

THE BOLOGNA DECLARATION AND PLANNED FOLLOW-UP AT THE VSB – TECHNICAL UNIVERSITY OF OSTRAVA

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Editor's Note:

The article below summarizes the planned response by VSB to the Bologna Declaration of which the Czech Republic is a signatory. The response aims to transform the education system at VSB into one more familiar to educators elsewhere, particular those in the U.S. and Asia.

I invite those of you who are interested in this issue, especially if you are from one of the signatory nations, to share with us your ideas on how we can contribute to promoting the implementation of the goals of the Declaration through our experience in international cooperation. I would appreciate a brief report on what your institution is doing or planning to do as a result of this Declaration. If there is enough interest, we may be able to schedule a panel discussion at a future ICEE or other appropriate forums.

For those of you who may not be familiar with it, the Bologna Declaration was signed in June 1999. It represents a formal agreement at the cabinet level by 29 European countries to initiate and coordinate efforts to enhance the employability and mobility of citizens, and to increase the international competitiveness of European higher education. This "European Space" for higher education is to be completed by the year 2010. Among the objectives:

- 1. Adoption of a system of comparable degrees;*
- 2. Adoption of a new structure for undergraduate and graduate studies in all countries, with the first degree to be relevant to the labor market and requiring no less than 3 years of study;*
- 3. Adoption of a comparable credit system that covers lifelong learning activities;*
- 4. Adoption of a European dimension in quality assurance with comparable criteria and methods; and*
- 5. The elimination of obstacles to the mobility of students, trainees, graduates, teachers, researchers, and higher education administrators.*

Since the signing of the Declaration, signatory countries are initiating government programs to start "convergent reforms." Universities and related consortia are making plans for systemic change. Ministers of Education of signatory countries are meeting in May 2001 to assess progress and make further plans.

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1. Introduction

The Velvet Revolution (1989) started the political, social and economic changes in the Czech Republic, which have influenced the Czech higher education (HE) sector, particularly technical universities, and brought some assets and negations:

Assets:

- academic freedom and university autonomy
- abolition of „numerus clausus“
- ending of international isolation, new contacts
- improving of HW and SW facilities
- implementation of credit system of study

Negations:

- lower interest in engineering studies
- fall of the social reputation of technical professions
- increasing problems of big factories, former traditional partners of technical universities
- chaotic way of a transformation of secondary education
- bad stay of foreign languages

The development in the nineties can be characterized by:

- diversification of existing HE institutions (new faculties, new study programs of humanities and social sciences, implementation of bachelor study programs → 22,1% in 1999)
- establishment of new HE institutions
- establishment and development of a new type of HE institutions (higher professional schools) both state and non-state
- since 1998 private HE institutions
- increasing number of students of HE institutions (113 thousand in 1989 → 193 thousand in 2000)
- increasing number of students calculated for 1 teacher (9,2 in 1989 → 14,7 in 2000)
- two new laws on higher education (1990, 1998)

2. The Bologna Declaration

The Bologna Declaration specifies the idea of the Europe of Knowledge and defines the common goal: to create European space for HE in order to enhance the employability and mobility of citizens and to increase the international competitiveness of European higher education; the European space for HE should be completed in 2010.

A set of specified objectives includes:

- adoption of a common framework of readable and comparable degrees, „also through the implementation of the Diploma Supplement“;
- introduction of undergraduate and postgraduate levels in all countries, with first degrees no shorter than 3 years relevant to the labor market;
- ECTS (the European Credit Transfer System) – compatible credit systems also covering lifelong learning activities;
- European dimension in quality assurance, with comparable criteria and methods;
- elimination of remaining obstacles to the free mobility of students and teachers.

The Bologna Declaration was signed by 29 European countries that undertook to reform the structures of their HE systems in a convergent way.

3. The present situation at the Czech technical universities

- The Czech technical universities have traditionally provided five years engineering study (master degree), which is considered as pregraduate one. After the Velvet revolution some of them have implemented a new form of study in the Czech HE system – the three years bachelor study, but only with the modest success. There were three main reasons for it:
- no tradition in the Czech Republic (**who** is bachelor and **what** is able to do?)
 - ambiguous definition of bachelor studies in the Higher Education Law (1990)
 - short time at universities to introduce bachelor studies

It led to problems:

- creation of two groups of Bachelors: those who will continue on with a Master (engineering) program and those who do not
- only a formal division of originally Master programs into two parts for the formers
- minimal interest of the labor market for the latter's (lack of information)
- they were comprehended by society as unsuccessful university students
- nearly all of them tried to continue their study through a compensatory year

4. The main objectives of further transformation

The general issues in engineering education in the Czech Republic are:

- more competitive environment for technical universities as to fresh students
- decreasing support from the industry

- balance between quantity and quality (a rapid increase in enrollment needs the diversification of academic offerings)
- public demand on move from elite to the mass HE (14% in 1989, 33% in 1999, 50% in 2005 of the nineteen's)
- balance between concrete demands of a local industry and a global labor market
- influence not only by the Czech Legislation, but also by the gradual integration into European structures (Europe of Knowledge; the Bologna declaration)
- governmental push towards shorter studies and finishing study in time
- development of lifelong learning; credit-rated lifelong learning activities
- secondary education not too convenient to the engineering education
- relatively very strict division of particular engineering fields of study

I needs and the new HE Law valid since 1999 and changing situation at the labor market allow the further step of transformation. Its main objectives might be considered as follows:

- to introduce a modular structure of study programs which enables at least two successful endings of a study
- to increase an "employability" of graduates which is connected with their mobility, language preparation, social interactive skills, willingness to further education etc.
- to decrease drop-out rates at maintaining the quality of a study
- to increase both horizontal and vertical students mobility
- to incorporate a lifelong learning into accredited study programs (credit-rated lifelong learning)
- to increase an access of graduates from other HE institutions
- to increase the effectiveness of funds for education

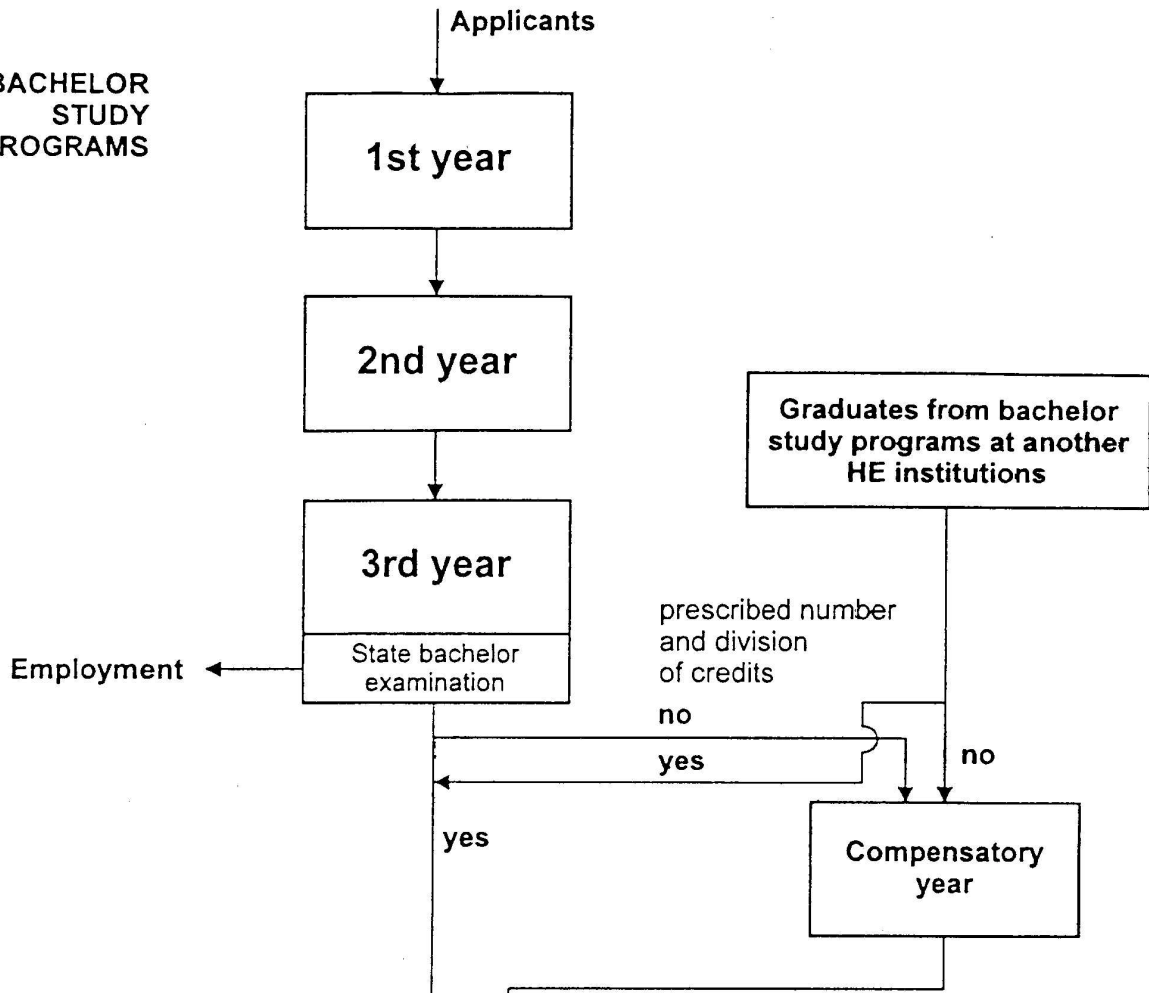
The possible scheme of the structural HE at the Technical University of Ostrava can be seen at the picture. It looks very simply, but the creation of its making sense content shall not be so simple. Some aspects, which must be respected, are:

- emphasis on distinct aims of particular degrees of study
- creation of acceptable mechanisms and criteria for quality evaluation in particular degrees of study
- implementation of a structural system of study will need of principle overwork of current study plans including subject syllabuses
- emphasis on an attractiveness for foreign students (parallel courses in English language)
- possibilities of interdisciplinary studies (making use of the Faculty of Economics and the University of Ostrava)
- Economy of a study (common first part of a study at all technical faculties etc.)

5. Conclusion

It is necessary to continue in a transformation process of the Czech engineering education. Both the new Higher Education Law and significant part of potential employers (mainly with foreign capital) promote it. Further development needs co-ordination and co-operation not only within the Czech Republic but also within the Europe.

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