SIMILARITIES AND DIFFERENCES BETWEEN SURVEYOR’S EDUCATION IN KIEV AND BELGRADE AT UNIVERSITY LEVEL

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Universities for comparison

National university of Construction and Architecture (KNUCA) – Department of surveying and cadastre (Ukraine)
and
University of Belgrade (UB) - Faculty of Civil Engineering - Department of geodesy and geoinformatics (Serbia)
Subjects for comparison

Ukraine’s

*BSc program* - “Geodesy, cartography and surveying”
*MSc program* - “Surveying and Cadastre”

Serbian’s

*BSc program* “Geodesy”
*MSc program* - “Land Management”

Main goals for comparison

- Investigate and appreciate the possibilities for mutual recognition of studies and facilitate student’s and teacher’s mobility
- Define the minimum of common program content that is enough for diploma recognition or mobility requirements for the new student’s generation
### Procedure of comparison

Programmes were divided into seven general groups:

| I. Fundamental courses (mathematics, physics, descriptive geometry, electronics…) | V. Legal courses |
| II. Surveying courses (all subjects related to measurements, equipment, processing and mapping) | VI. Economic courses |
| III. GeoInformation technology courses (GIS, Databases, Informatics, Programming…) | VII. Others (general background courses) |
| IV. Land Management courses (Cadastre, Spatial Planning, Land Consolidation…) | Practice |

### Structure of the BSc level at KNUCA

- I - 17%
- II - 37%
- III - 8%
- IV - 13%
- V - 4%
- VI - 7%
- VII - 14%
Structure of the MSc at KNUCA Speciality “Surveying and cadastre”

Structure of the BSc level at UB
Structure of the MSc level at UB “Land Management”

Comparison BSc and MSc levels

<table>
<thead>
<tr>
<th>Block</th>
<th>Ukraine</th>
<th>Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BSc</td>
<td>MSc</td>
</tr>
<tr>
<td>I Fundamental courses</td>
<td>35,25</td>
<td>0</td>
</tr>
<tr>
<td>II Surveying courses</td>
<td>79</td>
<td>0</td>
</tr>
<tr>
<td>III Geoinformation technology courses</td>
<td>15,75</td>
<td>5,25</td>
</tr>
<tr>
<td>IV Land Management</td>
<td>27,25</td>
<td>8,75</td>
</tr>
<tr>
<td>V Legal courses</td>
<td>7,5</td>
<td>6,75</td>
</tr>
<tr>
<td>VI Economic courses</td>
<td>15,25</td>
<td>2,25</td>
</tr>
<tr>
<td>VII General background courses</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Final Work (diploma work, examinations)</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Total number ECTS:</td>
<td>245</td>
<td>60</td>
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</tbody>
</table>
DIFFERENCES
BSc

In addition to differences in structure of modules

Regarding the BSc
The programmers duration are unequal
Ukraine’s program lasts 4 years and takes 245 ECTS
Serbian’s program lasts 3 years and takes 180 ECTS

There is essential difference in final works
State exam in Ukraine
Final synthetic work in Serbia;

DIFFERENCES AND SIMILARITIES
MSc

In addition to differences in structure of modules

Regarding the MSc program

The programs duration are unequal
Ukraine’s program lasts 1 year and takes 60 ECTS
Serbian’s program lasts 2 years and takes 120 ECTS

Final work is the same
Thesis takes 30 ESTC
Total knowledge (BSc & MSc)

It is interesting to compare total amount of knowledge that is taken after university education overall. The total durations and ECTS are nearly equal (not counting the difference in 5 ECTS). Two total programs are nearly equal in Fundamental subjects, Legal and Economic courses, differences consist in proportions of disciplines in BSc and MSc programs. There are difference in Surveying, Land Management and Geoinformation groups in favour to Serbian's side.

Changes to Higher Education Law

One significant difference could be pointed out: Very large block of general, humanitarian disciplines on Ukraine's BSc level curricula. In 2010 the changes to Higher Education Law were accepted: Block of general, humanitarian disciplines was decreased from 36 ESTC to 16,5 ESTC in favour of professional disciplines.
CONCLUSIONS

Analysing two education levels some interesting questions have been opened and request an answers

Are these two programmes obtain similar profiles of the future professions?

What are the basic aims of BSc and MSc programmes in both countries?

Are these differences results of the market profession needs or teaching staffs made seriously imposed on curricula contents?

In spite of all the differences when we see BSc and MSc programme together in both countries, they are more similar and in final produce similar skills and knowledge.

CONCLUSIONS

The main conclusions

The efforts on making the education process in accordance to the Bologna rules and to the future market needs should be continued

Both countries agree, the overarching framework of qualifications made on European level should be the basement for the future activities.
Thanks for your attention