY DEVELOPMENT

XIV.1. Subsidies from the state budget in support of asset reproduction

The following subsidies from the state budget were used to reproduce assets:

Construction – Ministry of Education

- individual subsidies of 209,740,000 CZK
- system subsidy of 47,499,000 CZK
- targeted subsidies of 5,229,000 CZK

Construction – State Fund for Environment

- system subsidy of 440,000 CZK

Machinery and equipment – Ministry of Education

- targeted subsidies of 79,497,000 CZK

Other funding for machinery and equipment

- MD 50,000 CZK

XIV.2. Other investment

In addition to the subsidies from the state budget, the following resources were also used by BUT to finance the reproduction of assets: BUT's own resources, subsidies from the budgets of the South Moravian Region and the City of Brno, the funds of the Grant Agency and, the Academy of Sciences, and donations from abroad.

Construction

- Fixed Assets Development Fund 75,434,000 CZK
- Southern Moravia Region 3,393,000 CZK
- City of Brno 2,000,000 CZK
- Foreign donations 704,000 CZK

Machinery and Equipment

- Fixed Assets Development Fund 45,581,000 CZK
- Grant Agency of the Czech Republic 1,166,000 CZK
- Academy of Sciences 1,850,000 CZK
- Donations 1,086,000 CZK
- Foreign donations 932,000 CZK

Purchases and exchanges of land

- Fixed Assets Development Fund 6,196,000 CZK

XIV.3. Renovation and maintenance of buildings

The renovation and maintenance of the BUT buildings were financed from BUT's own resources and from the state budget (both investment and non-investment funding). New buildings were built and old ones reconstructed. modernized, and repaired. For spending on the constructions of 2005, see Tables XIV.3 – 1 to 6d.

For further information, see Table XIV.3 – 8.

XIV.4. Involvement in the University Development Fund projects

See Table IV.11 – 10.

XIV.5. Participation in the development programmes

See Table IV.11 – 11.

XIV.6. Use of the EU structural funds

See Table XIV.6 – 12.

XV. ACTIVITIES OF THE BUT BOARD OF TRUSTEES

Two sessions of the BUT Board of Trustees in 2005 with the following major agenda:

Session 15 held on 9th May 2005

- BUT Board of Trustees approved the granting of an easement
- BUT Board of Trustees approved transfer of real estates
- BUT Board of Trustees passed an opinion on the Annual Management Report
- BUT Board of Trustees passed an opinion on the 2005 budget

Session 16 held on 10th October 2005

- BUT Board of Trustees passed an opinion on a draft 2006 amendment to the BUT Mission Statement
- BUT Board of Trustees passed an opinion on a draft BUT 2006-2010 Mission Statement

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

XVI. CONCLUSION

With its present eight faculties, BUT can be viewed as a university with the broadest scope in this country, offering a wide spectrum of specialised programmes: apart from the engineering fields, they include programmes in business, fine arts, and artistic programmes linked with engineering. This is an ideal environment in which interdisciplinary programmes of study fields come into being (mechatronics, materials engineering, mathematical engineering, physical engineering, biomedical engineering, industrial design, combined business-engineering and informatics-business programmes, etc.). That BUT offers modern and well conceived system of education is also evidenced by the permanent interest of young people in studying at our university and by the constantly growing number of students. At present there are about 19,000 students at BUT including 2,000 doctoral ones. This also testifies to the strong links with science and research at our university. The bulk of our graduates have no problems finding a job and, thanks to the solid professional base they receive, they find opportunities in many spheres of society. The international dimension of our alma mater has been steadily gaining significance in both education and research.

One of the BUT strategic objectives over the last 15 years has been to maintain the university integrity while respecting independent development of each faculty. In today's world there are distinctive trends towards integration of resources, means, activities, and staff to form larger units and BUT will have to respect this while maintaining the specific features of its faculties and units. The culture of a university is one of its substantial characteristics joining together all its teachers, students, and graduates through a feeling of togetherness. The fast growing interest of industries in original innovations and the influx of new global companies in the South Moravian Region create a new situation to which BUT has to react. In this connection, we also count on extending multi-resource financing. In the years to come, BUT will have to

take into consideration the expected growth of student population in the Czech Republic. BUT priorities concentrate, in line with the mission statement of the Ministry of Education, Youth, and Sport, on the following 3 areas:

- internationalization,
- quality and excellency of academic activities,
- quality and culture of academic life.

These priorities influence all the BUT key activities.

BUT Faculties

FACULTY OF ARCHITECTURE
Poříčí 237/5, 639 00 Brno
tel.: +420 541 146 600, fax: +420 541 146 605
http://www.fa.vutbr.cz

FACULTY OF ELECTRICAL ENGINEERING AND COMMUNICATION
Údolní 244/53, 602 00 Brno
tel.: +420 541 141 111
http://www.feec.vutbr.cz

FACULTY OF CHEMISTRY
Purkyňova 464/118, 612 00 Brno
tel.: +420 541 149 301, fax: +420 541 211 697
http://www.fch.vutbr.cz

FACULTY OF INFORMATION TECHNOLOGY
Božetěchova 1/2, 612 66 Brno
tel.: +420 541 141 139
http://www.fit.vutbr.cz

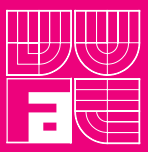
FACULTY OF BUSINESS AND MANAGEMENT
Kolejní 2906/4, 612 00 Brno
tel.: +420 541 141 111
http://www.fbm.vutbr.cz

FACULTY OF CIVIL ENGINEERING
Veveří 331/95, 602 00 Brno
tel.: +420 541 141 111
http://www.fce.vutbr.cz

FACULTY OF MECHANICAL ENGINEERING
Technická 2896/2, 616 69 Brno
tel.: +420 541 141 111
http://www.fme.vutbr.cz

FACULTY OF FINE ARTS
Rybářská 125/13/15, 603 00 Brno
tel.: +420 541 146 850
http://www.ffa.vutbr.cz

Faculty of Architecture (FA)
Poříčí 237/5, 639 00 Brno
tel.: +420 541 146 600, fax: +420 541 146 605
e-mail: surname@fa.vutbr.cz
http://www.fa.vutbr.cz



Faculty of Architecture

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
akad. soch. Oldřich Rujbr
for faculty development

Faculty Secretary Ing. Jan Krnáč

Departments and Studios

Department of drawing and modelling
headed by doc. Ing. arch. Zdeněk Makovský
Department of free creative 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 doc. Ing. arch. Hana Urbášková, Ph.D.
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 akad. soch. Oldřich Rujbr

Degree programmes

- **Bachelor's degree programme B3501: Architecture and town-planning**
  standard length: 4 years
  form: fulltime study
  field of study: 3501R002 architecture
- **Master's degree programme N3501: Architecture and town-planning**
  standard length: 2 years
  form: fulltime 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: fulltime 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, synthesize the results of analysis, and use them to design solutions. The graduates should be prepared for academic careers.

The most important event

City of Brno Award was approved for doc. Ing. arch. Jaroslav Drápal, CSc for his pedagogic activities. On 15th November 2005, doc. Drápal was also awarded a BUT Gold Medal.

Exhibitions and Competitions

Studio, Bachelor's degree, and diploma projects are exhibited at the end of each semester on the faculty premises. The results of the BOHUSLAV FUCHS PRIZE faculty competition of projects are regularly on display.

The following exhibitions could also be visited at the faculty:

- FOA BREEDING ARCHITECTURE, a London architectural studio,
- ARCHITECTURE FOR DIPLOMACY, designs of embassy of the future, an international competition of designs for Czech embassies abroad,
- ZWEI ARCHITEKTURPREIS, from a studio project competition of the faculty of architecture at TU Dresden,
- JAN HIRD POKORNÝ, a Czech architect in New York born in Brno.

• Structive models – An exhibition of structive models was held in the House of Art from 10th February to 2nd March. These were projects by students during the Basics of Architecture course led by doc. Jaroslav Drápal and architect Ladislav Mohelník. Architectural structures are the best offered by the collection fund of the faculty. During the summer holidays, the exhibition was installed at the city museum of Bystřice nad Pernštejnem.

• MOBITEX 2005 – A set of diploma and studio projects of the Studio of interiors and exhibitions led by Professor Jiljí Šindlar was exhibited at an international housing fair held traditionally on the Brno fair ground. The exhibit of a computer workstation by student Josef Hajný received an award for progressive technology.

• I Love Japan – an exhibition of the Department of Free Creation was opened first at the Mendel Centre on 16th March 2005 and later, from 26th May to 31st August 2005, at the Nostic Palace, the seat of the Ministry of Culture of the Czech Republic. Also prototypes of street furniture – concrete benches made at the Faculty of Architecture in cooperation with the Českomoravský cement company and Research Institute of Building Materials – were exhibited in the Kampa park. The last phase of the exhibition started in the Domino gallery in Letovice on 4th November 2005. Presented at the exhibition were also 3D objects made by students as part of the Modelling Techniques course led by sculptor Oldřich Rujbr.

• The foyer of the Janáček Opera Theatre saw the projects of three teams of 1st year students on exhibition from 14th to 29th September 2005. Their subject being the Janáček Opera Foyer, they were made in the Basics of Architectural Design course.

• Figurama – an exhibition of drawings and paintings of students of architecture held from 7th July 2005 in Znojmo attended by BUT faculties of architecture and fine arts, University of West Bohemia in Pilsen, University of Fine Arts Bratislava, Academy of Arts, Architecture, and Design Prague, Academy of Fine Arts in Prague, University of Allied Arts in Vienna and Academy of Arts, Architecture, and Design in Mainz.

• Brownfields in Utrecht – student projects on Brno brownfields were presented together with works by Dutch students at an exhibition in Utrecht in June. A conference was held as part of the exhibition at which Professor Zemánková presented her paper.

• Walking through the town – New Inspiration – were the titles of a street furniture design competition organized by the Czech Chamber of Architects, the City Point association and the Czech Design Centre in which four faculty teams participated. The winners were Josef Hajný and Štěpán Eliáš, the design was implemented by MM CITE. The prototypes by Oldřich Rujbr and a team of Roman Čerbák, Martin Klenovský led by Oldřich Rujbr were implemented with the support by of the Českomoravský Cement company in the Research Institute of Building Materials in Brno. They were presented at the FOR ARCH fair in Prague. Subsequently in the Kampa park as part of the I Love Japan cycle, at the exhibitions entitled Please Sit Down held at the Faculty of Architecture, and Brno Pedestrian at the Vaňkovka Culture Centre.

• Architecture for Diplomacy – the faculty achieved success in a competition of ideas organized by the Czech Centre and the Czech Embassy in London from Czech and British students of architecture. Two second places were awarded to the projects of the teams: Tomáš Berka, Jaromír Sedlák and Jiří Ziegler led by Hana Ryšavá; and Radek Brunecký led by doc. Milan Stehlík. Two special awards went to a Pencil Sharpeners group composed of Hana Sedláčková, Radim Rozehnal and Patricie Tůmová-Turbová, and to a 3 S group – consisting of Adam Sirotek, Ondřej Skála and Alexander Sláma. In the Czech Republic, the projects were first presented in the Centre for European Architecture in Prague on 6th April 2005 and then in Liberec and Brno.

• Xella (YTONG) 2005 – Brno Centre of Modern Architecture – in an international competition the jury appreciated as the best Lucie Miklicová from the Faculty of Architecture out of 52 projects. Students of the faculty V. Kejdová, B. Šimonová, and P. Čáslava received special rewards.

• EXTREM – Five students led by doc. Menšíková participated in an international 2005 UIA Istanbul student competition.

• John Hejduk Prize – This year for the first time, D.R.N.H. and Kuba & Pilař architectural studios awarded prize to the best Bachelor's degree project on the subject "House for a Partner Town" – a polyfunctional house in a square in Zlín. The prizes were given to Radim Petruška, Hana Drdlová and Pavel Kvintus.

• Workshop – an international workshop on the architecture of textile membranes was held after last year's successful event in Nancy, France. The venue was the Veveří castle from 27th June to 1st July 2005. Apart from students from the BUT Faculty of Architecture it was also attended by teachers from Ecole d´Architecture de Nancy, France and Hochschule fűr Technik und Wirtschaft Saarbrűcken, Germany. The workshop was organized by the Department of Construction and the Studio of Interiors and Exhibitions. The subject discussed was the roof coverage of selected spaces of the Veveří castle court.

Lectures

Distinguished architects gave lectures in the faculty's great hall.

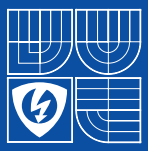
- 29. 4. 2005, Xavier de Geyter, a leading Belgian architect working in Gent
- 18. 11. 2005, Kazunari Sakamoto, Japanese architect and teacher concerned with residential buildings
- 14. 12. 2005, Ivan Reimann, Czech architect working abroad, teacher at TU Dresden and cooperating with Thomas Müller in Berlin

New Associate Professors and Professors

- two associate professors were appointed with five new appointment procedures started
- procedures for three professorships were initiated

Faculty of Electrical Engineering and Communication

Faculty of Electrical Engineering and Communication (FEEC)
Údolní 244/53, 602 00 Brno
tel.: +420 541 141 111
e-mail: surname@feec.vutbr.cz
http://www.feec.vutbr.cz



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. Toman Petr, Ph.D.
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 Microelectronics
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**

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

- **Electrical Engineering, Electronics, Communications and Control Equipment follow-up Masters' degree programme with the following fields of study**

  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**

  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 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 Bachelor's degree programmes are also offered with special medicine and biomedicine courses added to the existing programmes.

In 2005, 371 graduates received a Bachelor's degree, 199 a Master's degree and 37 doctoral students a Ph.D. degree. A total of 1,091 first-year students enrolled on the full-time programmes and 233 of them chose combined study. There were 49 first-year doctoral students. A total of 46 international students attended paid-for courses taught in English.

In 2005, thirty-two students attended courses of the lifelong-learning programme.

Important events

The following are the events that most influenced life at the faculty:

- the former deans and BUT rector met to celebrate the 100th birthday of prof. Ing. Jiří Brauner, one of the first deans of the BUT faculty of electrical engineering,
- the first follow-up Electrical Engineering, Electronics, Communications and Control Equipment Master's degree programme was opened,
- at the GAUDEAMUS 2005 education fair held from 1st to 4th November 2005, the faculty's new programmes were presented in an atypical stand,
- twenty-nine titles of electronic text were issued containing a total of 3,088 pages,
- the first year of a combined Electrical Engineering, Electronics, Communications and Control Equipment Bachelor's degree project was completed for the 233 new students,
- a STUDENT EEICT 2005 student competition was held for 46 Bachelor's, 62 Master's and 132 Doctor's projects in cooperation with the Faculty of Information Technology,
- an international round was held of the HONEYWELL EMI 2005 student competition of selected 6 Bachelor's, 16 Master's, and 37 Doctor's degree projects in cooperation with the Faculty of Information Technology and the Faculty of Mechanical Engineering,
- three new 2005-2009 research plan projects were launched, with prof. Ing. Jiří Kazelle, CSc., prof. Ing. Jiří Svačina, CSc., and prof. Ing. Radimír Vrba, CSc., as solution providers,
- an Integrated Circuit Design Laboratory was officially opened at the Department of Microelectronics, heavily sponsored by ON Semiconductor and CADENCE,
- elections were held for the FEEC Senate, with RNDr. Vlasta Krupková, CSc., being elected senate chairperson and student Petr Polách chairperson of its student chamber,
- a new student journal appeared called E-FEKT with student Jiří Piškula as editor-in-chief,
- prof. Ing. Radimíra Vrba, CSc. was elected candidate for the faculty dean for 2006 to 2010.

The Most Important Achievements in Science and Research

The development and implementation of PSK-31, a transponder for narrow-band data communication with extreme spectral efficiency was completed in 2005. As part of the PCSAT 2 project of the US Naval Academy, Maryland, USA, the transponder was taken to the international ISS space station on board of the Discovery on 3rd August 2005 where it was successfully put into permanent operation. The chief designer of PSK-31 is doc. Ing. Miroslav Kasal, CSc., helped by doctoral students Ing. Michal Zamazal and Ing. Petra Kutín.

Student competition

For the eleventh time in a row, together with the Faculty of Information Technology, the faculty organized the STUDENT EEICT 2005 conference and competition. Apart from presenting their projects, the undergraduate and doctoral students could strengthen the links between the faculty and some of its industrial partners including major companies concerned with electrical engineering. The winners will participate in the HONEYWELL EMI 2005 conference organized by the same faculties in cooperation with the Faculty of Mechanical Engineering.

New Associate Professors and Professors

Eleven new associate professors were approved after successfully presenting their theses and one new professorship was awarded.

New degree programmes

Preparation and opening of the first year of the Electrical Engineering, Electronics, Communications and Control Equipment follow-up degree programme was among important activities of 2005. Of the 362 students enrolled, 35 study biomedical and environmental engineering, 21 power engineering, 90 electronics and communication, 22 electrical engineering production and management, 37 cybernetics, automation, and measurement, 20 microelectronics, 16 heavy current and power electrical engineering, and 121 teleinformatics. This entailed the creation of new electronic textbooks and other electronic aids for this study. The total number of the first-year subjects was 97 with 21 subjects and an additional Bachelor's programmes equipped with electronic textbooks. For some subjects even two electronic textbooks were issued – one student book and one laboratory or computer book. The total volume of the text vas 29 books with 3 088 pages.

Faculty of Chemistry (FC)
Purkyňova 464/118, 612 00 Brno
tel.: +420 541 149 301, fax: +420 541 211 697
e-mail: surname@fch.vutbr.cz
http://www.fch.vutbr.cz

Faculty of Chemistry

Dean prof. Ing. Jaroslav Fiala, CSc.

Vice-Deans prof. Ing. Ladislav Omelka, DrSc.
for creative activities, 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 (until 2nd November 2005)
Ing. Vítězslav Frank, Ph.D. (from 2nd November 2005)

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.

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
M806	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
P3911	Materials Science	Materials engineering

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

Aims and Objectives of Study

- transition to three-tier structure of study – Bachelor' s, Master's, and Doctor's degree programmes,
- credit system permitting study in several fields,
- broad range of degree programmes offered,
- the degree programmes and fields of study offered reflect the needs of practice
- selected specialized courses taught in English,
- extensive computer-aided support for 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 fulltime and combined form.

Important events

From 20th to 22nd September the 3rd Meeting on Chemistry and Life an international scientific conference was traditionally held at the Faculty of Chemistry. It was endorsed by BUT rector prof. RNDr. Ing. Jan Vrbka, DrSc. During the conference also the alumni met of the former Faculty of Chemistry abolished in 1952.

The Most Important Achievements in Science and Research

Research plan

The Homogeneous and Heterogeneous Materials Based on Synthetic Polymers and Biopolymers research plan implemented in the years 1998 to 2004 was successfully completed in 2005. As the only one at BUT, this research plan received rating A. A new research plan has been designed as its continuation. Foreseen for the period 2005 to 2009, its title is Multifunctional Heterogeneous Materials Based on Synthetic Polymers and Biopolymers. The staff of all the four departments of the faculty is participating. In 2005 the outcomes of this project included 9 papers published in international journals.

Development and transformation projects

In 2005 the faculty was involved in 4 transformation and development projects. The first one was to provide support for the faculty degree programmes. Another two projects were among the integrated development programmes of Brno University of Technology and the faculty involvement was related to the development of and support for the English language courses and the lifelong learning programmes. The fourth project concentrated on nanotechnology at BUT.

Projects from grant agencies

In 2005 research was conducted on 6 post doctoral grant projects, one doctoral grant project, 5 standard projects with grants form the Grant Agency of the Czech Republic Grant Agency of the Czech Republic, and two projects funded by the Academy of Sciences of the Czech Republic.

University Development Fund

A total of 25 projects were implemented.

Structural funds

The European Social Fund provided funding for a project entitled "A Complex of Lifelong-Learning Courses in Chemistry, Environment Protection, and Crisis Management".

International cooperation projects

Two COST projects, 1 KONTAKT project, and one INITAS subproject within the 6th EU Framework Programme were worked on in 2005.

Student Competitions

As in the previous years in 2005, too, the traditional STUDENT FCH 2004 competition took place for the faculty Bachelor's Master's degree students. Three students from Bachelor's and Master's programme took part in a student research competition held at the Faculty of Chemistry and Foodstuff Technology in Bratislava. In May, one doctoral student of the faculty took part in a „Prix de Chimie" competition organized annually by the French Embassy in Prague in cooperation with Rhodia CR, s.r.o. Out of the 10 selected doctoral students of the Czech chemical higher-educational institutions, one student of our faculty ended up fourth. The students of our faculty also received a number of other prizes (1 prize of the Preciosa Foundation, 1 Josef Hlávka prize, 2 Rector prizes).

New Associated Professors and Professors

One professorship and one associated professorship were awarded at the Faculty of Chemistry and one member of academic staff was successful in receiving associated professorship at Slovak University of Technology in Bratislava.

Preparation and Accreditation of New Degree Programmes

As foreseen by the BUT 1999-2005 Mission Statement, three study fields were accredited in the Chemistry, Technology, and Properties of Materials Bachelor's degree programme: Chemistry, Technology, and Properties of Materials, Chemistry and Technology of Environmental Protection, and Consumer Chemistry plus a Population Protection Bachelor's degree programme with the Crisis Management and Protection of Population field of study.

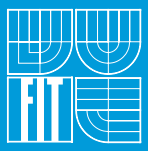
The following parallel doctoral programmes taught in English were accredited: Physical Chemistry, Macromolecular Chemistry and Chemistry, Technology, and Properties of Materials.

In the Chemistry and Chemical Technologies Bachelor's degree programme, the Engineering Chemistry study field was also accredited for teaching in English.

The Ministry of Education, Youth, and Sports accredited the Faculty of Chemistry as an institution authorised to offer programmes for further education of teachers. Subsequently, the request was granted for the accreditation of the following lifelong-learning programmes: Mathematics for Chemists, A Course in Toxicology for Chemistry Teachers, and A Course in Applied Chemistry For Secondary School Teachers.

A request was filed with the accreditation commission for the extension of accreditation of the Consumer Chemistry and Chemistry and Technology of Foodstuffs follow-up Master's programmes and the Chemistry and Technology of Foodstuffs doctoral programme with the Chemistry and Technology of Foodstuffs study field. The request also included the accreditation of parallel courses taught in English in the Chemistry and Technology of Environmental Protection and Chemistry and Technology of Foodstuffs follow-up Master's programmes

Faculty of Information Technology (FIT)
Božetěchova 1/2, 612 66 Brno
tel.: +420 541 141 139
e-mail: surname@fit.vutbr.cz
http://www.fit.vutbr.cz



Faculty of Information Technology

Dean prof. Ing. Tomáš Hruška, CSc.

Vice-Deans
prof. RNDr. Milan Češka, CSc.
for creative activity
doc. Ing. Vladimír Drábek, CSc.
for education
Ing. Miloš Eysselt, CSc.
for student affairs and study counselling
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 doc. Ing. Zdeněk Kotásek, CSc.

Accredited degree programmes

- **Information Technologies Bachelor's degree programme**
  (a three-year programme with the following study field: information technologies)
- **Information Technologies follow-up Master's degree programm**e
  (a two-year programme with the following study fields: computer graphics and multimedia, intelligent systems, computer systems and networks)
- **Electrical Engineering and Computer Science Master's degree programme**
  (a five-year with the following study field: computing and computer science - 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 with the following study field: computing and computer science - the programme is running out and is to be completed at the end of the academic year 2006/2007)
- **Information Technologies doctoral programme**
  (a three year programme with the following study field: information technologies)

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.

In a number of disciplines, computer applications may be so complex that computing expertise must be combined with additional fields of knowledge.

The Master's degree programme offered at the Faculty of Information Technology is open, provided that all the admission requirements are fulfilled, also to those who have received a Bachelor's degree at some other IT-oriented university.

Important Event

The first year of a follow-up Information Technology Master's degree programme began with 206 students admitted. Important was also that the faculty organizational chart was finally restructured and good staff recruited and trained.

The important events in 2004 include:

• the great common ball of the Faculty of Information Technology and the Faculty of Electrical Engineering and Communication held at the Voroněž hotel on 28th January 20058

• engineering projects – Ing. Ondřej Ryšavý, Ph.D.: Vutbrmsr.Net class library: a software project implementing the basic features of extendable infrastructure used to develop and implement verification algorithms and data structure in the Microsoft ROTOR/.NET environment; the design uses a generic programming method for verification algorithms to be efficient and reusable.

• Grammars with Context Conditions and Their Applications by prof. RNDr. Alexander Meduna, CSc. and Ing. Martin Švec, Ph.D. published by Wiley, New York, US, May 2005

• co-organizing the EMI 2005 student competition

• CSEW 2005 (Computer Science Education Workshop), a meeting of computer-oriented institutes, departments and faculties of the Czech Republic and Slovakia held on 20th and 21st October 2005

• the Cisco Akademie was officially opened at the Faculty of Information Technology on 11th November 2005

• a lecture given by IBM researchers with subsequent discussion organized by the Faculty of Information Technology as part of the Innovator's Tour on 1st December 2005

The Most Important Achievements in Science and Research

Language Identification (LID) System by P. Matějka, L. Burget, P. Schwarz, and J. Černocký.

The LID system developed by the Speech@FIT research team can identify the language of a given speech segment. It combines two approaches known in the literature as acoustic and phonotactic language identification where:

• the acoustic LID determines the language by the parameters derived directly from the speech signal. For the NIST evaluation, our team enhanced the existing technologies by discriminative training of acoustic models, which improves language separation.

• the phonotactic LID uses speech translated by a phoneme identifier into a string or a directed phoneme graph. These are then used to train language modelss (LM) that can be seen as statistics recording the probabilities of occurrence of phoneme doubles and triples. As the first, the Speech@FIT team used what is called anti-models to improve the discrimination between the target languages.

The LID technology can also be used commercially for automatic call switching at call-centres, for emergency calls, etc. However, its main application area is security. In a NIST-LRE-2005 evaluation of world's 12 industrial and academic laboratories performed by the National Institute of Standards and Technology, USA, the LID system developed at the Faculty of Information Technology ranked second in the 30-second speech segment category and was found the best in the 10-second and 3-second speech segment categories.

The system and the NIST evaluation results – intended both for the professionals and for a wider audience, were applauded in the media – see www.fit.vutbr.cz/research/groups/speech/web/media.html.cz.

New associate professors and professors appointed

One associate professorship and one professorship were awarded at the faculty in 2005

Student Competitions

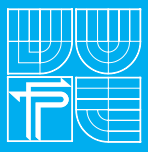
At the Student EEICT conference, students from the faculties of information technology and electrical engineering and communication compete in presenting their papers. In 2005, the student conference was held on 28th April also attended and sponsored by major companies producing electrical equipment and information technologies.

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 assessments are made for curricula, their updates and innovation, and for individual courses.

The results of enquires among students are also used to asses the quality of teaching and teachers. 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.

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: surname@fbm.vutbr.cz
http://intra.fbm.vutbr.cz/, http://www.fbm.vutbr.cz



Faculty of Business and Management

Dean doc. Ing. Miloš Koch, CSc.

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

Vice-deans prof. RNDr. Ivan Mezník, CSc.
dean's deputy for international relations
prof. Ing. Petr Němeček, DrSc.
for strategic development
doc. Ing. Vojtěch Koráb, Dr., MBA
for science, research and doctoral study
Ing. Vojtěch Bartoš, Ph.D.
for teaching

Faculty Secretary Ing. Václav Meluzín

Chairperson of the Academic Senate Mgr. Helena Musilová.

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

Departments

Department of Economics
headed by doc. Ing. Alena Kocmanová, Ph.D.
Department of Finance
headed by Ing. Pavel Svirák, Dr.
Department of Informatics
headed by Ing. Jiří Kříž, Ph.D.
Department of Management (since 1st September 2004)
headed by PhDr. Iveta Šimberová, Ph.D.

Other offices and departments

Brno Business School
Dean's Office
Study Office
Information System Division
Scientific Information Division

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
  - European Business and Finance

- **Doctor's degree programme:**
  Company Management
- **Lifelong Learning Programmes:**
  Tax Consultancy, Managerial Informatics, Corpor. Finance and Business, Company Manag.
  Master of Business Administration programmes
  International Management-Marketing Studies

Aims and objectives of study

The faculty offers an Economics and Management programme and a System Engineering and Informatics Bachelor's degree programme. Offered are also 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 that serve as a background for company management. Graduates from the Bachelor's programme desiring to obtain qualification for finance and business may enrol on the Corporate Finance and Business programme for a Master's degree needed in managing medium and large companies. 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 all its accredited programmes. Another programme offered is the MBA studies run in cooperation with the Nottingham Trent University in the United Kingdom and the Dominican University of Illinois, USA. Together with Nicolaus Copernicus University in Torun, Poland, the faculty organizes international management and marketing studies. The British Business Management and Finance Bachelor's degree programme offered in cooperation with Nottingham Trent University in Great Britain is now running out.

New Associated Professors and Professors

One member of the academic staff was approved as associate professor.

Preparation and Accreditation of New Fields of Study

During the year, the faculty received accreditation for combined courses in the Bachelor's and Master's degree programmes.

Preparations were started and materials processed for submitting an accreditation application for a Business and Law programme as part of the development programme assigned.

The Most Important Achievements in Science and Research

• Research conducted at the faculty concentrates on environmental economy, sustainable development and dealing with externalities, the following are the major research projects:

• AGATE-AMMONIA GAS ABSORPTION TECHNOLOGY a project within the 6th EU Framework programme. The solution provider is prof. Ing. Mirko Dohnal, DrSc. It is concerned with environment, particularly with the optimal removal of ammonia from the air. There are 11 European partners to this project

• AsiaBioMem, a projects embarked upon by the faculty in 2005. Prof. Ing. Mirko Dohnal is the solution provider and the subject is optimal processing of waste water in the South Asia's tourist resorts. The partners include: Vietnam, Thailand, Germany, the Czech Republic

International Relations

Student mobility is an integral part of teaching at the faculty. The faculty aims to have as many students of all the programmes spend a term at a university abroad. Under bilateral Socrates/Erasmus agreements, 70 BUT students stayed abroad while 26 foreign students were hosted by the faculty. Other bilateral agreements providing study-stay opportunities for students were signed with universities in the USA and Russia. Also teacher mobility takes place under the Socrates/Erasmus scheme. Students also participate in international student competitions organized within the PRIME and ETAP projects. In all these competitions, they had remarkable success. Since in 2006 the faculty will be organizing the 12th Euroweek international student conference, elaborate preparations have begun.

Faculty Development

1. In harmony with the BUT Mission Statement, teaching acquires a new quality as required by the EU from the "European Universities".
2. Cooperation improved between faculties to extend the offer of courses organized by two or more faculties.
3. Cooperation strengthened on the preparation of interdisciplinary study and degree programmes to meet the requirements of the practice.
4. Cooperation with companies strengthened on assigning the themes of Bachelor's and Master's degree projects.
5. Study aids extended with the e-learning forms having a priority.
6. Study materials prepared for specialized courses to be taught in English.
7. Research conducted at the faculty receives every support.

Conferences and other activities

- Management, Economics and Business Development in the New European Conditions, 3rd International Scientific Conference, May 2005, Brno, Rozdrojovice.
- Business Development in Central and Eastern Europe, 13th Annual International Conference, September 2005, Brno, FBM BUT.
- Progressive Methods and Tools of Management and Economics of Companies, December 2005, Brno, FBM BUT.
- Pro-export Policy, an international colloquium, Brno, FBM and the Civic Futurology Association, October 2005.
- 11th ETAP Working Meeting held in September under the auspices of dean doc. Koch and vice-dean prof. Mezník.

Student competitions

- Workshop of Doctoral students, November, Brno, BUT FBM
- Students from Bachelor's degree courses continued their participation in the ETAP international

project. Ten students attended the European Accountancy Week in Lille, receiving an award.

- Six ETAP participants went to St. Petersburg to take part in the International Students´ Olympiad. Out of 255 participants, our student notched up considerable success by winning an award entitled "Mister Accounting".
- Fifteen students participated in the 11th EUROWEEK in Katowice. In three categories, three third places went to our faculty and one team won a specially announced competition.

Important event

Prof. Ing. Vladimír Smejkal, CSc., was nominated among the top ten researchers in the field of information technology, Invex 2005.

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

Faculty of Civil Engineering

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

Vice-Deans
doc. Ing. Vlastimil Stara, CSc.
for study and students' affairs
prof. Ing. Jindřich Melcher, DrSc.
for development
prof. Ing. Rostislav Drochytka, CSc.
for internal and external relations

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.

Chairperson of the Academic Senate doc. RNDr. Josef Dalík, CSc. /Ing. Aleš Krejčí, CSc.

Faculty Secretary Ing. Tibor Horoščák, CSc.

Departments
Department of Mathematics and Descriptive Geometry
headed by prof. RNDr. Josef Diblík, DrSc.
Department of Physics
headed by prof. RNDr. Zdeněk Chobola, CSc.
Department of Chemistry
headed by prof. RNDr. Pavla Rovnaníková, CSc.
Department of Structural Mechanics
headed by prof. Ing. Drahomír Novák, DrSc.
Department of Geodesy
headed by doc. Ing. Josef Weigel, CSc.
Department of Geotechnics
headed by doc. Ing. Kamila Weiglová, CSc.
Department of Building Structures
headed by doc. Ing. Milan Vlček, CSc.
Department of Technology of Building Materials and Components
headed by prof. Ing. Rostislav Drochytka, CSc.
Department of Concrete and Masonry Structures
headed by prof. Ing. Jiří Stráský, CSc.
Department of Road Structures
headed by doc. Ing. Jan Kudrna, CSc.
Department of Railway Structures and Constructions
headed by doc. Ing. Pavel Zvěřina, CSc.

Department of Metal and Timber Structures
headed by prof. Ing. Jindřich Melcher, DrSc.
Department of Municipal Water Management
headed by doc. Ing. Jan Mičín, CSc.
Department of Water Structures
headed by doc. Ing. Vlastimil Stara, CSc.
Department of Landscape Water Management
headed by doc. Ing. Miloš Starý, CSc.
Department of Building Services
headed by Ing. Jiří Hirš, CSc.
Department of Computer Aided Engineering and Computer Science
headed by doc. RNDr. Jiří Macur, CSc.
Department of Structural Economics and Management
headed by Ing. Leonora Marková, Ph.D.
Department of Technology, Mechanization and Construction Management
headed by Ing. Vít Motyčka, CSc.
Department of Building Testing
headed by doc. Ing. Leonard Hobst, CSc.
Department of Social Sciences
headed by PhDr. Darja Daňková
Library and Information Centre
headed by Mgr. Marie Davidová
Centre for Computing Equipment Management
headed by Ing. Miloslav Zimmermann

Degree programmes

Accredited programmes

Bachelor's degree programmes

- **Construction** (B 3609) three-tear programme, full-time since 2004/2005, with the following fields of study:
  – structures and transport
  – building construction
  – construction and materials engineering
  – water management and structures
  – construction management
  – military structures
- **Construction Engineering** (B3607) four-year, full-time since 2004/2005, full-time in English since 2005/2006, with the following fields of study:
  – structures and transport construction
  – building construction
  – construction and materials engineering
  – water management and structures
  – construction management
  – military structures

- **Architecture of buildings** (B3503), four-year programme, full-time since 2005/2006, with the following field of study:
  – architecture of buildings
- **Geodesy and Cartography** (B3646), three-year programme, full-time since 2004/2005, with the following fields of study:
  – Geodesy and cartography
  – Military geodesy and cartography

Master's degree follow-up programmes

The following programmes were accredited at the faculty in 2005:

- **Construction Engineering** (N3607), 1.5-year programme, full-time from 2008/2009, with the following fields of study
  – geodesy and cartography
  – building construction
  – construction and materials engineering
  – structures and transport construction
  – water management and structures
  – construction management and financing
- **Geodesy and Cartography** (N3646), two-year programme, full-time since 2007/2008, with the following field of study:
  – geodesy and cartography

Doctoral full-time and combined programmes

- **Forensic Engineering** (P3917), three-year programme, with the following field of study:
  – forensic engineering
- **Geodesy and Cartography** (P3646), three-year programme, with the following fields of study:
  – geodesy and cartography
- **Construction Engineering** (P3607), three-year programme, with the following fields of study:
  – construction management
  – structures and transport construction
  – water management and structures
  – physical and construction materials engineering
  – building construction

Running out Master's degree programmes

- **Construction Engineering** (M3607), five-year programme, full-time until 2009, with the following fields of study:
  – structures and transport construction
  – building structures (together with combined courses and courses taught in English)
  – construction and materials engineering
  – water management and structures
  – construction management

- **Geodesy and Cartography** (M3646) five-year programme, full-time until 2009, with the following field of study:
  – geodesy and cartography

Aims and Objectives of Study

In line with the EU agreements, the programmes offered at the Faculty of Civil Engineering are of three types including Bachelor's, follow-up Master's, and Doctor's degree programmes. To some of the programmes, gradually, courses taught in English and combined courses are added. A new Building Construction Architecture Bachelor's degree programme was accredited and the first students were admitted. A Master's degree programme following this Bachelor's degree is being prepared.

Preparations started for the accreditation of a new Building Technology study field as part of the Construction Engineering follow-up Master's degree programme, which was necessitated by the demands of practice.

In all the degree programmes, language skills begin to play an important role, with the English courses being promoted by the rector's decision.

Extended and targeted courses are being offered at the Faculty of Civil Engineering made „to order" for large building companies such as Skanska CZ, a. s., Metrostav, a. s., ŽS Brno, a. s.

Important Events

BUT Faculty of Civil Engineering – Presence and Vision – was the title of a conference held at the faculty on 19th October 2005 initiated by the Student Chamber of the Academic Senate attended by a large number of representatives from other Czech faculties of civil engineering and building companies. The aim was to collect a broad spectrum of views on a further direction and concepts of the faculty development – this aim was fulfilled. As the reactions were positive, another event of this type is expected.

STAVOKS – a second conference of secondary schools was held at the faculty on 8th December 2005 where 25 students of secondary schools presented their papers.

The Most Important Achievements in Science and Research

Since 2005 the Faculty of Civil Engineering has participated in CIDEDAS, a centre of integrated design of progressive building structures together with the faculties of civil engineering of the Czech Technical University in Prague and VŠB-TU Ostrava.

Student Competitions

SVOČ – a student research competition: 196 papers in 11 specialized sections were submitted in the faculty 2005 round. For the international round of SVOČ held in Košice, 20 papers were nominated in 10 sections. The faculty students carried off 7 first places, 1 second place and 2 third places.

JUNIORSTAV – seventh conference of doctoral students was held on 2nd February 2005. The conference was held in 21 separate sections with the participants increasing in number – 473 students presented their papers. All of them were included in the conference proceedings (printed and on CD).

Associate Professorships and Professorships

Nine academics fulfilled the criteria of becoming associated professors. Four candidates have successfully completed the proceedings and were appointed professors.

Faculty of Mechanical Engineering

Faculty of Mechanical Engineering (FME)
Technická 2896/2, 616 69 Brno
tel.: +420 541 141 111
e-mail: surname@fme.vutbr.cz
http://www.fme.vutbr.cz

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 Dumek, Ph.D.
Ing. Vladimír Kotek (from 1st January 2005 to 31st July 2005)

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

Chairperson 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.
Department of Foreign Languages
headed by Mgr. Dita Gálová
Heat Transfer and Flow Laboratory
headed by doc. Ing. Miroslav Raudenský, CSc.

The Faculty offers the following degree programmes

programme	field of study	form	degree	years
Bachelor's degree B2341 Mechanical engineering	Mechanical Engineering	P	Bc.	3
	Industrial Design in Mechanical Engineering	P	Bc.	3
	Applied Comp. 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 Comp. 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 Manufac. Machines and Equipment	P	Ing.	2
	Manufacturing Technology	P	Ing.	2
	Manufacturing Technology and Industrial Management	P	Ing.	2
	Environmental Engineering	P, K	Ing.	2
Follow-up Master's degree N2301 Mechanical engineering	Applied Comp. Science and Management	P, K	Ing.	3
	Design of Machines and Equipment	P, K	Ing.	3
	Manufacturing Technology 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*

Aims and Objectives of Study

(1) Structured study. It is based on a three-tier education pattern: Bachelor's degree, follow-up Master's degree, and Doctor's degree programmes. 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 in the Bachelor's degree programmes have to pass a written test in physics and mathematics. Exempt from these tests are applicants who have taken a leaving-school 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 may be either general or profession-oriented.

Profession-oriented fields of study: are of a more practical type being primarily designed for those who wish to embark on a practical career after graduation. However, graduates from these programmes may choose to continue their study in related three-year degree programmes for a 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.

General fields of study: are suitable for those students who wish to go on studying for a 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. The general Bachelor's degree fields include: Mechanical Engineering, Industrial Design in Engineering, Physical Engineering, Materials Engineering, Mechatronics.

(4) 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 wish to go on studying for a Master's degree. Students may choose form among 20 fields of study.

(5) 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 wish to go on studying for a Master's degree.

(6) Combined form of study: this is a combination of fulltime and distance study in the proportion 1:2.

Important Events in 2004

An important event at the Faculty of Mechanical Engineering taking plac[e] late in 2005 was the 105th anniversary of its founding. A special gathering of the Scientific Board and the academic community was held. The celebrations were attended by the BUT rector and vice-rectors together with the deans of the partner faculties at Czech and Slovak technical universities. As part of the event, prof. Ing. František Trebuň, CSc. from the Technical University o Košice was awarded an honorary doctorate. Mr Trebuň had cooperated with the Faculty of Mechanical Engineering for a long time and is still on its Scientific Board.

The Most Important Achievements in Science and Research

Work on three research plans began early in 2005. Also 4 projects of research centres were initiated (1 solution provider, 3 solution co-providers) that were the best in a competition announced by the Ministry of Education, Youth, and Sports.

Student Competitions

As in the previous years, the Faculty of Mechanical Engineering announced a competition of grant projects submitted by doctoral students and staff members of up to 35 years of age. The poster presentation, which forms one part of such projects took place in January 2006 and proved that the quality of the project was steadily increasing. Most of the posters shown could be presented even at major international conferences and congresses.

New Associate Professors and Professors

The faculty's Scientific Board approved the appointment of 4 new associate professors who successfully presented a thesis and 7 new professors. Five other candidates started preparations for associated professorship.

Faculty of Fine Arts

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

Dean PhDr. Petr Spielmann, dr.h.c.

Vice-Deans Mgr. Richard Fajnor
for education
PhDr. Pavel Ondračka
for strategic development
Ak. soch. Zdeněk Zdařil
for development and material equipment
doc. Dr. Jiří H. Kocman
deputy dean, for creativity and external relations

Faculty Secretary Mgr. Jaroslava Bílá

Chairman of the Academic Senate Mgr. Irena Armutidisová (until 13th October 2005)
doc. ak. soch. Michal Gabriel (from 10th November 2005)

Studios, Departmens and Sections

The Fine Arts Bachelor's degree programme in Czech and the Master's degree programme in Czech and in English are offered at the following studios:

- Studio of sculpture 1 – doc. ak. soch. Michal Gabriel
- Studio of sculpture 2 – doc. ak. soch. Jan Ambrůz
- Studio of painting 1 – doc. ak. mal. Petr Veselý
- Studio of painting 2 – prof. ak. mal. Martin Mainer
- Studio of painting 3 – doc. MgA. Petr Kvíčala
- Studio of graphics – ak. mal. Margita Titlová-Vlovsky
- Studio of drawing – doc. Mgr. Josef Daněk
- Studio of graphic design – Mgr. Václav Houf
- Studio of paper and book – doc. Dr. Jiří H. Kocman
- Studio of inter-media – doc. prom. ped. Václav Stratil
- Studio of environment – ak. mal. Vladimír Merta
- Studio of video – prof. PhDr. ak. mal. Peter Rónai
- Studio of multimedia – Mgr. Richard Fajnor
- Studio of performance – prof. ak. soch. Tomáš Ruller
- Studio of product design – ak. soch. Zdeněk Zdařil
- Studio of body design – doc. Mgr. Jana Preková

The following studios provide teaching services for all other studios:

- Department of the theory of art – prof. PhDr. Jan Sedlák, CSc.
- Section of photography – Mgr. Irena Armutidisová
- Section of information technologies – Ing. Jaroslav Maloch, CSc. (until 31st July 2005), MgA. Vít Baloun (since 1st August 2005)
- Section of video – Ing. Dalibor Vlašín

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. The Rudiš–Vydrová architectural studio 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 too far from each other. With this in mind, attempts have been made to share the buildings at the corner of Údolní and Úvoz streets with the BUT Faculty of Architecture.

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 in which cultural activities find little support, there are very few jobs ensuring subsistence. We see more opportunities coming in future for restoration specializations (restoring objects of the 20th century cultural heritage).

Important events

New degree programmes prepared for accreditation

• The faculty makes every effort to develop cooperation with the public. The Galerie FaVU art gallery continues its exhibitions on the faculty premises at Údolní 495/19. Thanks to this institution, the public can look inside the faculty's activities in a broader context. The gallery offers its space for exhibitions of works, projects, and research by the faculty students and teachers as well as joint projects with known personalities having some relationship to our faculty, its programme or region.

• The faculty together with the Brno House of Arts and later with the Brno Moravian Gallery held a cycle of lectures featuring faculty teachers. A number of other exhibitions were held for the works by the faculty teachers, studios, and students.

• Together with the Faculty of Chemistry, the Faculty of Information Technology, the Technical Museum, and Brno Moravian Gallery, the faculty submitted to the Ministry of Education Youth, and Sports an application for grant on a project for a Research Centre of the Protection and Salvation of the 20th Century Cultural Heritage Objects.

• in September 2005, an application was filed to extend the accreditation of the Bachelor's degree programme and the follow up Master's degree programmes in Czech and in English. In January 2006 the faculty received the accreditation for the Bachelor's programme until 1st December 2013 and for the follow-up Master's programmes until 1st December 2009.

• After extensive discussions with the BUT leading officials and following a recommendation of the faculty's Artistic Board, work was initiated in 2005 on the accreditation of a doctoral programme so that an application may be filed with the Ministry of Education, Youth, and Sports by the end of the summer semester of 2005/2006.

The most important artistic achievement

As in the previous years, the faculty academics participate in the most significant activities in culture and artistic life of the Czech Republic being standard, distinctive representatives of Czech art abroad - see below.

Works of our students and graduates are more and more bought by public institutions including the National Gallery in Prague with outstanding collectors paying considerable attention to events at the faculty.

Student competitions

- Krtička Jan, Studio of sculpture 2, Kiruna Snow Festival, Kiruna, Sweden, 3rd place
- Zdražilová Pavla, Studio of sculpture 2, Competition for the presentation of the city of Jihlava in Heidenheim, Germany, 1st place
- Kačírková Pavla, Studio of sculpture 2, Competition for the presentation of the city of Jihlava in Heidenheim, Germany, 2nd place
- Černý Vratislav, Studio of sculpture 2, Competition for the presentation of the city of Jihlava in Heidenheim, Germany, 3rd place
- Zrubec Radoslav, Studio of painting 3, main prize of Artkontakt, 2005
- Turková Anežka, Studio of painting 3, finals participant in Startpoint, 2005

New associated professors and professors appointed

One associated professor and three professors were appointed in 2005.

1st May 2005 – doc. PhDr. Petr Spielmann, dr.h.c.

13th February 2005 – prof. ak. soch. Tomáš Ruller
1st November 2005 – prof. ak. mal. Martin Mainer
14th December 2005 – prof. PhDr. ak. mal. Peter Rónai

Exhibitions of teachers' and students' works

Over 88 exhibitions were held with teachers and students involved as artists, guardians, organizers or providing some other services. For detailed information, visit www.ffa.vutbr.cz.

Publishing

The publishing activities of teachers, students as well as graduates from the Faculty of Fine Arts has become a distinctive feature of the faculty's professional profile with more emphasis placed on theoretical subjects than is customary at traditional schools of arts.

other BUT units

BUT CENTRE OF SPORTS ACTIVITIES (CESA)

Technická 2896/2, 612 00 Brno
Tel.: +420 541 141 111
http://www.cesa.vutbr.cz

BUT COMPUTER AND INFORMATION SERVICES CENTRE (CISC)

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

BUT CENTRE OF EDUCATION AND COUNSELLING (CEAC)

Antonínská 548/1, 601 90 Brno
tel.: +420 541 141 111
http://www.cvp.vutbr.cz

BUT HALLS OF RESIDENCE AND CANTEENS (HRAC)

Kolejní 2905/2, 612 00 Brno
tel.: +420 549 255 366, fax: +420 541 211 266
http:// www.skm.vutbr.cz

BUT VUTIUM PRESS

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

BUT INSTITUTE OF FORENSIC ENGINEERING (IFE)

Údolní 244/53, 602 00 Brno
tel.: +420 541 141 111
http://www.usi.vutbr.cz

BUT CENTRAL LIBRARY (CL)

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

CENTRE OF INFORMATION SERVICES

Director PaedDr. Jaroslav Bogdálek

In 2005, the Centre of Sports Activities offered various courses to students in 5 performance categories and 42 events. With growing interest in most diverse forms of sports activities, over 7,500 students had registered.

The Centre also offered educational programmes, specialized seminars, training, and accreditation courses to its instructors and all those interested. It lined up teams representing BUT and prepared athletes for the 4th Czech Academic Games (CAG) in Olomouc, who ranked among the best by the number of medals they had won.

A Movement Studio project for the senior citizens was successfully launched as part of the University for the 3rd Age and met with considerable interest.

The Centre offered to the BUT students enjoyment of sport in their leisure in 18 different events.

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

In June, the Centre of Sports Activities co-organized the 2nd Summer Olympiad of Children and Youth held in Brno heavily subsidized by BUT

Sports Courses

Over 7,800 BUT students had registered for one of the 42 specialized sports courses in 2005.

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

- Olympic Day Race
- 2nd Summer Olympiad of Children and Youth
- 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:

• Students of the Faculty of Architecture

Kotlas Michal	FLOOR BALL	3rd place - AC CR

• Students of the Faculty of Civil Engineering

Babka Peter	FLOOR BALL	3rd place - AC CR
Cvrček Tomáš	FLOOR BALL	3rd place - AC CR
Dänemark Mario	FLOOR BALL	3rd place - AC CR
Kadlec Marek	FLOOR BALL	3rd place - AC CR
Krejčí Jan	FLOOR BALL	3rd place - AC CR
Miczek Daniel	FLOOR BALL	3rd place - AC CR
Pavlica Ondřej	FLOOR BALL	3rd place - AC CR

Bernacik Stanislav	BADMINTON double	3rd place - CAG 2005
Daňková Pavla	JUDO up to 57 kg	3rd place - CAG 2005
Hanzl Jaroslav	KARATE – KATA	3rd place - CAG 2005
Kvaček Tomáš	SPORTS AEROBIC	4th place - HUNGARIAN OPEN
Mikolášek Martin	KARATE - KUMITE /+68	3rd place - CAG 2005
Henek Vladan	ORIENTEERING RACE-MIDDLE	2nd place - CAG 2005
Jaňour Jan	TRIATHLON	2nd place - AC CR
Křížová Dana	ARCHERY	2nd place - CAG 2005
Vařeková Barbora	ROWING	1st place - AC CR
Čech David	SWIMMING	winner of the 2005 Czech Cup of long-distance swimmers crossed the Channel in 2004
Červenka Jan	TRACK ATHLETICS – javelin	1st place - CAG 2005
Mikulenka Peter	RACK ATHLETICS - 3 000 h hurdles	1st place - CAG 2005
	- 5 000 m	2nd place - CAG 2005
Petříková Irena	TRACK ATHLETICS - 1 500 m	1st place - CAG 2005
	- 3 000 m	1st place - CAG 2005
Vlk Martin	GYMNASTICS	1st place - AC CR
Wagner Štěpán	TRACK ATHLETICS - 100 m	1st place - CAG 2005
	- long jump	1st place - CAG 2005

• Students of the Faculty of Electrical Engineering and Communication

Fojt Zdeněk	FLOOR BALL	3rd place - AC CR
Fojt Milan	FLOOR BALL	3rd place - AC CR
Gleissner Filip	FLOOR BALL	3rd place - AC CR
Kadlec Petr	FLOOR BALL	3rd place - AC CR
Fujcik Lukáš	JUDO /over 100 kg	3rd place - CAG 2005
Hovanec Stanislav	ALPINISM	represented the CR, the most difficult Alpine routes
Smola Michal	ORIENTEERING RACE NAT. CHAMPIONSHIP	3rd place, short distance
	NAT. CHAMPIONSHIP	5th place - classic distance
	2005 long-term competitions:	1st place - Continental Cup, 1st place - HI Tec Sprint Cup
Prokop Václav	JUDO /over 100 kg	1st place - CAG 2005

• Students of the Faculty of Chemistry

Stará Zdenka	ORIENTEERING RACE NAT. CHAMPIONSHIP	1st pl., long and short dist.
	NAT. CHAMPIONSHIP	2nd place - classic event and sprint,
	NAT. CHAMPIONSHIP	3rd place - relays
	World Cup:	4th place - Italy
		20th place in overall rating

• Students of the Faculty of Information Technology

Laichman Libor	FLOOR BALL	3rd place - AC CR
Sladký Roman	FLOOR BALL	3rd place - AC CR
Braun Daniel	SKITTLES	2nd place - CAG 2005

• Students of the Faculty of Business and Management

Pajurek Zdeněk	TABLE TENNIS / mix	2nd place – CAG 2005
Stará Kamila	HISTORIC CAR UPHILL RACE	vice-champion for 2005 – FIA Championship, Central European Zone racing Formula Easter MTX 1–03 car in the 4 – monoposts category
Švejda Jakub	FIN SWIMMING – 50 m	2nd place – CAG 2005
	– 200 m	2nd place – CAG 2005
Pinnerová Eliška	TABLE TENNIS – single	3rd place – CAG 2005
	– mixed	2nd place – CAG 2005
	– double	1st place – CAG 2005

• Students of the Faculty of Mechanical Engineering

Novák Jan	FLOOR BALL	3rd place - AC CR
Švéda Martin	FLOOR BALL	3rd place - AC CR
Baar Pavel	TRACK ATHLETICS /decathlon	3rd place - CAG 2005
Bezunk Antonín	JUDO /up to 100 kg	3rd place - CAG 2005
Durna Petr	SWIMMING /100 m breast stroke	3rd place - CAG 2005
Kodajková Zuzana	KARATE / KUMITE /women	3rd place - CAG 2005
Opluštil Tomáš	KARATE / European University Karate Championship	1st place (along with other Czech particip.) 7th place - KUMITE individual male - 70 kg 9th place– team KUMITE male
Durna Pavel	SWIMMING - 100 m side stroke	2nd place - CAG 2005
Kozel David	BOULDERING	2nd place RANKING CR 1st Czech bouldering climber 1st Czech Cup - overall 3rd place
Macek Lubomír	KARATE /KUMITE +68 kg	2nd place - CAG 2005
Dlabaja Tomáš	ORIENTEERING RACE Nat. Champ.:	1st place, sprint 1st place, night orienteering race
	All-year-round competitions CR:	1st place - HI Tec Sprint Cup 2nd place - Continental Cup 3rd place - HSH Ranking
	World Cup:	7th place - sprint 16th place - classic distance 6th place - relays 23rd place - overall
	World Championship in Japan:	23rd place - classic distance
	Olympiad in Nonolympic Events:	3rd place - mixed relays

Marcell Jan	TRACK ATHLETICS - discus throwing	2nd place - CAG 2005
	- shot put	1st place - CAG 2005
Obadal Radek	ROWING	1st place - AC CR
Šípková Nela	TABLE TENNIS - double	2nd place
	- single	2nd place
	- mixed	1st place

CENTRE OF COMPUTER AND INFORMATION SERVICES

Director Ing. Jaromír Marušinec

In 2005, the Computer and Information Services Centre continued to improve the university information and communication technologies as described in the relevant chapter of this annual report. A new KolejNet department was established to manage the student computer network.

Legal and Management Department

- performed CCIS administrative work related to BUT information technologies
- coordinated and managed CCIS departments and BUT information technologies
- administered the university software
- coordinated the operation, upgrading and integration of the SAP ApolloVUT, and StudisVUT information systems
- performed analyses in preparation of a project to change the chip pass technology to MIFARE one

Department of Backbone Management

- upgraded the backbone network by 10Gb technology
- managed the fibre optic communication infrastructure
- performed hardware and software maintenance of the network servers
- took safety measures in protection of the BUT computer network
- in cooperation with authorized persons managed the faculty networks
- was in charge of connecting schools and non-profit organizations to the academic backbone network
- built up and managed the BUT telephone network and mobile communication

Department of Operation

- administered workstations, domain, e-mail, and network servers of the Rectorate and other BUT units
- administered multimedia facilities and recorded their loans
- maintained rooms needed for CCIS training

Department of Management Systems

- cooperated on SAP operation with the management and HR methodologists,
- operated the SAP system
- trained SAP users
- cooperated with other universities within the SAP Coordination Centre Association

Department of Databases

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

Department of Development

- developed new Apollo interface modules for science, research, study and teaching affairs
- implemented BUT's new Internet and intranet portals
- developed new BUT portal web interface modules – (Studis and Web4Teacher)
- supervised a number of students' degree projects
- provisionally printed chip passes for BUT staff and students
- trained the instructors and key users of the new information system

Department of the Kolejnet network

- managed the KolejNet student network
- implemented a new version of KolejNet to be integrated into the existing accommodation system at the halls of residence

CENTRE OF EDUCATION AND COUNSELLING

Director Ing. Vlastimil Bejček, CSc.

In 2005 the Centre of Education and Counselling had the following organizational chart:

- Department of Lifelong Learning
- Department of Counselling
- Department of the University of the Third Age

The Centre of Education and Counselling 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 educational conventions,

• to offer lifelong-learning courses designed for different BUT target groups and for a wider public meeting their particular needs,

• to create communication interface between BUT and the public offering counselling to the BUT students and graduates helping them to find jobs and roles in society, supporting education, research and counselling services at faculties.

The educational programmes offer:

- pedagogic education
- managerial education
- engineering and legal education
- language education

See Tables IV.5 – 1b,c.

The University of the 3rd Age offers the following courses:

- computing, Internet
- architecture
- digital photography
- chemistry
- artificial intelligence
- physical education

In 2005, the University of the Third Age offered 29 courses for 897 students taught in 858 lessons.

The counselling programme includes

- project counselling and services
- study counselling
- psychological counselling
- personnel and labour counselling and services
- pedagogic counselling

The department of lifelong learning provided counselling and coordinated the following European projects including the European social Fund:

• IST Retraining of Disabled Persons – part of the Leonardo da Vinci programme. Ten 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. It is a three-year project ending on 30th August 2007.

• EQUIPE – part of the Socrates programme - concerned with the benchmarking of European universities and quality improvement in lifelong learning. It was successfully completed in September 2005 followed by an EQUIPE Plus project with BUT as a contact place in the network of lifelong-learning educational institutions in the Czech republic.

• EILC – part of the Socrates programme. An intensive Czech course for international students.
• EUROmonitor – the Centre of Education and Counselling Services informs the faculties on the funds offered by the EU (see http://www.cvp.vutbr.cz/poradenstvi/poradenstvi-k-evropskych-projektum/).

Other activities

The Centre of Education and Counselling Services took active part in the Autodesk Academia FÓRUM annual conference

- Autodesk Academia DESIGN seminar
- International seminar on U3V held at Nový Dvůr (participants from Finland, Austria, Slovakia)
- Paper on U3V presented at the Helsinki LLinE conference in Jyväskylä
- Active participation in a LiLL international conference in Otzenhausen,
- GAUDEAMUS student fair
- AEDUCA, 1st lifelong-learning fair in Olomouc
- Inquiry into practical opportunities of BUT graduates (2003-2005)
- Comprehensive evaluation was organized of a U3V Infrastructure Development project implemented at 17 public universities; South Bohemian University in České Budějovice,
- Preparation of an ADD-LIFE, Grundtvig 1 project, Vienna
- Report on an EFOSEC project of the European Federation Of Older Students At The Universities (EFOS). Magdeburg,
- Internet For Senior Citizens, Brno

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 counselling in pedagogic methodology both to BUT faculties and other customers. Its activities also help develop the regional, national, and international cooperation of BUT concerning the lifelong learning programmes.

BUT HALLS OF RESIDENCE AND CANTEENS

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 6,965 beds for students in the following locations:

- the Pod Palackého vrchem halls of residence (3 130 beds)
- the Purkyňovy halls of residence (2 250 beds)
- the Mánesovy halls of residence (264 beds)
- the Listovy halls of residence (1 044 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. Almost all the rooms are connected to the Internet.

The sports facilities offered include a fitness centre, gymnasium, Boulder Centre – climbing wall, and other sports facilities, almost all supervised by experts from the Centre of Sports activities. 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 distributed among four blocks. There are double and triple rooms with baths shared by several rooms on the same floor. Almost all the rooms are connected to the Internet.

Available is a computer room and a fitness centre. 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 in two buildings. The rooms are connected to the Internet. The students may use a sauna, an outdoor sports ground, and a restaurant situated in a link connecting both blocks.

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. The rooms are connected to the Internet. A gymnasium, fitness centre, and playing ground 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) until 30th June 2005
- 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)

A new "Caffe Bar Piccolo" canteen was opened on the Pod Palackého vrchem campus replacing a former meal serving facility. Snacks are offered every day including Saturdays and Sundays. Forty-eight places are available in a pleasant modern interior. The menu includes breakfasts, lunches a la carte, desserts, sandwiches, mixed drinks and a wide assortment of coffees.

Important events

- Since October, complementary subsidies have no longer been provided for university student accommodation. This has entailed a considerable increase in the accommodation prices.
- In 2005 BUT sold the most meals to students of all the universities with the largest number of meals per student.
- Virtually all the rooms are now connected to the BUT computer network.
- The number of beds in the Pod Palackého vrchem halls of residence was increased by transforming one office floor into accommodation rooms. These new rooms serve as accommodation for BUT staff.
- In June 2005 the Halls of Residence and Canteens provided accommodation and meals for over 4,000 participants of the 2nd Olympiad For the Czech Children.

VUTIUM PRESS

Director PhDr. Alena Mizerová

Publishing and Editing

In 2005 the University published 293 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 wider expert public both in the classic book form and electronically. In the University Textbook Translations series, VUTIUM Press submitted a joint-project with the Institute of Chemical Technology in Prague for publishing Organic Chemistry by J. McMurphy and, with Brno Centre of European Studies, a Czech translation of The Essential Study Skills textbook.

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 2005, VUTIUM Press organized several seminars devoted to the building of an academic network, for example, in cooperation with the Brno Centre of European Studies, it prepared successful marketing and distribution of professional literature with lectures given by: Kateřina Myšková, director of Myris Trade, Prague; Jiří Padevět, deputy director of Academia Publishing, Prague, and Otto Sagner, representative of Kubon & Sagner, Buchexport-Import, GmbH, Munich.

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 and Bratislava. VUTIUM Press also arranged a 5th joint exhibition of 19 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 3rd Book Fair in Brno at an Academic Literature and Google seminar was held as part of a series entitled Chances of University Presses in the European Book Space.

For the number of titles published by VUTIUM Press in 2005, see Table XI. – 1 (by ISBN and ISSN records).

The editing and publishing in 2005 done for the entire Brno University of Technology (by ISBN and ISSN records) is summarized in Table XI. – 2.

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 2005, 221 students graduated from the Institute, 2 four-semester courses and 4 one-semester courses were opened, a new course was offered on the PC Crash road accident simulation programme;

b) an accredited Doctor's degree programme of the 3917V001 Forensic Engineering field, offered by the faculties of civil and mechanical engineering in cooperation with the Institute with 74 doctoral students enrolled; 5 students 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 in January 2005, a conference on the current issues of forensic experts specializing in road accidents in June as part of an accompanying programme to the Autotec´05 fair. In most regions of the Czech Republic, it helped instruct experts on the amendment to the executive regulation to the Property Assessment Act. In cooperation with EVU, it was also considerably involved in Querry'05, a part of an EU programme to bring down the number of road accidents.

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, and Water Management. A total of 47 expert opinions were made at the Institute. Most of them were revising and required an interdisciplinary approach.

The Institute informally cooperates with the Department of Justice 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. Lectures were also 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 150/IEC 17024 (formerly ČSN EN 45 013) standard. In 2005, 17 new experts were certified, 95 monitored, and 9 re-certified by the Institute. By the end of 2005, 113 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. A transition was completed in 2005 to the ČSN EN 150/IEC 17024 standard.

CENTRAL LIBRARY

Director Ing. Martin Fasura

The BUT Central Library is the coordinator of library services. It is responsible for the operation and maintenance of the Aleph500 library system, purchasing foreign journals and information databases. It is also responsible for keeping 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 completed in 2004. Thanks to this unification, the book description records stored in the BUT Central Catalogue could be repaired with duplicities removed.

Early in 2005, the Z39.50 server was put into operation to enable shared cataloguing and incorporation of the libraries in the Unified Information Gateway project.

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 nationally recognized format, which guarantees unified identification within the Czech Republic.

BUT Library Portal

A hyperlink to BUT libraries was added to the BUT Internet portal. Here, the user may find basic information on the BUT library environment: a list of libraries with concise descriptions and links to relevant websites with 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 Computer and Information Services, new Central Library websites were integrated into the portal design.

The Central Library also prepares a new internal portal of the BUT libraries. Next to a discussion forum, the library staff may find here instruction for use of the Aleph system, statistics of its use, etc. A new interface was tested to make the administration of electronic information sources more efficient. Late in 2005, the entire Intranet Portal of libraries was rebuilt using a new publication system allowing more efficient management of primary documents.

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
- Dialog
- Science Direct
- Beilstein
- ProQuest5000
- EIFL Direct
- MathSci
- 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 from domestic and foreign libraries. Since 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 and the Faculty of Information Technology, 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.

The incorporation in the curricula varies. Late in 2005, preparations were initiated of a new concept of information education tailored to different user types. We plan to completely redraw and extend the spectrum of curricula placing more emphasis on work with electronic information sources and the inclusion in the newly built university e-learning system.

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

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 2005 a BUT project for extending the sources of information at the BUT libraries was successful in receiving a grant from the Higher-Education Development. Thanks to this funding, the libraries of the Faculty of Information Technology and the Faculty of Electrical Engineering and Communication were 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 to all the participants and provides motivation to further education.

The Central Library collections of course include titles published by VUTIUM Press provided free of charge.

In cooperation with the Computer and Information Services Centre, the Central Library manages the BUT Libraries portal. Here, the user may find the basic information on the BUT library environment: a list of libraries with concise descriptions and links to relevant websites with more detailed information, a list of services offered, information sources available, and Ask BUT Library and FAQ discussion forums.

Tables

III. – 1 BUT ACADEMIC SENATE

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

Chamber of Academics	**Chamber of Students**
Mgr. Irena Armutidisová (FFA) Mgr. Václav Božek, CSc. (FCE) doc. RNDr. Josef Dalík, CSc. (FCE) RNDr. Pavel Dobis, CSc. (FEEC) 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) 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, PhD. (FME) doc. Ing. František Zbořil, CSc. (FIT)	Lukáš Berta (FFA) – *until 14.06.2005* Daniela Čechová (FME) – *since 11.01.2005* Jiří Gajdošík (FEEC) – *until 14.06.2005* Mgr. Marcel Hádlík (FCE) – *until 05.04.2005* Ing. Pavel Jelínek (FME) – *until 10.01.2005* Pavel Kvintus (FA) Jan Myšulka (FC) Ing. Jaroslav Švec (FIT) Veronika Zderadičková (FBM) – from *07.12.2005*

Working Commissions of the Academic Senate	
Legislation Commission	***Economic Commission***
Mgr. Václav Božek. CSc. Ing. Ivana Groligová, CSc. doc. Ing. Zdeňka Lhotáková, CSc. – *chairperson* doc. Ing. Eva Münsterová, CSc. Ing. Jiřina Omelková, CSc. Ing. Jaroslav Švec	doc. RNDr. Josef Dalík, CSc. doc. Dr. Ing. Petr Hanáček Ing. Helena Hanušová, CSc. RNDr. Božena Kábelová RNDr. Vlasta Krupková, CSc. prof. Ing. arch. Alois Nový, CSc. RNDr. Pavel Popela, PhD. – *chairperson* Veronika Zderadíčková
Pedagogic Commission	
RNDr. Pavel Dobis, CSc. – *chairperson* Mgr. Marcel Hádlík – *until 05.04.2005* Ing. Helena Hanušová, CSc. RNDr. Vlasta Krupková, CSc. Jan Myšulka	

AS representatives in the BUT Construction Commission	AS representatives in the Council of Universities
prof. Ing. arch. Alois Nový, CSc. Mgr. Marcel Hádlík – *until 05.04.2005*	doc. Ing. Eva Münsterová, CSc. – *vice chairperson, member of presidium* Mgr. Václav Božek. CSc. – *member of assembly* Jan Myšulka –*Student Chamber of the AS*

AS representatives in the BUT CEAC Programme Board	AS representatives in the HRAC Supervisory Board
doc. Ing. František Zbořil, CSc. doc. Ing. Eva Münsterová, CSc.	Jiří Gajdošík – *until 14.06.2005* Veronika Zderadičková Petr Donth

III. – 1 BUT ACADEMIC SENATE (from October 2005 to October 2008)

doc. RNDr. Josef Dalík, CSc.	chairperson
doc. Dr. Ing. Petr Hanáček	vice chairperson and chairperson of the Chamber of Academics
Veronika Donthová	vice chairperson and chairperson of the Chamber of Students

Chamber of Academics	Chamber of Students
doc. RNDr. Josef Dalík, CSc. (FCE) doc. Ing. Eva Gescheidtová, CSc. (FEEC) doc. Dr. Ing. Petr Hanáček (FIT) Ing. Helena Hanušová, CSc. (FBM) Ing. arch. Jan Hrubý, CSc. (FA) Ing. Jana Korytárová, Ph.D. (FCE) RNDr. Vlasta Krupková, CSc. (FEEC) doc. Ing. Jiří Kunovský, CSc. (FIT) doc. MgA. Petr Kvíčala (FFA) doc. Ing. Zdenka Lhotáková, CSc. (FA) doc. Ing. Miloslav Pekař, CSc. (FC) RNDr. Pavel Popela, Ph.D. (FME) Ing. Jan Roupec, Ph.D. (FME) PhDr. Jana Spoustová (FFA) Ing. Stanislav Škapa, Ph.D. (FBM) prof. RNDr. Milada Vávrová, CSc. (FC)	Daniela Čechová (FME) Petr Donth (FCE) Veronika Donthová (FBM) Petr Dub, DiS. (FFA) Ing. arch. Petr Kocián (FA) Jakub Mahdal (FIT) Jan Myšulka (FC) Tomáš Žabka (FEEC)

Working Commissions of the Academic Senate	
Legislation Commission	***Economic Commission***
Petr Donth Veronika Donthová Petr Dub, DiS. doc. Ing. Eva Gescheidtová, CSc. doc. Ing. Zdeňka Lhotáková, CSc. – *chairperson* Jan Myšulka doc. Ing. Miloslav Pekař, CSc. Ing. Pavel Roupec, Ph.D. prof. RNDr. Milada Vávrová, CSc.	Veronika Donthová doc. Dr. Ing. Petr Hanáček Ing. Helena Hanušová, CSc. Ing. arch. Jan Hrubý, CSc. Ing. Jana Korytárová, Ph.D. RNDr. Vlasta Krupková, CSc. doc. MgA. Petr Kvíčala Jakub Mahdal RNDr. Pavel Popela, Ph.D. – *chairperson* prof. RNDr. Milada Vávrová, CSc.
Pedagogic Commission	
Daniela Čechová Ing. Helena Hanušová, CSc. RNDr. Vlasta Krupková, CSc. – *chairperson* doc. Ing. Jiří Kunovský, CSc. PhDr. Jana Spoustová Ing. Stanislav Škapa, Ph.D.	
AS representatives in the BUT Construction Commission	**AS representatives in the Council of Universities**
Ing. arch. Jan Hrubý, CSc. Ing. arch. Petr Kocián	doc. Ing. Eva Münsterová, CSc. – *vice chairperson, member of presidium* prof. RNDr. Milada Vávrová, CSc. – *member of assembly* Jan Myšulka – *Student Chamber of the AS* Petr Donth – *Student Chamber of the AS (reserve)*
AS representatives in the BUT CEAC Programme Board	
doc. RNDr. Josef Dalík, CSc. doc. Dr. Ing. Petr Hanáček	

III. – 2 BUT SCIENTIFIC BOARD IN 2005

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.	chairperson of the board of directors of the Stavoprojekta. a. s. building company	building structures
Ing. Jiří Devát	managing director, Microsoft, s.r.o.	theory and automation of control
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 solids
prof. Ing. Petr Sáha, CSc.	rector, Tomas Bata University in Zlin	materials engineering
prof. PhDr. Jan Sedlák, CSc.	FA until 31st January 2004	architecture
prof. RNDr. Eduard Schmidt, CSc.	vice rector, Masaryk University	physics of solid substances
doc. PhDr. Petr Spielmann, dr.h.c.	dean, FFA	history of arts
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, numerical methods

III. – 3 BUT BOARD OF TRUSTEES

Ing. Vladimír Jeřábek, MBA	chairperson	
Ing. Richard Kuba, CSc.	deputy chairperson	
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.1 – 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	13/30	11/40	9/36	16/29	40/135
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		**16/39**	**13/49**	**9/36**	**19/22**	**57/156**

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	4	3	0	0	2	7	3	8	9	18
FME	2	13	2	21	1	20	7	7	12	61
FEEC	2	8	2	9	1	4	1	7	6	28
FIT	2	2	2	5	1	1	1	1	6	9
FC	2	3	4	4	4	4	5	6	15	17
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	**16**	**39**	**13**	**49**	**9**	**36**	**19**	**32**	**57**	**156**

IV.5 – 1b LIFELONG-LEARNING PROGRAMMES

study-field groups	master field group code	lifelong programmes within accredited programmes		others	total
		free	paid		
science	11-18				
engineering	21-39			3	
agriculture, forestry, veterinary	41-43				
health, medicine, pharmacy	51-53				
social scineces	61, 65, 67, 71-74			1	
business	62				
law, administration	68			7	
pedagogy, teaching, social care	75			1	
psychology	77				
culture, arts	81,82				
total	**11 to 82**			**12**	

IV.5 – 1c STUDENT NUMBERS IN LIFELONG-LEARNING PROGRAMMES

study-field groups	master field group code	lifelong programmes within accredited programmes		others	total
		free	paid		
science	11-18				
engineering	21-39			29	
agriculture, forestry, veterinary	41-43				
health, medicine, pharmacy	51-53				
social scineces	61, 65, 67, 71-74			10	
business	62				
law, administration	68			112	
pedagogy, teaching, social care	75			24	
psychology	77				
culture, arts	81,82				
total	**11 to 82**			**175**	

IV.7 – 3 APPLICATIONS, ADMISSIONS, AND ENROLMENTS IN 2005/2006

study-field group	master field group code	applications submitted	registered applications	eligible	admitted	enrolled
science	14	15	15	14	14	10
engineering	21-39	12,664	11,313	8,334	7,983	6,530
economics	62	3,285	3,155	1,170	1,168	929
culture, arts	82	430	428	90	88	84
total BUT		**16,394**	**14,911**	**9,608**	**9,253**	**7,553**

IV.8 – 2a STUDENT NUMBERS ON 31ST OCTOBER 2005

field group	master field group code	students in degree programme				total students
		Bc.	Mgr. follow-up	Mgr.	Ph.D.	
science	14	0	0	0	72	72

engineering	23 to 39	10,041	1,254	5,061	1,773	18,129
economics	62	1,049	928	0	103	2,080
culture and arts	82	168	114	0	0	282
BUT		**11,258**	**2,296**	**5,061**	**1,948**	**20,563**

IV.8 – 8 NUMBER OF INTERNATIONAL STUDENTS ON 31ST OCTOBER 2005

Programme type		Students
Bc.	Bachelor's degree	890
Ing. / Mgr	follow-up Master's degree	115
Ing. / Mgr	Master's degree	184
Ph.D.	doctoral programme	69
Total		**1,258**

IV.8 – 8b TOTAL STUDENT NUMBERS ON 31ST OCTOBER 2005

programme type		study form		total
		full-time	combined	
Bc.	Bachelor's degree	10,335	923	11,258
Ing./Mgr.	follow-up Master's degree	1,810	486	2,296
Ing./Mgr.	Master's degree	4,744	317	5,061
Ph.D.	doctoral programme	952	996	1948
total		**17,841**	**2,722**	**20,563**

IV.8 – 8c STUDENT NUMBERS ARRANGED BY FACULTIES

faculty	type of degree programme				total
	Bachelor's	follow-up Master's	Master's	Doctor's	
FCE	2,446	0	2,451	538	5,436
FME	2,324	481	1,393	599	4,815
FEEC	3,065	371	564	368	4,368
FIT	1,315	209	279	117	1,920
FC	511	37	374	143	1,065
FA	362	156	0	80	598

FFA	168	114	0	0	282
FBM	1,049	928	0	I03	2,080
total	**11,258**	**2,296**	**5,061**	**1,948**	**20,563**

IV.8 – 8d NUMBERS OF STUDENTS BY PROGRAMMES

fac.	programme code / name		men	women	study form		total
					full-time	comb.	
FAST	B3503	Architecture of Building Structures	19	21	40	0	40
	B3607	Civil Engineering	1 475	525	1 808	192	2 000
	B36O9	Building	173	71	244	0	244
	B3646	Geodesy and Cartography	94	68	162	0	162
	M3607	Civil Engineering	1 751	529	1 993	287	2 280
	M3646	Geodesy and Cartography	99	72	171	0	171
	P3607	Civil Engineering	331	134	209	256	465
	P3646	Geodesy and Cartography	10	4	8	6	14
	P3917	Forensic Engineering	36	23	13	46	59
FSI	B2341	Mechanical Engineering	2 018	126	1 792	352	2 144
	B3901	Aplikované vědy v inženýrství	162	36	198	0	198
	M2301	Mechanical Engineering	1 280	113	1 393	0	1 393
	N2301	Mechanical Engineering	377	36	230	183	413
	N3901	Applied Sciences in Engineering	63	5	68	0	68
	P2302	Machinery and Equipment	226	14	111	129	240
	P2303	Manufacturing Technology	60	21	25	56	81
	P3901	Applied Sciences in Engineering	83	5	47	41	88
	P3910	Physical and Materials Engineering	94	13	56	51	107
	P3913	Applications of Natural Sciences	27	7	18	16	34
	P3917	Forensic Engineering	18	0	3	15	18
	P3920	Metrology and Testing	21	10	16	15	31
FEKT	B2612	Electrical Engineering and Computer Science	38	0	38	0	38
	B2643	Electrical and Electronic Engineering Communication and Control Technology	2 956	71	2 714	313	3 027

	M2612	Electrical and Electronic Engineering	541	23	564	0	564
	N2612	Electrical and Electronic Engineering	12	0	12	0	12
	N2643	Electrical, Electronic, Communication and Control Technology	349	10	359	0	359
	P2643	Electrical and Electronic Engineering Communication and Control Technology	358	10	208	160	368
FIT	B2612	Electrical Engineering and Computer Science	8	0	8	0	8
	B2646	Information Technology	1 268	39	1 307	0	1 307
	M2612	Electrical Engineering and Computer Science	268	11	279	0	279
	N2612	Electrical Engineering and Computer Science	5	0	5	0	5
	N2646	Information Technology	194	10	204	0	204
	P2646	Information Technology	111	6	72	45	117
FCH	B2801	Chemistry and Chemical Technology	124	175	253	46	299
	B2901	Chemistry and Technology of Foodstuffs	32	180	192	20	212
	M2805	Chemistry and Environmental Technology	39	61	89	11	100
	M2806	Applied Chemistry	18	49	63	4	67
	M2808	Chemistry and Technology of Materials	50	32	77	5	82
	M2901	Chemistry and Technology of Environmental Protection	21	104	115	10	125
	N2805	Chemie a technolog. ochrany živ. prostředí	1	5	2	4	6
	N2806	Consumer Chemistry	1	0	1	0	1
	N2820	Chemistry, Technology and Properties of Materials	3	6	9	0	9
	N2901	Chemistry and Technology of Foodstuffs	1	20	13	8	21
	P1404	Physical Chemistry	15	32	29	18	47
	P1405	Macromolecular Chemistry	16	9	17	8	25
	P2805	Chemistry and Technology of Environmental Protection	16	25	21	20	41
	P2820	Chemistry, Technology and Properties of Materials	11	9	13	7	20
	P3911	Materials Science	8	2	1	9	10
FA	B3501	Architecture and Town-Planning	199	163	362	0	362
	N3501	Architecture and Town-Planning	85	71	156	0	156
	P3501	Architecture and Town-Planning	44	36	48	32	80

FaVU	B8206	Fine Arts	78	90	168	0	168
	N8206	Fine Arts	57	57	114	0	114
FP	B6208	Economics and Management	288	352	640	0	640
	B6209	Systems Engineering and Computer Science	303	106	409	0	409
	N6208	Economics and Management	494	434	637	291	928
	P6208	Economics and Management	67	36	37	66	103
BUT			**16 496**	**4 067**	**17 841**	**2 722**	**20 563**

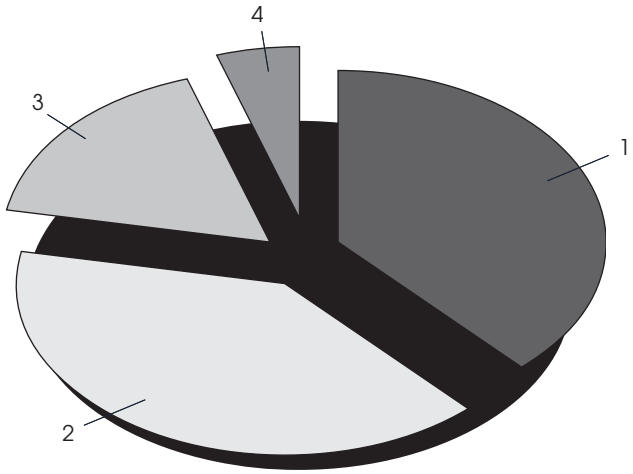
IV.9 – 2b GRADUATE NUMBERS

field group	master field group code	graduate numbers				total graduates
		Bachelor's	follow-up Master's	Master's	Ph.D.	
science	14	0	0	0	6	6
engineering	23 to 39	928	113	1,133	128	2,302
economics	62	137	334	0	12	483
culture, arts	82	33	46	0	0	79
BUT		**1,098**	**493**	**1,133**	**146**	**2,870**

IV.9 – 9b GRADUATE NUMBERS ARRANGED BY FACULTIES

faculty	programme type				total
	Bachelor's.	follow-up Master's	Master's	Ph.D.	
FCE	0	0	447	34	481
FME	275	50	333	31	689
FEEC	372	6	184	37	599
FIT	187	2	90	13	292
FA	81	47	0	8	136
FC	13	8	79	11	111
FBM	33	334	0	12	483
FFA	35	46	0	0	79
BUT	**1,098**	**493**	**1,133**	**146**	**2,870**

Graduate numbers by degree types



1 – 38% Bachelor's 2 – 40% Master's 3 – 17% follow-up Master's 4 – 5% Ph.D.

IV.9 – 9c GRADUATE NUMBERS ARRANGED BY DEGREE PROGRAMMES

faculty	degree programme	male students	female students	including international students	total
FCE	M3607	331	78	10	409
	M3646	21	17	1	38
	P3607	16	6	1	22
	P3646	7	2	0	9
	P3917	2	1	0	3
total FCE		**377**	**104**	**12**	**481**
FME	B2341	342	32	7	274
	B3901	0	1	0	1
	M2301	295	38	11	333
	N2301	25	1	6	26
	N3901	20	4	1	24
	P2302	11	1	1	12

	P2303	3	1	0	4
	P3901	4	0	1	4
	P3910	4	0	0	4
	P3913	3	1	0	4
	P3917	2	0	0	2
	P3920	0	1	0	1
total FME		**609**	**80**	**27**	**689**
FEEC	B2612	11	0	1	11
	B2643	352	9	17	361
	M2612	187	6	12	184
	N2612	6	0	0	6
	P2643	35	2	4	37
total FEEC		**582**	**17**	**34**	**599**
FIT	B2612	23	0	3	23
	B2646	156	8	22	164
	M2612	90	0	8	90
	N2612	2	0	0	2
	P2646	13	0	0	13
total FIT		**284**	**8**	**33**	**292**
FC	B2801	5	7	0	12
	B2901	0	1	0	1
	M2805	9	8	1	17
	M2806	3	12	0	15
	M2808	8	13	0	21
	M2901	6	20	0	26
	N2805	0	2	0	2
	N2901	0	6	0	6
	P1404	0	2	0	2
	P1405	3	1	0	4
	P2805	0	3	0	3
	P2820	1	0	0	1
	P3911	1	0	0	1
total FC		**36**	**75**	**1**	**111**

FA	B3501	41	40	1	81
	N3501	32	15	2	47
	P3501	6	2	0	8
total FA		**79**	**57**	**3**	**136**
FFA	B8206	17	16	2	33
	N8206	20	26	6	46
total FFA		**37**	**42**	**8**	**79**
FBM	B6208	67	70	6	137
	N6208	173	161	13	334
	P6208	7	5	0	12
total FBM		**247**	**236**	**19**	**483**
total BUT		**2,251**	**619**	**137**	**2,870**

IV.9 – 9d BUT DOCTORAL GRADUATES

fac.	name	thesis and supervisor
FCE	Ing. Zdenka Podešvová	Humidity and condensation in the claddings of wooden constructions. Supervised by doc. RNDr. Tomáš Ficker, DrSc.
FCE	Ing. Václav Veselý	Parameter of concrete used to describe fracture behaviour. Supervised by Ing. Zbyněk Keršner, CSc.
FCE	Ing. Dita Baničová	Analysis of influence of microwave radiation on wooden components of roof structures. Supervised by doc. Ing. Miloslav Novotný, CSc.
FCE	Ing. Roman Bura	Efficient energetic regeneration of residential prefabricated buildings. Supervised by Ing. Libor Matějka, CSc.
FCE	Ing. Radovan Machotka	Using methods of geodetic astronomy to determine the raise of the local quasi-geoid. Supervised by prof. Ing. Jan Fixel, CSc.
FCE	Ing. Monika Manychová	Applications of acoustic emission in building industry. Supervised by doc. Ing. Miloslav Novotný, CSc.
FCE	Ing. Pavel Berka	Sound insulating properties of building structures. Supervised by Ing. Danuše Čuprová, CSc.
FCE	Ing. Miroslav Stibor	Fracture parameters of quasi-fragile materials and their determination. Supervised by Ing. Zbyněk Keršner, CSc.
FCE	Ing. Libor Matějka	Forensic opinions on selected defects and failures in building structures. Supervised by doc. Ing. Leopold Lukašík, CSc.

FCE	Ing. Patrik Bayer	Modifications of the properties of composites base on alumino-silicate materials. Supervised by prof. RNDr. Pavla Rovnaníková, CSc.
FCE	Ing. Hynek Stančík	Influence of porous structure on the properties of the brick splinter. Supervised by Ing. Bohumil Novotný, CSc.
FCE	Mgr. Katarína Valouchová	Ensuring the stability of reservoir banks to prevent abrasive action. Supervised by doc. Dr. Ing. Miloslav Šlezingr
FCE	Ing. Michal Žoužela	Assessment of methods used to measure and evaluate the velocity fields of real prismatic routes with defined flow parameters with free surface. Supervised by doc. Ing. Jan Šulc, CSc.
FCE	Ing. Jiří Bureš	Experimental analysis of GPS measurement. Supervised by doc. Ing. Otakar Švábenský, CSc.
FCE	Ing. Ondřej Fuciman	Analysis of humidity processes of sheathing structures. Supervised by doc. Ing. Antonín Fajkoš, CSc.
FCE	Ing. Aleš Dvořák	Publishing geografic data on the intra/internet. Supervised by RNDr. Ladislav Plánka, CSc.
FCE	Ing. Miroslav Menšík	Statistic pressure flow models of ground water and its action on the subsoils of constructions. Supervised by prof. Ing. Jaromír Říha, CSc.
FCE	Ing. Petr Mráček	Thermal and energetic behaviour of glassed double facades of houses. Supervised by doc. Ing. Jiří Sedlák, CSc.
FCE	Ing. Michal Stehlík	Determining the material and transformation characteristics of masonry using a method of flat presses combined with an ultrasound impulse method. Supervised by prof. Ing. Jiří Adámek, CSc.
FCE	Ing. Jakub Vrána	Regeneration of technical equipment and facilities in residential houses. Supervised by Ing. Karel Čupr, CSc.
FCE	Ing. Milan Ostrý	Influence of the accumulation properties of materials with a phase change on the interior micro-climate. Supervised by Ing. Danuše Čuprová, CSc.
FCE	Ing. Vladimír Švehla	Diagnosing reinforcement corrosion in reinforced concrete structures. Supervised by prof. Ing. Rostislav Drochytka, CSc.
FCE	Mgr. Jan Martinek	Numeric simulation of acoustic oscillations in materials. Supervised by prof. RNDr. Zdeněk Chobola, CSc.
FCE	Mgr. Petra Trebuláková	Frequency inspection as a method for assessing the frost resistance of burnt and concrete roofings. Supervised by prof. RNDr. Zdeněk Chobola, CSc.
FCE	Ing. Tomáš Znajda	Modelling the process of air permeability of building materials with respect to energetic demands of building structures. Supervised by doc. RNDr. Ing. Stanislav Šťastník, CSc.
FCE	Ing. Lenka Nevřivová	Study of the microstructure of heat-resistant materials. Supervised by Ing. Karel Lang, CSc.

FCE	Ing. Hana Kučerová	Study of properties and joint-action of cement composite components and their influence on the resulting properties of cement pastes and concretes. Supervised by doc. Ing. Rudolf Hela, CSc.
FCE	Ing. Pavel Kůr	Monitoring the imperfections of a track grid. Supervised by doc. Ing. Pavel Zvěřina, CSc.
FCE	Ing. Barbora Dokládalová	Problems related to the dependence of the rent on the usual price of a flat. Supervised by prof. Ing. Albert Bradáč, DrSc.
FCE	Ing. Jaroslav Chovanec	Multi-criteria optimisation methods used for passing forensic opinions on constructions. Supervised by doc. Ing. Leonora Marková, Ph.D.
FCE	Ing. Petr Daněk	Problems connected with long term monitoring of hybrid bridge structures. Supervised by Ing. Pavel Schmid, Ph.D.
FCE	Ing. Věra Heřmánková	Load tests of walled objects, experimenting and modelling using the ATENA 2D computer program. Supervised by prof. Ing. Jiří Adámek, CSc.
FCE	Ing. Josef Klouda	Analysis of the designs, structures, and proportions of the Great Moravian Empire constructions. Supervised by doc. Ing. Milan Vlček, CSc.
FCE	Ing. Jiří Šlanhof	Cements and pastes for ceramic tiles: determining the shear gripping and designing testing methods for defined flexibilities. Supervised by Ing. Pavel Schmid, Ph.D.
FME	Ing. Jiří Štoček	Optimizing the material flow in a selected industrial plant. Supervised by doc. Ing. Břetislav Mynář, CSc.
FME	Ing. Petr Kundrát	Qualitative properties of generalized pantograph equation. Supervised by doc. RNDr. Jan Čermák, CSc.
FME	Mgr. Jana Hoderová	Semi-regular simplexes in the finite-element method. Supervised by prof. RNDr. Alexander Ženíšek, DrSc.
FME	Ing. Tomáš Vysloužil	Fracture mechanics of particle and fibre composites with fragile matrix. Supervised by prof. RNDr. Michal Kotoul, DrSc.
FME	Ing. Pavel Skácel	Computing and experimental modelling of deformation-stress states of elastomers and their interface to solid materials. Supervised by Ing. Jiří Burša, Ph.D.
FME	Ing. Pavel Rudolf	Study of shear layers to optimise the intake pipe of a whirl turbine. Supervised by prof. Ing. František Pochylý, CSc.
FME	Ing. Aleš Skoták	Whirl structures in the intake pipe of a water turbine. Supervised by prof. Ing. František Pochylý, CSc.
FME	Ing. Jiří Zapletal	Parametric oscillation in a hydraulic system with a piston pump. Supervised by doc. RNDr. Ing. Josef Nevrlý, CSc.
FME	Ing. Jiří Hájek	Calculations and optimisations of selected processes and devices with the existence of combustion. Supervised by prof. Ing. Petr Stehlík, CSc.

FME	Ing. Vít Kermes	Reducing the emissions of nitrogen oxides in combustion devices. Supervised by prof. Ing. Petr Stehlík, CSc.
FME	Ing. Karel Doubravský	Mathematical model of hardness distribution on bolts. Supervised by doc. RNDr. Bohumil Maroš, CSc.
FME	Ing. Michaela Balzarová	Barriers to ISO 14001:1996 implementation in a UK steel fabrication sector. Supervised by prof. Ing. Karel Kocman, DrSc.
FME	Ing. David Maňas	Workability of rubber and wear of rubber products. Supervised by doc. Ing. Imrich Lukovics, CSc.
FME	Ing. Michal Staněk	Modelling the process of polymer forming including the technological design of a tool. Supervised by doc. Ing. Miroslav Maňas, CSc.
FME	Ing. Radek Szabó	Expert systems used to diagnose insulation systems of electric rotating machines. Supervised by doc. Ing. Miloš Hammer, CSc.
FME	Ing. Jiří Svoboda	Fuzzy-neural networks in diagnosing insulation materials. Supervised by doc. Ing. Miloš Hammer, CSc.
FME	Ing. Robert Popela	Use of optimisation methods in the aerodynamic design of an airplane. Supervised by prof. Ing. Karol Fiľakovský, CSc.
FME	Ing. Simona Fialová	Pump for extra-corporeal blood circulation. Supervised by prof. Ing. František Pochylý, CSc.
FME	Ing. Jozef Poláček	Analysis of the dynamic stability of an airship. Supervised by prof. Ing. Karol Fiľakovský, CSc.
FME	Ing. Jaroslav Ženíšek	Monte Carlo simulations of diffusion in crystalline solids. Supervised by doc. RNDr. Jiří Spousta, Ph.D.
FME	Ing. Karel Němec	Influence of load conditions on the structure and properties of cast nickel super-alloys. Supervised by doc. Ing. Tomáš Podrábský, CSc.
FME	Ing. Tomáš Jakubík	Measurements and Numerical Simulations of Ambient-Turbulence Effects on Diesel-Fuel Sprays. Supervised by prof. Ing. Miroslav Jícha, CSc.
FME	Ing. Petr Janovský	Modelling human hearing. Supervised by doc. Ing. Vojtěch Mišun, CSc.
FME	Ing. Jindřich Nový	Digital filtering and Compression in Image Processing and Volume Renderlng. Supervised by prof. RNDr. Miroslav Druckmüller, CSc.
FME	Ing. Karel Kaleta	Analysis of the voltage state in the heat sprayed paint coatings. Supervised by doc. Ing. Oldřich Ambrož, CSc.
FME	Ing. Petr Jákl	Microscope with an optically locally held local probe. Supervised by doc. RNDr. Pavel Zemánek, Ph.D.
FME	Ing. Jan Ježek	Multiple optical tweezers and optical scalpel. Supervised by doc. RNDr. Pavel Zemánek, Ph.D.
FME	Ing. Albert Bradáč	Modelling the movement of a vehicle – the dodging manoeuvre. Supervised by prof. Ing. František Vlk, DrSc.

FME	Ing. Aleš Vémola	Problems related to a forensic opinion on the movement and braking of a vehicle in a general space arc. Supervised by prof. Ing. Milan Forejt, CSc.
FME	Ing. Dana Shejbalová	Assessing the quality of an engineering production process and products using selected methods. Supervised by doc. Ing. Jiří Pernikář, CSc.
FME	Ing. Vladimír Dvořák	Phase diagram and specific heat capacity of the SnF2 – NaF binary system. Supervised by prof. Ing. Oldřich Matal, CSc.
FEEC	Ing. Daniel Bečvář	On Current and Voltage Conveyors. Supervised by prof. Ing. Vladislav Musil, CSc.
FEEC	Ing. Eva Kadlecová	Automated system of calculating the reflecting surface of lights. Supervised by Ing. Pavel Fiala, Ph.D.
FEEC	Ing. Martin Zlomek	Effect of sudden drops in the feeding voltage on the action of an induction machine. Supervised by doc. Ing. Lubomír Brančík, CSc.
FEEC	Ing. Petr Hrnčiřík	Raster image electron microscopy by slow and Auger electrons. Supervised by Ing. Ilona Müllerová, DrSc.
FEEC	Ing. Vlasta Sedláková	Quality and Reliability Indicators of Thick Film Resistors Based on the Experimental Evaluation of Noise and Non-Linearity. Supervised by doc. RNDr. Pavel Hruška, CSc.
FEEC	Ing. Martin Plšek	Extracting a speech signal from the noise background in the spectral domain. Supervised by prof. Ing. Zdeněk Smékal, CSc.
FEEC	Ing. Abdelgawad Taher	Maximizing the data rate of discrete multi-tone systems using time domain equalization design. Supervised by prof. Ing. Zdeněk Smékal, CSc.
FEEC	Ing. Jiří Šebesta	Digital detection of the satellite PSK signals using a combined phase and timing estimate of symbols. Supervised by doc. Ing. Miroslav Kasal, CSc.
FEEC	Ing. Ahmad Khateb, Ph.D.	A novel technique for low voltage operational amplifiers. Supervised by prof. Ing. Vladislav Musil, CSc.
FEEC	Ing. Omer M. Salih	Mobility protocols and network issues for 3G. Supervised by Ing. Vít Novotný, Ph.D.
FEEC	Ing. Martin Vlk	Approximation symbolic analysis of linear circuits. Supervised by doc. Dr. Ing. Zdeněk Kolka
FEEC	Ing. Karel Čermák	Optimisation of opto-electronic velocity measuring devices based on spatial filtering method. Supervised by Ing. Aleš Prokeš, Ph.D.
FEEC	Ing. Vlastimil Navrátil	Modelling of magnetic-coupled radiation mechanism in electronic systems. Supervised by prof. Ing. Jiří Svačina, CSc.
FEEC	Ing. Jiří Starý, Ph.D.	Lead-free soldering – material and process compatibility in an inert and inert/reduction atmosphere. Supervised by prof. Ing. Jiří Kazelle, CSc.

FEEC	Ing. Dalibor Červinka	Starter/generator for a passenger car. Supervised by doc. Dr. Ing. Miroslav Patočka
FEEC	Ing. Lubomír Přikryl	Controlling the crane travel with active reduction of load swinging. Supervised by prof. Ing. Jiří Skalický, CSc.
FEEC	Ing. Martin Vondra	Voice transformation in voice-coders and TTS systems. Supervised by prof. Ing. Zdeněk Smékal, CSc.
FEEC	Ing. Petr Fiedler	Interoperability in the industrial automation. Supervised by prof. Ing. František Zezulka, CSc.
FEEC	Ing. Daniel Schwarz	Automated morphometry of MRI brain images with the use of deformable registration. Supervised by doc. Ing. Ivo Provazník, Ph.D.
FEEC	Ing. Josef Šíp	Detection of weak optical signals. Supervised by doc. Ing. Otakar Wilfert, CSc.
FEEC	Ing. Asterios Anagnostoudis	Localization calibration for three-dimensional data reconstruction in freehand ultrasonography. Supervised by prof. Ing. Jiří Jan, CSc.
FEEC	Ing. Milan Boštík	Voice analysis for stress detection. Supervised by doc. Ing. Milan Sigmund, CSc.
FEEC	RNDr. Jan Krejčí	Biosensors – methods of the output signal analysis. Supervised by doc. Ing. Ivan Szendiuch, CSc.
FEEC	Ing. Hynek Vychodil	Geometric properties of on-line identification. Supervised by prof. Ing. Petr Pivoňka, CSc.
FEEC	Ing. Martin Adámek	Optimizing the properties of thick-layer chemical sensors. Supervised by doc. Ing. Ivan Szendiuch, CSc.
FEEC	Ing. Jaroslav Skřivánek	Detection systems for ESEM. Supervised by doc. Ing. Josef Jirák, CSc.
FEEC	Ing. Tomáš Gubek	Active filters with electronically controlled parameters. Supervised by prof. Ing. Dalibor Biolek, CSc.
FEEC	Ing. Vít Matoušek	New method for direct measurement of refraction index of air with an optical resonator. Supervised by doc. Ing. František Urban, CSc.
FEEC	Ing. Martin Horák	Symbolic methods for circuit analysis and their implementation. Supervised by doc. Dr. Ing. Zdeněk Kolka
FEEC	Ing. Jiří Háze	New method of compensating for errors caused by the switched-capacitor technique in the AD converters. Supervised by prof. Ing. Radimír Vrba, CSc.
FEEC	Ing. Michal Skočdopole	AD converters with switched currents for sensorics. Supervised by prof. Ing. Radimír Vrba, CSc.
FEEC	Ing. Radek Stupka	Advanced methods of switched power-supply units. Supervised by doc. Dr. Ing. Miroslav Patočka.
FEEC	Ing. Luboš Sikora	Analysis, design, and optimisation of a ringless alternator for automotive industry. Supervised by prof. Ing. Vítězslav Hájek, CSc.
FEEC	Ing. Ivo Běhunek	Heat accumulation in solar systems. Supervised by Ing. Jan Gregor, CSc.

FEEC	Ing. Ondřej Franek	Numerical modelling of spherical array of monopoles using FDTD method. Supervised by prof. Dr. Ing. Zbyněk Raida.
FEEC	Ing. Milan Motl	Analysis of microwave structures using variational methods. Supervised by prof. Dr. Ing. Zbyněk Raida.
FEEC	Ing. Michal Polanský	New ARPDC method for improving the quality of robust control of nonlinear systems. Supervised by prof. Ing. Petr Vavřín, DrSc
FA	Ing. arch. Petr Dýr	Agricultural buildings in the Czech Republic – development and future use. Supervised by prof. Ing. arch. Mojmír Kyselka, CSc.
FA	Ing. arch. Miloslav Sohr	Reconstruction of squares in the Czech regional capitals after 1989. Supervised by Ing. arch. Gabriel Kopáčik, Dr.
FA	Ing. arch. Ladislav Mohelník	Space interpretation of an architectural and town-planning work. Supervised by doc. Ing. arch. Jaroslav Drápal, CSc.
FA	Ing. Markéta Čablová	Quality of public spaces and its improvement. Development factors of public spaces. Supervised by prof. Ing. arch. Jan Koutný, CSc.
FA	Ing. Dana Mičínová	Use of the urbanized land to enable integrated drainage. Supervised by doc. Ing. Zdeňka Lhotáková, CSc.
FA	Ing. Milan Přinosil	Drinking water supply in an urbanized environment. Supervised by doc. Ing. Zdeňka Lhotáková, CSc.
FA	Ing. Martin Navrkal	Architectural typology of economy housing. Supervised by doc. Ing. arch. Milan Stehlík, CSc.
FA	Ing. arch. Martin Ondrouch	Regionality of architecture. Supervised by doc. Ing. arch. Jaroslav Drápal, CSc.
FC	Ing. Markéta Hnilová	Isolation and characterization of plant antimicrobial compounds. Supervised by prof. Ing. Mojmír Rychtera, CSc.
FC	Ing. Eva Janoušková, roz. Marková	Determining the content of chlordans in food using a gas chromatology method. Supervised by doc. Ing. Miroslav Fišera, CSc.
FC	Ing. Roman Karmazín	Syntheses of precursors of ceramic materials by sol-gel methods in non-conventional conditions. Supervised by prof. RNDr. Jaroslav Cihlář, CSc.
FC	Ing. Jan Merna	Coordinating the polymeration of alkens by catalytic transition-metal-based systems. Supervised by prof. RNDr. Jaroslav Cihlář, CSc.
FC	Ing. Hana Šormová	Numeric simulations of optical spectra. Supervised by doc. RNDr. František Krčma, Ph.D.
FC	Mgr. Soňa Hermanová	Coordination polymeration of 1-alkens. Supervised by prof. RNDr. Jaroslav Cihlář, CSc.
FC	Ing. Vítězslav Frank	Preparation and technological properties of materials on the basis of sulphoaluminate hydrates. Supervised by doc. Ing. Jaromír Havlica, CSc.
FC	Ing. Petr Ptáček	Dispersion SiO2-based systems. Supervised by doc. Ing. Jaromír Havlica, CSc.
FC	Ing. Kamila Bezděková	Study of photocatalytic transformation of organic substance. Supervised by doc. Ing. Michal Veselý, CSc.

FC	Ing. Jan Kalfus	Viscoelastic properties of polyvinylacetate-hydroxyapatite nanocomposites. Supervised by prof. RNDr. Josef Jančář, CSc.
FC	Ing. Jana Zemanová	Using electromigration methods to determine the content of protein-like substances in foodstuffs. Supervised by doc. Ing. Miroslav Fišera, CSc.
FBM	Ing. Mgr. Jan Dovrtěl	Selected aspects of information system efficiency. Supervised by doc. Ing. Miloš Koch, CSc.
FBM	Mgr. Vladislav Grycz	Methodology for calculating the costs of telecommunication services. Supervised by doc. Ing. Zdeněk Sadovský, CSc.
FBM	RNDr. Zuzana Chvátalová	Atypic demand for selected commodities with the support of mathematical modelling methods. Supervised by doc. Ing. Miloslav Keřkovský, MBA
FBM	Ing. Jiří Luňáček	Evaluation of environmental investment in Czech companies. Supervised by prof. Ing. Petr Němeček, DrSc.
FBM	Ing. Přemysl Hoffmann	Customer value as a key factor of customer relations management. Supervised by doc. Ing. Vladimír Chalupský, CSc., MBA
FBM	Ing. Lucie Sýkorová	Accompanying services and their importance for company prosperity. Supervised by doc. Ing. Vladimír Chalupský, CSc., MBA
FBM	Ing. Romana Nývltová	Financial management of global companies. Supervised by doc. Ing. Mária Režňáková, CSc.
FBM	Ing. Eva Tomášková	Measuring market orientation and its influence of company performance. Supervised by doc. Ing. Vladimír Chalupský, CSc., MBA
FBM	Ing. Milan Beneš	Implementation methodology of knowledge management. Supervised by prof. Ing. Petr Němeček, DrSc.
FBM	Ing. Vladimír Hibš	Market disruption strategy for Czech engineering companies. Supervised by doc. Ing. Miloslav Keřkovský, CSc., MBA
FBM	Ing. Ivo Fišer	Automatic identification in the distribution of consumer products. Supervised by prof. Ing. Marie Jurová, CSc.
FBM	Ing. Vladimíra Kučerová	Environmental recycling economics in a company's water management. Supervised by prof. Ing. Mirko Dohnal, DrSc.
FIT	Ing. Martin Švec	Grammars with context conditions and their applications. Supervised by doc. RNDr. Alexandr Meduna, CSc.
FIT	Ing. Vladimír Bartík	Obtaining association rules from relational data. Supervised by doc. Ing. Jaroslav Zendulka, CSc.
FIT	Ing. Martin Drahanský	Biometric security systems – fingerprint recognition technology. Supervised by doc. Ing. František Zbořil, CSc.
FIT	Ing. Martin Heckel	Applying knowledge mining methods to textural analysis. Supervised by doc. Ing. Jaroslav Zendulka, CSc.
FIT	Ing. Vladimír Kutálek	Modelling and performance prediction of application-specific multiprocessor systems. Supervised by prof. Ing. Václav Dvořák, DrSc.

FIT	Ing. Petr Matoušek	Symbolic data structures for parametric verification. Supervised by prof. Ing. Miroslav Švéda, CSc.
FIT	Ing. Daniel Mika	Applying formal procedures to the design of a numeric circuit test controller. Supervised by doc. Ing. Zdeněk Kotásek, CSc.
FIT	Ing. Ondřej Ryšavý	Specifying and reasoning in the calculus of objects. Supervised by prof. Ing. Miroslav Švéda, CSc.
FIT	Ing. Martin Fědor	Algorithms for interactive real-time characters animation. Supervised by doc. Dr. Ing. Pavel Zemčík.
FIT	Ing. Stanislav Sumec	Automatic video-sequence editing. Supervised by doc. Dr. Ing. Pavel Zemčík.
FIT	Ing. Martin Dobšík	Computer animation of soft tissues. Supervised by doc. Dr. Ing. Pavel Zemčík.
FIT	Ing. Pavel Tišnovský	Hybrid particle systems. Supervised by doc. Dr. Ing. Pavel Zemčík.
FIT	Ing. Tomáš Ondráček	Adaptive multi-layer neural networks. Supervised by doc. Ing. František Zbořil, CSc.

IV. – 9e PRIZES AWARDED TO STUDENTS AND GRADUATES IN 2005

Rector's Prize for the best graduates		
	FCE	Ing. Pavel Fornůsek
	FME	Ing. Eva Žampachová
	FC	Ing. Lukáš Bružeňák
	FIT	Ing. Jiří Techet
	FFA	MgA. Marie Polášková
Josef Hlávka Prize		
	FCE	Ing. Tomáš Jiruška
	FME	Bc. Jaroslava Čápová
	FC	Ing. Dagmar Kamenářová
	FIT	Ing. Martin Švec
	FFA	MgA. Václav Ondroušek
Siemens 2004 Prize		
	FEEC	Aleš Čáp
	FEEC	Ing. Vlastimil Navrátil
	FIT	Ing. Martin Drahanský
	FIT	Ing. Lukáš Sekanina

PRECIOSA Foundation Prize		
	FME	Ing. Jindřich Nový, Ph.D.
		Marek Mančík
	FEEC	Ing. Roman Tkadlec
		Jolana Dvorská
	FIT	Zdeněk Mazal

IV.11 – 10 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	14	20,982	0	20,982
B	2	0	424	424
C	1	0	250	250
E	1	0	459	459
F	63	0	11,635	11,635
G	108	0	13,491	13,491
total	**149**	**20,982**	**26,259**	**47,241**

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 – consulting and information centres
E – university libraries
F – innovation of degree programmes
G – student creativity

IV.11 – 11 BUT INVOLVEMENT IN DEVELOPMENT PROGRAMMES IN 2005

Programme title	Solution provider	Funding received in thousands of CZK	
		Inv	Non-Inv
• Support for implementing new modular structure of degree programmes			
	doc. RNDr. Miloslav Švec, CSc.	3.546	14.252

• Integration project of courses taught in English, improving language skills, internationalisation of programmes			
	prof. Ing. Karel Rais, CSc.	1.1	9.7
• Integrated project of development of distance and combined programmes at BUT			
	doc. RNDr. Miloslav Švec, CSc.	0	12.85
• Integrated project of lifelong learning development at BUT			
	Ing. Vlastimil Bejček, CSc.	0	3.2
• Integration of information and communication technologies in support of multimedia-based teaching at BUT			
	Ing. Jaromír Marušinec, Ph.D.	7.012	4.988
• Joint pilot international educational projects			
	prof. Ing. Jan M. Honzík, CSc.	0	784
• student mobility	prof. Ing. Jiří Kazelle, CSc.	0	3.142
• university of the 3rd age at BUT	prof. Ing. Petr Vavřín, CSc.	120	1.195
• development of U3V infrastructure	prof. Ing. Petr Vavřín, CSc.	0	1.09
• Development of regional higher-education in cooperation with a higher vocational school			
	prof. RNDr. Miroslav Liška, DrSc.	0	890
• Preparation of new interdisciplinary degree programmes at BUT			
	doc. RNDr. Miloslav Švec, CSc.	0	1.28
• Strategic management development at BUT			
	prof. Ing. Karel Rais, CSc.	0	1.45
• GAUDEAMUS 2005, 12th educational fair			
	prof. Ing. Jan M. Honzík, CSc.	0	950
• System of BUT European study units integrated within BCES			
	prof. RNDr. Petr Dub, CSc.	200	1.74
• Development of Academic Centre of Student Activities for 2005			
	Ing. Jaroslav Švec	0	1.254
• Preparation for certification of Diploma Supplement and ECTS-Label			
	doc. RNDr. Miloslav Švec, CSc.	0	3.75
• Development of communication and information technologies at BUT			
	Ing. Jaromír Marušinec, Ph.D.	4.245	9.686
• Extension of on-the-job courses in selected fields of study			
	Ing. Vladimír Kotek	7.609	0

IV.15 – 2c NUMBER OF DROP-OUTS

study field group	group code	dropouts in degree programme				total dropouts
		Bachelor's	follow-up Master's	Master's	doctoral	
science	14	0	0	0	9	9
engineering	23-39	1,932	96	584	160	2,772
economics	62	96	108	0	10	214
culture, arts	82	3	6	0	0	9
BUT		**2,031**	**210**	**584**	**179**	**3,004**

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

Site	connection rate Mb/sec	node supervision	access components	
			2004	2005
Antonínská 1	10000	DNTM	BlackDiamond	BlackDiamondSummitX450
Božetěchova 2	10000	DTM	BlackDiamond	BlackDiamond
Gorkého 13	100	D	PC router	PC router
Kolejní 2	2000	DNT	Summit7iSummit48	SummitX450Summit1i
Kolejní 4	1000	DNTM	BlackDiamond	BlackDiamond
Kounicova 46/48	1000	DNT	Summit7i	SummitX450
Kounicova 67a	10000	DNTM	Summit48	BlackDiamondSummit48
Mánesova 12	1000	DNT	Summit1i	Summit1i
Poříčí 5	1000	DNTM	Summit5iSummit48	Summit7iSummit48
Purkyňova 93	1000	DNT	Summit7i	SummitX450
Purkyňova 118	1000	DNTM	Summit5i/Ix2x Summit7i	Summit5i/Ix2x Summit7i
Rybářská 13/15	1000	DNT	Summit48	Summit5iSummit48
Technická 2	1000	DNTM	BlackDiamondSummit1i	BlackDiamond Summit1i
Technická 8	1000	D	Summit1i	Summit1i
Údolní 19	1000	DNTM	Summit1iSummit48	SummitX450Summit48
Údolní 53	1000	DNTM	Summit5i	Summit5i
Veveří 95	1000	DNTM	BlackDiamond	BlackDiamondSummitX450
Technická 4	1000	D	Summit24	Summit24

*supervision level:
D – node accessibility
N – checking power supply
T – checking temperature
M – modem

VI.1 – 1 LIBRARY COLLECTIONS AND SERVICES

library	fac.	library units	acquisitions	loans	registered users	interlibrary loans	internat. loans
Central Library	BUT	6,905	350	380	1,480	700	113
Faculty Library	BUT	24,608	2,031	13,106	5,032	1,309	139
Faculty Library	FME	7,913	2,806	15,118	4,613	1,045	335
Library Inform. Centre	FCE	100,322	2,580	22,006	5,326	264	118
Faculty Library	FA	15,751	481	3,608	800	33	17
Scientific Inform. Centre	FBM	14,347	1,893	11,129	2,015	15	18
Faculty Library	FFA	6,768	360	2,531	379	9	6
Faculty Library	FIT	8,301	1,111	8,079	2,065	58	30
Fac. Libr. in Kolejní street	FEEC	1,411	936	942	349	0	0
Partial Libraries	FEEC	33,836	1,313	3,212	758	46	0

VI.2 – 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	4
Faculty Library in Kolejní street	FEEC	34	16
Partial Libraries	FEEC	26	0

VI.6 – 3 LIBRARY STAFF NUMBERS

library	faculty	with secondary education	with university education	total
Central Library	BUT	5	3	8
Faculty Library	BUT	5	2	7
Faculty Library	FME	6	0	6
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

VI. – 4 UNIVERSITY LIBRARIES, LIBRARIAN AND INFORMATION SERVICES

2005 increase in collections	13,021
Total collections	278,449
Number of titles and periodicals subscribed: – paper form – electronic form (estimate)	957 5,000
Week (physical) opening hours[1]	66
Number of loans for home study[2]	80,129
Number of users[3]	22,817
Number of study places	754
Number of volumes placed on the shelves	45,861

1) Number of opening hours of the library with the longest opening hours.
The opening hours of libraries do not add up!
The word physical means that personal visit to library rather than electronic communication is involved.
2) Including extended loans.
3) A user is a visitor who asked for loan for home study at least once in a calendar year.

VII. – 5a BUT INVOLVEMENT IN PROJECTS RECEIVING TARGETED FUNDING

progr. code	R&D support programme title	number of projects	funding received (thousands of CZK)
GA	Standard grants	112	72,180
GP	Post-doctoral grants	40	8,179
GD	Doctoral grants	9	14,005
LN	Research centres	7	72,117
LZ	Programme of support of newly qualified R&D workers	6	4,484
IF	Safe and economical transport	8	4,961
FI	IMPULS	20	11,249
FT	TANDEM	18	10,364
FF	PROGRES	5	1,215
1H	POKROK	6	4,069
FD	Consortium Project	6	2,059
IA	Grants of distinct research nature focussed on the research currently conducted mainly in the Academy of Sciences of the Czech republic	5	831
KJ	Junior research grant projects	4	920
1E	Information society (TP2 National Research Programme)	8	9,988
WB	Research and development focussed on the needs of regions	5	585
ST	National Security Office	3	791
1Q	Support for targeted research projects (National Research Programme PP2)	1	1,916
1G	Use of natural resources (National Research Programme)	1	410
1R	Landscape and future sites – 4 (National Research Programme)	1	480
SN	Rational use of energy and sustainable energy resources	2	334
LA	INGO	4	587
ME	KONTAKT	4	392
OC	COST	14	4,656
OE	EUREKA	5	1,200
OK	EUPRO	1	804
Total		**295**	**228,775**

VII. – 5b BUT INVOLVEMENT IN PROJECTS RECEIVING FUNDING FROM OTHER DOMESTIC AND INTERNATIONAL SOURCES

programme code	R&D support programme name	number of projects	funding received (thousands of CZK)
FP 5	5th EU Framework Programme	21	11,348
FP 6	6th EU Framework Programme	12	13,614
EU-FIF	European Contract – Eco-design Activities	1	30
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	118
DV splp.	Bilateral cooperation (Hungary, Germany, Poland, Austria, Slovakia, Slovenia, IVF)	15	costs charged on a continual basis
total		**52**	

VII. – 5c BUT INVOLVEMENT IN THE IMPLEMENTATION OF RESEARCH PLANS

Research Plan	Funding received for 2005 in thousands of CZK
Progressive building materials with the use of secondary raw materials and their influence on the service life of constructions	**15,775**
Environmentally and energetically controlled system of waste and biomass processing	18,095
Multifunctional homogeneous and heterogeneous materials based on synthetic polymers and biopolymers	22,461
Electronic communication systems and technologies of new generations (ELKOM)	24,665
Nanomaterials and nanostructures	20,500
New trends in microelectronic systems and technologies	22,450
Simulation modelling of mechatronic systems	20,975
Energy accumulation and optimisation resources in the sustainable development conditions	15,126
Total	**160,047**

VII. – 5d RESEARCH CENTRE PROJECTS

Faculty	Centre	solution provider	owner
FME	Centre of aviation and space research	prof. Ing. CSc. Antonín Píštěk	BUT
		solution co-provider	
FCE	Centre of integrated design of progressive building structures	prof. Ing. CSc. Jindřich Melcher	Czech Technical University in Prague
FME	Josef Božek research centre of combustion engines and automobiles	doc. Ing. CSc. Václav Píštěk	Czech Technical University in Prague
FME	Environmental centre of applied research of non-iron metals	doc. Ing. CSc. Luděk Ptáček	VUK Panenské Břežany, s. r. o.
FME	Research of engineering production equipment and technology	prof. Ing. CSc. Zdeněk Kolíbal	Czech Technical University in Prague
FEEC	Data, algorithms, decision making	prof. Ing. CSc. Jiří Jan	Czech Academy of Sciences, Institute of Information Theory and Automation
FEEC	Centre of applied computer science	prof. Ing. DrSc. Petr Vavřín	Czech Technical University in Prague

VIII.1 – 6 AGE OF UNIVERSITY ACADEMIC STAFF (on 31st December 2005)

age	academic position										scientists	
	professors		associate professors		senior lecturers		lecturers		instructors			
	total	women	total	women	total	women	total	women	total	women	total	women
under 29	0		0		32	6	82	22	1		9	1
30 to 39	2		14	1	159	19	73	23			13	4
40 to 49	10		46	6	107	40	27	15			6	
50 to 59	34	3	92	8	146	64	1	0			1	
60 to 69	67	3	106	11	83	26	3	2			9	1
over 70	19		15	3	2	0	2	0			3	
Total	**132**	**6**	**273**	**29**	**529**	**155**	**188**	**62**	**1**		**41**	**6**

VIII.2 – 7 NUMBERS OF INTERNAL (FULLTIME) AND EXTERNAL UNIVERSITY STAFF (PERSONS AND RECALCULATED NUMBERS) IN 2005

Staff		academic position					scientists	other staff
		professors	associate professors	senior lecturers	lecturers	instructors		
internal	actual number	131	273	523	184	1	33	1,511
	recalculated number	102.2	245.6	481.3	158.3	0.2	26.8	1,273.2
external	actual number	153	181	771	280	203	13	2,031
	recalculated number	1.9	2.4	6.8	5.1	4.1	0.3	61.2

VIII.5 – 10 NEW ASSOCIATED PROFESSORSHIPS AWARDED AT BUT IN 2005

fac.	name	field of research	appoint. date
FCE	Florián Aleš, Ing. CSc.	theory and construction of buildings	08.04.2005
FCE	Hirš Jiří, Ing. CSc.	theory and construction of buildings	08.04.2005
FCE	Hobst Leonard, Ing. CSc.	physical and building material engineering	07.01.2005
FCE	Bajer Miroslav, Ing. CSc.	theory and construction of buildings	01.11.2005
FCE	Bartoněk Dalibor, Ing. CSc.	geodesy and cartography	01.12.2005
FCE	Bydžovský Jiří, Ing. CSc.	physical and building material engineering	01.11.2005
FCE	Brožovský Jiří, Ing. CSc.	physical and building material engineering	20.12.2005
FCE	Keršner Zbyněk, Ing. CSc.	theory and construction of buildings	20.12.2005
FCE	Karmazínová Marcela, Ing. CSc.	theory and construction of buildings	01.12.2005
FCE	Marková Leonora, Ing. Ph.D.	forensic engineering	15.07.2005
FME	Haluza Miloslav, Ing. CSc.	construction and process engineering	07.02.2005
FME	Juračka Jaroslav, Ing. CSc.	construction and process engineering	24.05.2005
FME	Petráček Jiří, RNDr. Dr.	applied physics	22.02.2005
FME	Tomáš Jiří, RNDr. Dr.	applied mathematics	21.04.2005
FME	Kaiser Jozef, Ing. Ph.D.	applied physics	01.12.2005
FEEC	Gescheidtová Eva, Ing. CSc.	theoretic electrical engineering	29.03.2005

FEEC	Wilfert Otakar, Ing. CSc.	electronics and communications	29.03.2005
FEEC	Bártlová Milada, RNDr. Ph.D.	theoretic electrical engineering	20.06.2005
FEEC	Bauer Pavol, Ing. Dr.	heavy current electrical and power engineering	29.11.2005
FEEC	Beneš Petr, Ing. Ph.D.	engineering cybernetics	20.06.2005
FEEC	Fiala Pavel, Ing. Ph.D.	heavy current electrical and power engineering	20.06.2005
FEEC	Kozumplík Jiří, Ing. CSc.	electronics and communications	20.06.2005
FEEC	Novotný Vít, Ing. Ph.D.	electronics and communications	29.11.2005
FEEC	Toman Petr, Ing. Ph.D.	heavy current electrical and power engineering	25.10.2005
FEEC	Vorel Pavel, Ing. Ph.D.	heavy current electrical and power engineering	29.11.2005
FEEC	Zeman Václav, Ing. Ph.D.	electronics and communications	29.11.2005
FA	Pelčák Petr, Ing. arch.	architecture	10.05.2005
FA	Rusín Tomáš, Ing. arch.	architecture	22.11.2005
FBM	Pirožek Petr, Ing. Ph.D.	industry economics and management	19.10.2005
FC	Klučáková Martina, Ing. Ph.D.	physical chemistry	28.02.2005

VIII.5 – 11 NEW PROFESSORSHIPS AWARDED AT BUT IN 2005

faculty	name	field of research	appoint. date
FSI	Malenovský Eduard, doc. Ing. DrSc.	applied mechanics	01.05.2005
FSI	Šikola Tomáš, doc. RNDr. CSc.	applied physics	01.05.2005
FSI/FCE	Daněček Josef, doc. RNDr. CSc.	applied mathematics	01.11.2005
FSI	Dub Petr, doc. RNDr. CSc.	applied physics	01.11.2005
FSI	Foret Rudolf, doc. Ing. CSc.	materials science and engineering	01.11.2005
FSI	Franců Jan, doc. RNDr. CSc.	applied mathematics	01.11.2005
FSI	Vejvoda Stanislav, doc. Ing. CSc.	construction and process engineering	01.11.2005
FEEC	Provazník Ivo, doc. Ing. Ph.D.	electronics and communications	01.11.2005
FEEC	Vondrák Jiří, doc. Ing. DrSc.	electrical engineering and electronic technology	01.05.2005
FC	Zmeškal Oldřich, doc. Ing. CSc.	materials science and engineering	01.11.2005
FIT	Meduna Alexander, doc. RNDr. CSc.	computing and computer science	01.11.2005

IX.1 – 1 STUDY STAYS ABROAD

Programme	Government funding	Direct cooperation between universities / including development programmes	
		In Europe / incl. dev. prog.	outside Europe / incl. dev. prog.
students staying abroad		39/16	3/3
students staying at BUT	6	15	1
teachers staying abroad		14	
teachers staying at BUT	1	19	

X.2 – 1 SOCRATES/ERASMUS ACTIVITIES – COMPARING ACADEMIC YEARS

activity	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Student Mobility					
students	110	121	156	225	255
months	577	700	993	1 446	1,644
Teacher Mobility					
teachers	43	60	94	103	108
months	71	106	132	169	161

X.2 – 2 EU EDUCATIONAL AND VOCATIONAL PROGRAMS

programme	Socrates Erasmus	Socrates				Leonardo
		Comenius	Grundtvig	Lingua	Minerva	
projects	2		1*			5 + 1*
students staying abroad	424					29
students staying at BUT	140					5
teachers staying abroad	108					10
teachers staying at BUT	32					5
total subsidies in CZK thous.	**24,365**		**60**			**4,491**

** pilot projects*

X.2 – 3 OTHER PROGRAMMES

Programme	Ceepus	Aktion	others
projects	3	1	3
students staying abroad	12	1	6
students staying at BUT	28		4
teachers staying abroad	2		8
teachers staying at BUT	15		6
total subsidies in CZK thous.	**465**		

XI. – 1 NUMBER OF TITLES IN SERIES EDITED BY VUTIUM PRESS IN 2005

(by ISBN and ISSN)

textbooks	monographs	lectures	proceedings	scientific writings	journals	total
1	3	3	2	125	1	135

XI. – 2 NUMBER OF TITLES EDITED IN 2005 AT BUT

(by ISBN and ISSN)

Edited by	textbooks	monographs	lectures	proceedings	scientific writings	journals	total
FA	-	-	2	6	-	1	9
FCE	-	-	5	20	-	-	25
FFA	-	-	-	-	-	-	-
FEEC	-	-	20	22	-	-	42
FC	-	-	5	3	-	-	8
FIT	-	-	-	-	-	-	-
FBM	-	-	29	7	-	-	36
FME	1	2	15	15	-	-	33
Rectorate	-	-	-	5	-	-	5
VUTIUM	1	3	3	2	125	1	135
Total	**2**	**5**	**79**	**80**	**125**	**2**	**293**

XIII.1 – 9 STUDENT CARE – ACCOMMODATION, MEALS

BUT			
Total number of beds in the university halls of residence			6,965
Number of beds available to university students			6,786
Number of beds available to university staff			90
Number of beds available to university guests			80
Number of beds in hired facilities			201 until 30.062005
Number of applications for accomm. submitted in the current academic year			8,470
Number of applications for accommodation granted until 31st December 2005			7,223
Monthly charges in CZK for accomm. in the halls of residence	**students**	**staff**	**others**
A – cell system	1,720-2,600	2,000-3,000	
B – rooms with two and more beds	1,505-2,100		
C – other rooms			
Price of a meal in CZK	**students**	**staff**	**others**
	19 and 26.50	19 and 26.50	42,50 and 50
Total number of meals served in 2005	**students**	**staff**	**others**
	1,708,054	121,897	102,941

XIII.2 – 1 BUT HALLS OF RESIDENCE

Facility	**address**	**buildings**	**total capacity**
Pod Palackého vrchem halls of residence	Brno, Kolejní 2	A02, A03, A04, A05	3,407
Purkyňovy halls of residence	Brno, Purkyňova 93	B02, B04, B05, B07	2,250
Listovy halls of residence	Brno, Kounicova 46/48	C01, C02, C03	1,044
Mánesovy halls of residence	Brno, Mánesova 12	D1, D2	264
Total			**6,965**

XIII.3 – 1 BUT CATERING FACILITIES

facility address	meals served/day
Pukyňova canteen	6,500
Kounicova canteen	2,200
Kolejní canteen	1,500
Q Restaurant	700
Q Restaurant for staff	100
V Restaurant	900
Mozzarella pizzeria	2,000
Caffé Bar Piccolo	300
Antonínkská café	0
Purkyňova bistrot	0
Maruška bistrot	600
Sbnack bar at Purkyňova 118	0
Total	**14,800**

XIII.4 – 1 SCHOLARSHIPS (in thousands of CZK)

	subsidy from ministry of education	other resources			scholarship fund	total on 31.12.2005
		subsidies from other ministries	subsidies from abroad	non-subsidy resources		
total scholarships	123,054.43	199	7,717.35	4,772.74	1,361.30	137,104.82
including regular scholarships						
accommodation scholarships	16,547.98	0	0	0	0	16,547.98
doctoral students	71,833	0	0	0	0	71,833
international students	916.18	0	0	0	0	916.18
merit scholarships	5,649.80	0	0	36	623.80	6,309.60
SOCRATES-ERASMUS	12,298.48	0	3,244.92	0	0	15,534.40
short stays of intern. students	0	0	0	0	0	0
extraordinary scholarships	15,818	199	4,472.43	4,736.74	737.50	25,936.67

XIII.3 – 2 REPAIRS AND OTHER BUILDING PROJECTS FINANCED FROM BUT NON-DEVELOPMENT FUNDS (in thousands of CZK)

project description	amount
Reconstruction and completion of the Božetěchova campus	108
Repairs of building A2 at Technická	102
Putting the integrated building into operation	163
Multipurpose sports hall	43
Repairs of buildings A3, 5 and 6th floor at Technická 2	5,445
Addition to and repair of building D3 at Technická 2	157
Reconsruction of building no. 31 at Vříšť	49
Repair of toilettes in building A4 at Technická	1,398
FA – lecture hall no. 118 at Poříčí 5	22
Repair of roof at Technická 8	807
Repairs at FFA	350
Božetěchova campus – active elements, interior, access system	1,054
Božetěchova campus – structural stabilization, reconstruction of refectory and park	36
Repair of roof at Rybářská	1,324
Replacement of cabling in building U2, 3rd floor at Údolní 53	158
Moving telephone exchange at Technická	180
Replacement of fire security system on Technická campus	1,199
Total	**12,595**

XIV.3 – 1 STUDIES AND OPINIONS MADE

BUT	
Total	298

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

BUT	
Total	1,900

XIV.3 – 4 SUBSIDIES FROM THE NON-DEVELOPMENT FUNDS FOR PROJECTS OF NON-DEVELOPMENT NATURE – PART OF THE PROPERTY RENOVATION PROGRAMME (in thousands of CZK)

project	amount
Reconstruction and completion of Božetěchova campus	280
total	**280**

XIV.3 – 5 PROJECTS OF BUT HALLS OF RESIDENCE AND CANTEENS (in thousands of CZK)

project description	amount
Listovy halls of residence – reconstruction of emergency lighting	1,396
PPV halls of residence annex to and repairs of blocks A06, A03	2,761
PPV halls of residence, block A06 – new café	1,331
total	**5,488**

XIV.3 – 6a SUMMARY OF THE BUT DEVELOPMENT FUNDS SPENT ON BUILDING PROJECTS IN 2005 (in thousands of CZK)

project description	Ministry of Education	BUT	South Moravian Region	City of Brno	Foreign subsidies	State Environmental Fund	Total
Reconstruction and completion of the Božetěchova campus	209,740	2,158					211,898
Reconstruction of a former brewery in Božetěchova Street		1,308			704		2,012

State Technical Inspection for buildings A1–3, B2 in Technická street	2,499	-7					2,491
Repairs of building A2 in Technická street		2,334					2,334
Reconstruction of the PPV athletic stadium		1,926	3,393	2,000			7,319
Putting into operation of the integrated building		16,388					16,388
Installation of fire prevention system in Technická Street		532					532
Multipurpose sports hall	17,800	2,168					19,968
Overhaul of lifts at Žižkova 17		2,139					2,139
Overhaul of lifts in building A2 in Technická Street		1,799					1,799
Overhaul of lifts at Purkyňova 118		1,656					1,656
Repairs of building A3, 5th and 6th floors in Technická Street	2,730	6,717					9,447
Addition to and repair of building D3 in Technická Street		5,156					5,156
Reconstruction of building no. 31 at Vříšť		2,438					2,438
Installation of thermo-regulation valves in Technická Street	3,680	387					4,067
FA – lecture hall no. 118 in Poříčí Street		4,363					4,363
Repairs at Gorkého 13		214					214
Construction of an FEEC building at Technická 10		405					405
Addition to building 506 at Purkyňova 118		145					145
Thermal insulation, replacement of windows in block K4 of the Kolejní halls of residence	11,119						11,119
Modernization of boiler room on the PPV campus	1,800						1,800

The Božetěchova campus – active elements, interior	7,100	95					7,195
FME – burner testing room		1,971					1,971
FME – addition for hydraulic unit		1,323					1,323
Installation of photovoltaic system		-440				440	0
The Božetěchova campus – structural stabilizing, reconstruction of refectory and park	6,000	591					6,591
Building with cloakrooms in the athletic stadium at PPV		402					402
Structural stabilising of building no. 31 at Vříšť		1,568					1,568
Installation of equipment in the building at Vříšť		59					59
Total	**262,468**	**57,797**	**3,393**	**2,000**	**704**	**440**	**326,802**

XIV.3 – 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
Purkyňova halls of residence – reconstructions of reception halls	2,746
Purkyňova halls of residence – electronic fire protection system in server rooms	38
Listovy halls of residence – reconstruction of emergency lighting	1,493
Listovy halls of residence – technical upgrade of fitness centre	924
Listovy halls of residence – delivery and assembly of sun blinds	223
Listovy and K1/PPV halls of residence – Kolejnet computer network	1,254
PPV halls of residence – addition to and repairs of building A06, A03	7,422
Thermal insulation and replacement of windows in block K4 in Kolejní Street	439
PPV halls of residence – enlarging accommodation capacity	659
PPV halls of residence – reconstruction of room 106	142
TR, PPV, and Purkyňovy halls of residence – monitoring electricity	192
Kounicova canteen – reconstruction of waste coolers and freezers	780

Purkyňova canteen – reconstruction of fire monitoring and camera system	108
Reconstruction of Purkyňova canteen – arrangement and equipment of the dining hall	25
PPV halls of residence – block A06 PIZZA – air conditioning system	542
PPV halls of residence block A06 – new café	650
Total BUT Halls of Residence and Canteens	**17,637**

XIV. – 6c PURCHASES AND TRADING OF LAND (in thousands of CZK)

BUT	
Total	**6,196**

XIV.3 – 6d OVERVIEW OF TOTAL SPENDING ON BUT CONSTRUCTIONS
(in thousands of CZK)

	Ministry of Education	BUT	South Moravian Region	City of Brno	State Environmental Fund	total
Total BUT projects	**262,468**	**81,630**	**3,393**	**2,000**	**704**	**350,634**

XIV.3 – 7 DEVELOPMENT FUND SPENDING ON MACHINERY AND EQUIPMENT
(in thousands of CZK)

faculty/department	Asset Develop. Fund	grants	donations	foreign subsidies	total
FFA	1,022	905			1,927
FCE	9,314	5,403			14,717
FME	5,464	33,902	185		39,551
FIT	2,451	2,626			5,077
FA	1,773	0			1,773
FC	3,755	4,069			7,824

FBM	1,181	0			1,181
FEEC	11,377	19,970	901	932	33,180
CEC		320			320
CCIS	310	12,988			13,298
Rectorate	2,861	0			2,861
BUT Unit		2,380			2,380
BUT Halls of residence and Canteens	6,072	0			6,072
Total	**45,580**	**82,563**	**1,086**	**932**	**130,161**

XIV.3 – 8 IMPORTANT (selected) PROJECTS OF THE BUILDING COMMITTEE IN 2005

Project description	total costs in thousands of CZK
Reconstruction and completion of the Božetěchova campus	212,287
Reconstruction of a former brewery at Božetěchova 1	2,012
Reconstruction of the athletic stadium on the PPV campus	7,319
Putting into operation of the integrated building	16,552
Multipurpose sports hall	20,011
Repairs of building A3, 5th and 6th floors, at Technická 2	14,892
Addition to and repair of building D3 at Technická 2	5,313
Installation of thermoregulation valves in buildings A4-6, B1-3, in Technická Street	4,067
Construction of a FEEC building at Technická 10	405
Thermal insulation and window replacement in block K4 in Kolejní Street	11,558
Modernization of a boiler room on the PPV campus	1,800
– active components, interior, access system	8,250
Božetěchova campus – structural stabilizing, reconstruction of refectory and park	6,627
Cloakroom building of the athletic stadium on the PPV campus	402
PPV halls of residence – addition to and repairs of buildings A06, A03	7,422

XIV.6 – 12 EU STRUCTURAL FUNDS SUBSIDIES SPENT

Operational programme	Measure (title)	Project	Implementation time	Amount allotted in CZK thousands Non-Development/ Development	Amount allotted for 2005 in CZK thousands Non-Development/ Development
European Social Fund	3.2.OP RLZ	Innovation of engineering technology, industrial management, and production technology Bachelor's, Master's and doctoral programs	2005–2007	2,652	663
OP RLZ	Support for tertiary education, research and development	Centre of further education in water management	01.11.2005 – 31.10.2007	1,827	
Development of Human Resources	OP RLZ measure 3.2	CZ.04.1.03/ 3.2.15.1/0146	2005–2007	1,200	78
Total (for each operational programme)				**5,679**	**741**

Published by BUT in 2006,
Editor in Chief PhDr. Jitka Vanýsková,
Design and DTP dagmarah@email.cz,
Translation Karel Mikulášek, Ph.D.
Printed by Expodata-Didot,
300 copies.