Cooperation in International Educational Programmes as a Way to Joint Higher Education Degrees

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PRESENTATION OBJECTIVE

TO GIVE AN OVERVIEW OF THE UNIVERSITY OF CHEMICAL TECHNOLOGY AND METALLURGY (UCTM - Sofia, Bulgaria) ACTIVITIES, RELATED TO THE DEVELOPMENT AND IMPLEMENTATION OF JOINT DEGREES THROUGH AN ACTIVE ACADEMIC MOBILITY UNDER EUROPEAN EDUCATIONAL PROGRAMMES.
CONTENT

- UCTM – ACADEMIC PROFILE;
- BG HIGHER EDUCATION – WHAT HAPPENED AFTER 1989 CONNECTED TO THE INTERNATIONAL COOPERATION;
- WHY INTERNATIONAL EDUCATION IS NEEDED;
- PARTICIPATION OF UCTM IN EU EDUCATIONAL PROGRAMMES FOR HIGHER EDUCATION;
- JOINT DEGREE OPTIONS;
- JOINT AND DOUBLE DEGREES AT UCTM;
- EMPLOYMENT OF GRADUATES.
THE UNIVERSITY
UCTM – ACADEMIC PROFILE

- **FOUNDED IN 1963**
- **3000 STUDENTS, 400 STAFF**
- **BOLOGNA PROCESS – FULLY IMPLEMENTED**
  - **BACHELOR DEGREE COURSES** – CHEMICAL TECHNOLOGY, CHEMICAL ENGINEERING, METALLURGY, MATERIALS SCIENCE, BIOTECHNOLOGY, BIOMEDICAL ENGINEERING, ECOLOGY, CONTROL ENGINEERING, INDUSTRIAL MANAGEMENT;
  - **MSc courses** in the above mentioned area of studies;
  - **PhD DEGREES** - RESEARCH BASED
- **COURSES – TAUGHT IN FOREIGN LANGUAGES:**
  - CHEMISCHE VERFAHRENSTECHNIK (GERMAN);
  - CHIMIE INDUSTRIELLE (FRENCH);
  - MATERIALS SCIENCE (ENGLISH) – MSc;
  - ENVIRONMENTAL PROTECTION (ENGLISH);
- **ECTS – ALLOCATED FOR ALL COURSES**
- **EUROPEAN DIPLOMA SUPPLEMENT**
- **ACTIVE PARTICIPATION IN EU EDUCATIONAL PROGRAMMES (ACADEMIC MOBILITY)**
- **ADULT EDUCATION – DEPARTMENT OF DISTANCE and CONTINUING EDUCATION**
- **COLLABORATION WITH OTHER BG UNIVERSITIES**;
- **RESEARCH PROJECTS** – managed by the Scientific and Research Department
- **COLLABORATION WITH INDUSTRY** – through industry funded projects
## Bulgarian Higher Education – What Happened After 1989 Connected to the International Cooperation and Mobility

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Before 1989</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Autonomy</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Flexibility of Curricula (elective subjects)</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>International Cooperation</td>
<td>LIMITED</td>
<td>GLOBAL</td>
</tr>
<tr>
<td>Participation in International Educational Programmes</td>
<td>NO</td>
<td>YES (Tempus, Socrates, LLP, Erasmus+)</td>
</tr>
<tr>
<td>Curricula Taught in Foreign Languages</td>
<td>NO</td>
<td>YES – German, English, French</td>
</tr>
<tr>
<td>Participation in University Consortia</td>
<td>NO</td>
<td>YES – Erasmus Mundus</td>
</tr>
<tr>
<td>Credit Transfer System</td>
<td>NO</td>
<td>ECTS – Fully Implemented</td>
</tr>
</tbody>
</table>
WHY INTERNATIONAL EDUCATION IS NEEDED

- Global economy, global communications and global job options;
- Managers and investors trust the quality of their own educational systems;
- University quality label and the University location play important role for the selection of employees;
- Joint degrees could be considered as a transfer of a quality label between Universities from different countries
PARTICIPATION OF UCTM IN EU EDUCATIONAL PROGRAMMES FOR HIGHER EDUCATION

UCTM GENERAL POLICY CONCERNING THE INTERNATIONAL MOBILITY OF STUDENTS

- **OUTGOING STUDENTS SHOULD COVER HIGH ACADEMIC AND LANGUAGE STANDARDS;**
- **TEACHERS PLAY A KEY ROLE** IN INITIATING AND EXECUTING **ERASMUS BILATERAL AGREEMENTS** AS WELL AS IN **SELECTING STUDENTS** FOR MOBILITY; THEY ARE ADDITIONALLY STIMULATED TO PREPARE THEIR COURSES IN GLOBALLY SPOKEN LANGUAGES
- **BG DOUBLE AND JOINT DIPLOMA STUDENTS** SHOULD BE ENROLLED AT UCTM AND THEY MUST SPEND A PERIOD(S) OF STUDY AT THE PARTNER UNIVERSITY;
- **UCTM HAS OPTIONS FOR** **TAILOR MADE MSc COURSES** FOR ATTRACTING MORE INCOMING INTERNATIONAL STUDENTS;

IHES
Tehran 29-30 April 2017
PARTICIPATION OF UCTM IN EU EDUCATIONAL PROGRAMMES FOR HIGHER EDUCATION

MAIN ACTIVITY – STUDENT AND STAFF MOBILITY UNDER Tempus, Erasmus, Erasmus Mundus and Erasmus +

OTHER - JOINT DEVELOPMENT OF STUDY CURRICULA (Tempus, Erasmus);
- THEMATIC NETWORKS (Erasmus).

RESULTS:

- 2% OF UCTM STUDENTS GET ERASMUS SCHOLARSHIPS AND SPEND A PERIOD OF STUDY ABROAD EVERY YEAR;
- MAJORITY OF OUR ERASMUS PARTNERS IS FROM GERMANY.
- ~ 50% OF GRANTS ARE FOR STUDENTS AND STAFF GOING TO GERMANY;
- CHEMICAL ENGINEERING AND ENVIRONMENTAL PROTECTION ARE THE MOST PREFERRED THEMATIC FIELDS
JOINT DEGREE OPTIONS

- Inter-institutional agreements based on the national legislation (certification of graduates – document signed by participating Universities – at least two);
- Erasmus – Mundus and Erasmus + sub – programmes (funded projects for Joint MSc and PhD courses) – diploma from the University where the students have been initially enrolled. Students have periods of study abroad at the project partner Universities.
JOINT DIPLOMA IN ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

- Developed under Tempus programme (UK, Germany, Belgium, Bulgaria);
- Based on intensive academic staff exchange;
- Development of new lecture and laboratory courses;
- Adoption of new teaching methods;
- Compulsory outgoing mobility for students;
- Incoming staff mobility for teaching;
- Delivered in English.
OUTCOMES

EUROPEAN MASTERS DEGREE CERTIFICATE

The Certificate for the European Masters Degree in
ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT
is awarded to
SVETLANA GEORGIIEVA TRIFONOVA

who has completed the requirements of the course and satisfied the examiners.

This degree is awarded in collaboration with the universities named below which participated in all aspects of teaching of the course and in examining the candidate for the award of the European Masters Degree.

University of Chemical Technology & Metallurgy, Sofia, Bulgaria
D.S. Trenčiansky University, Nitra, Slovakia
The Gauss University of Bratislava, Slovak Republic
The Free University of Brussels, Belgium
The International Technological University, UNIST, Incheon, S. Korea

Professors & Tutors

International Technological University

International Technological University

Signature

Tehran 29-30 April 2017

IHES
GRADUATES
AND THE
INTERNATIONAL LABOR MARKET
(CLASS OF 2010)
DOUBLE AND JOINT DEGREES WITH GERMANY

- 24 years of experience - since 1993;
- Jointly developed with:
  - Technical University Hamburg- Harburg;
  - Otto von Guericke University of Magdeburg;
  - Leibniz University of Hanover.
- Support:
  - 2 DAAD Project (1 for Stability Pact);
  - 2 TEMPUS Projects;
  - 1 ERASMUS/Socrates PROG Project.
OUTCOME

DOUBLE DIPLOMA
WITH OTTO VON GUERICKE UNIVERSITY OF MAGDEBURG

STUDY SCHEME
OUTCOME

Joint Diploma with the Technical University of Hamburg - Harburg
MOBILITY BETWEEN UCTM AND GERMAN PARTNERS

- 385 students to Germany from 2005 to 2015.
- High number of double degrees (135 BSc and 128 MSc)

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>Hannover</th>
<th>TUHH</th>
<th>OvG</th>
<th>Andere DUni</th>
<th>SUMME</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTEN</td>
<td>Anzahl</td>
<td>Monate</td>
<td>Anzahl</td>
<td>Monate</td>
<td>Anzahl</td>
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<tr>
<td>Praktikum</td>
<td>99</td>
<td>126</td>
<td>6</td>
<td>12</td>
<td>14</td>
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<td>15</td>
<td>82</td>
<td>30</td>
<td>170</td>
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<tr>
<td>SUMME</td>
<td>132</td>
<td>222</td>
<td>58</td>
<td>245</td>
<td>155</td>
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</tbody>
</table>
EMPLOYMENT RESULTS

- German Companies Worldwide
- PhD students in Germany
- PhD students in BG
- German companies in BG
- BG companies
CONCLUSIONS

- Student and staff international mobility contributes considerably to the transparency and a real comparison of the content and quality of study curricula;
- Development and implementation of courses leading to the international joint and double degrees depends on the national legislations and institutional regulations;
- Joint international degrees intensify the international mobility;
- International education in general and joint or double degrees in particular create much more globally distributed employment options.
THANK YOU FOR YOUR ATTENTION