

# INFRASTRUCTURE DEVELOPMENT AT THE FACULTY OF ENGINEERING

Investment activities with corresponding capital investments were undertaken at the Faculty of Engineering in 2002, as part of the Rijeka University Development Program. The program was created with the purpose to solve key issues of the Faculty, i.e. to enable further planned development of this scientific and educational institution. After the construction of the Laboratory Building in 1966, it presented the first significant step of capital investments at the Faculty.

The investment cycle, starting in 2002 included urgent interventions of reconstructing and refurbishing of internal lighting and sanitary facilities in the building of the Faculty. At the same time, based on a contract of cooperation with CARnet, the first teleconferencing room at the Faculty, with capacity of 36 seats, was furnished and completely equipped. The room is fitted with audio, video and computer equipment as well as a network system enabling distance learning or all possible combinations of distance and classroom learning.

In the same year, after obtaining building permits, investments were continued with the expansion and reconstruction of the building. A new part has been added to the northern front of the existing building, and a two-level bridge between the Faculty's main building and the Laboratory building has been built, which serves as a communications channel.

Until 2005, the investment cycle consisted of three stages. The first stage, which was initiated in October 2002, included necessary infrastructure development, i.e.: reconstruction of the sewage water and fresh water systems, construction of fire-fighting hydrant network, rerouting of electric power lines away from the construction site, lightning conductor grounding system, foundations for the new part of the building, laying subterranean gas pipeline to the central heating boiler room, and reconstruction of the boiler room and installation of new boilers and necessary equipment needed for transition to natural gas.

The second stage included construction and installation works which were to be carried out until the completion of the new part of the building along with renovation of the facade of the old part of the building. These investments left the Faculty with 2850 m<sup>2</sup> of free space for new lecture rooms, classrooms, laboratories, offices, social facilities and a library and study room.

After the second stage has been completed, the third stage was initiated, comprising functional equipping of new rooms with furniture, laboratory and computing equipment, according to the purpose of each particular room.

Upon completion of the third stage, after 2005, constant efforts to further improve infrastructure and working conditions for teachers, researchers, students and other employees at the Faculty were continued. With the investments which were to a larger part financed by the Faculty's own resources, further maintenance works were introduced, which mostly refer to the reconstruction of the roof, enlargement and adjustment of the parking lot and the audio-visual surveillance and alarm systems installation. A great number of working areas have been reconstructed and adapted to functional requirements concerning the organizational hierarchy and needs of an increasing number of teachers and researchers, especially junior researchers.

In this brief outline, it is necessary to mention the most important scientific-research equipment supplied in this period: a mechanical test machine with a capacity of 40 tons for testing material strength at room, low and increased temperatures; supercomputer; spectrometer; thermographic system; laser anemometer; laser interferometer system; stereo microscope; furnace for induction hardening; phonometer and other scientific equipment and devices. This is the equipment that will enable attaining of set goals of research within scientific and other projects conducted at the Faculty. It is also supposed to open paths for a closer collaboration with the local economy.

None of this, above mentioned, would have been possible without constant support of the University of Rijeka, and the Ministry of Science, Education and Sports and their strong commitment in the realization of the developmental strategy of Science and Higher Education.

Investments which were briefly summarized in the text above have enabled and contributed to successful activities at the Faculty of Engineering, Rijeka University, providing qualitative study programs in Mechanical Engineering, Naval Architecture, Electrical Engineering and Computer Science according to the standards of the Bologna Process. It can also be concluded that the Faculty has met basic conditions for further development according to plans, as well as for the adjustment to European and global trends.

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