

Faculty of Informatics

Annual Activity Report 2001

Dean:	Assoc. Prof. RNDr. Luděk Matyska, CSc.
Vice-deans:	Assoc. Prof. Ing. Jan Staudek, CSc. Assoc. Prof. Ing. Pavel Zezula, CSc. Assoc. Prof. Ing. Jiří Sochor, CSc.
Chairman of the Academic Senate:	Assoc. Prof. PhDr. Karel Pala, CSc.
Secretary:	RNDr. Lenka Bartošková

In the year 2001, the Faculty of Informatics continued preparations for the restructuring of its degree programme in order to fully harmonize it with the conclusions of the Bologna Declaration. Currently, accreditation materials for a consistently two-tier basic degree programme is being prepared in which the Faculty will offer two Bachelor's and two follow-up Master's programmes, together with a Master's teacher-training programme, to meet the ever-growing demand for graduates with profound theoretical knowledge as well as for graduates with more practical skills who are able to directly apply them in everyday practice. No major changes have been made in the post-graduate study. The final version of the accreditation materials in terms of their contents was approved by the Academic Council of the Faculty in November 2001.

In the area of research and development, academic staff of the Faculty successfully continued in activities encompassing areas, which, for the most part, connect to successful projects implemented through national and international grants. Activities in international projects of the 5th EU framework programme for processing of natural language were restarted.

Three long-term research projects entered in their third year, namely "Non-sequential Models of Computing", "Human-Computer Interaction, Dialogue Systems and Assistive Technologies" and "The Application of Computer Imaging in Microscopy". These projects, along with the information system security, represent the focus of research at the Faculty. Research into the issue of digital libraries continued through projects of the EU IST programme. In this area, the Faculty has become one of the main actors in the multimedia digital library programme in support of the SCHOLNET (IST-1999-20664) research project. It has also become a member of DELOS NoE (IST-1999-12262) "Network of Excellence" in the field of digital libraries. The Faculty is also involved in the following international projects: BALKANET (IST-2000-29388), QUIPROCONE (IST-1999-29064) and the Volkswagen-Stiftung project (I/75 946).

Other research areas in which the academic staff of the Faculty are particularly actively include theoretical informatics, specification-based systems, software engineering and programming methodology, computer networks, electronic typesetting and desktop publishing, scientific computation and data visualisation, information systems, multimedia and expert systems, and the impact of IT development in general. The Faculty of Informatics was a direct recipient of a comprehensive grant from the Grant Agency of the Czech Republic for research into virtual reality. Furthermore, academic staff of the Faculty worked on a total of 12 grants from the GA CR, five of which were joint projects, six grants were from the Higher Education Development Fund, one of which was joint project, five were grants

from abroad and three were grants which do not fall into any of the above categories. The total value of the grants received was almost 11 million Kč.

Research work at the Faculty is very closely connected with specialised research laboratories, funded mainly from grants and significantly supporting both applied and basic research. In 2001, the Faculty operated the “Laboratory of Natural Language Processing”, “Human-Computer Interaction Laboratory”, “Laboratory of Dialogue Systems”, “Laboratory of High-Resolution Cytometry” and “Laboratory of Parallel and Distributed Systems”. Apart from academic staff and students working on post-graduate studies, the best students from the Master’s programme also have the opportunity to become involved in the research activities of these laboratories. In research, the Faculty also co-operates closely with the Institute of Computer Science of MU, particularly in the area of digital libraries, computer networks, and scientific computation and visualisation.

The Faculty is the only school in the Czech Republic which is an active member of the European consortium “Euromasters in Language and Speech”. This year, the Faculty organized the EM summer school, with 22 students and 15 teachers mainly from the EU countries taking part in it. The Faculty is also a traditional organiser of the DATASEM conference, from now called DATAKON. It is the major national conference on database and information systems.

The Faculty continued to organize *The Colloquium in Informatics*, where the latest results of research and development in informatics are presented. At the colloquium, 12 foreign and 13 Czech speakers gave presentations. Thirteen Faculty members actively participated in the preparation of international conferences and congresses. The Faculty students took part in the team competition STEP AHEAD (2nd place) and the ACM Central Europe Programming Contest (17th place).

The Faculty of Informatics provides university-type courses with an emphasis on scientific training and theoretical foundations of the disciplines. The system of study at the Faculty is as open as possible to students and enables them to choose individual subjects as well as the overall orientation of their studies according to their particular interests.

At present, the Faculty offers training on the Bachelor’s, Master’s and Ph.D. levels. A number of subjects in study programmes are organised in co-operation with the Faculty of Science (particularly mathematics), while teacher-training courses are organized as inter-faculty studies. Students of other than teacher-training studies major in informatics and also subscribe to a minor secondary subject.

From the academic year 2002/2003 on, the applicants from secondary schools will only be allowed to enrol to Bachelor’s degree programmes, followed up by Master’s degree programmes, which will also be open to students who have completed their BA degrees at a different faculty or university (first of all at schools with similar specialisation as the FoI). Similarly, the Bachelor’s degree obtained at the FoI will enable students to continue at a different university in the Czech Republic or abroad.

Special attention has been paid to post-graduate studies in informatics, which the Faculty believes are the best it has to offer. The interest in this form of study is continuously growing. At present, the Faculty has 51 full-time and 15 combined study post-graduate students. In 2001, three students successfully completed their post-graduate studies. The Faculty is endeavouring to create the best conditions for the students to join in on research projects, and it expects scientific results in the form of quality dissertations and publication in renowned foreign journals or reviewed almanacs.

In all of its forms of study, the Faculty uses the credit point system, encompassing a combination of courses that are compulsory for a selected form of study, subjects that are compulsory electives, subjects for specific specialisations, and the elective courses chosen by the students themselves according to their own professional preferences. The elective courses, and to some extent also the other courses, may be chosen from the offer of other MU faculties.

The Faculty continued to keep up its wide international contacts with numerous foreign institutions. Twenty-two Faculty members were involved in work for various committees of international conferences boards of international professional societies (IFIP, IEEE CZ, TUG, ACM Chapter CZ and ER-CIM), or sat on editorial boards of scientific journals. Seventeen Faculty members were invited to take part in study-trips and series of lecture abroad, while two teachers from abroad gave courses at the

Faculty. Faculty members went on 134 trips abroad, most of which involved active participation in international conferences and seminars. The Faculty played host to 15 guests from abroad.

In the year 2001, active long-term co-operation in theoretical research continued with City University London (UK), the University of Namur (Belgium) and the Technical University of Munich (Germany). The Faculty maintained active co-operation with universities in Oxford (UK) and in Heidelberg (Germany) in research in the area of image analysis in cytometry. New contacts were made with counterpart institutions in Italy, Germany, Sweden, France, and Greece through the SCHOLNET project. Cooperation within the DELOS NoE network, which brings dozens of European and American facilities together, develops successfully.

In 2001, Faculty members published a total of 163 works, 74 of which were published in this country and 89 abroad. Four monographs were published abroad and 124 works in reviewed almanacs or journals. Other works include study materials and articles of a popular nature.

Honorary doctorates, medals and other awards

The MU Rector's Prize for Students with Excellent Academic Achievements went to Jan Obdržálek. The Faculty of Informatics Dean's Prizes for Excellent Academic Achievement was awarded to Martin Nečas, Jan Strejček, David Svoboda and Zdeněk Uher.