



**Choices and Responsibilities:  
Higher Education in the Knowledge Society**

**Programme on Institutional Management in Higher Education (IMHE)**

Heading for Knowledge Creation

Towards Research Based University Structure

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Education, Research and Service to society are the three basic functions of well established universities which should be balanced according to local and global developments in terms of being competitive at national, regional and global levels. This paper analyzes the transformation process which has taken place in Istanbul Technical University since 1996 under the ITU 2001 and ITU 2005 initiatives. These initiatives that have been designed to restructure the university and to strengthen its research capacity to compete worldwide are outlined and assessed.

These two comprehensive undertakings have created powerful continuous quality improvement systems which allowed the university to achieve ABET accreditation for all the engineering programs as well as recognized research excellence in certain areas such as:

Computational science and engineering,

Computer science and engineering

Molecular biology, biotechnology,

Material science and engineering,

Satellite communication and remote sensing,

Aerospace engineering

Undergraduate and graduate programs have been restructured to ensure continuous quality improvement and new multi-disciplinary undergraduate and graduate programs have been created to meet the needs of scientific and technological development.

The university has also managed to raise funds to provide the requisite infrastructure and has made significant investments in a wide range of disciplines with the support of its alumni, partners in industry, local and central government. ITU has created an efficient and effective structure for fund raising and for the implementation of the projects. University-industry relationship has been reformulated and ITU Technopolis project, which was launched in 1996, has become the focal point in the university's future plans.

Research and educational infrastructure have been upgraded. Human resources have been developed in a way to facilitate the institution's efforts toward reaching its goals. Benchmarking and quality improvement processes have been carried out continuously to achieve solid results. Indicators for the evaluation of achievements have been set and continuously measured and discussed. Feedback loops have been implemented in order to ensure further developments.

The aim of the paper is to demonstrate the transformation process of a well established university which dates back to 1773.