The 10th European Congress of Higher Agricultural Education (ECHAE)

The Bologna System in Agriculture and Forestry degrees in Spain.

Jaume Lloveras and Javier Arantegui
Agronomy – Agricultural/Forestry Engineering

Past plans of studies in Spain

3-year degree. Agricultural/Forest Technical Engineer.
5-year degree. Agricultural/Forest Engineer.

Possibility of becoming Agricultural/Forest Engineer with two additional courses after the Technical Engineer degree.

The 3-year degree is a traditional degree with many job opportunities in the industry or in government.
Agronomy – Agricultural/Forestry Engineering

Recent approved plans of studies in Spain
......to start in the next 2010-2011 course.

4 - year degree (240 ECTS credits).
Agricultural/Forest Engineer *(with different specialties)*.
*(The name of the degree depends on the university)*

+ 1-2 year Master (60-120 ECTS credits)
‘Official master’ Master Agricultural/Forest Engineer.
# Plans of studies

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<th>Course</th>
<th>Past system Option 1</th>
<th>Past system Option 2</th>
<th>Present/new system</th>
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**Agricultural/Forest Engineer**
# Plans of studies

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Agricultural/Forest Engineering
Agronomy – Agricultural/Forestry Engineering

**Reasons for the ‘new’ planning**

In Spain, the agronomists/forest are engineers, with the legal rights for planning and designing agricultural and food producing facilities.

The professional associations, of the higher degree Engineers (5 years) pushed the government for a five years degrees. **Finally → 4 - year degrees.**
ECTS DISTRIBUTION for AGRICULTURAL ENGINEERS

Basic subjects for Engineers (60)
Subjects common to agriculture (60)
Subjects for specialty (48)
Optional subjects (60)
Final project (12)

Similar to all Agric. degrees in Spain

One academic course = 60 ECTS Credits

BSc Degree

Máster (60 - 120)

MASTER
New plans of studies for Agric. Engineers

Minimum of 60 ECTS credits per course

Approximate distribution

1st course
Mathematics, physics, chemistry, biochemistry, biology, technical drawing, economy, computing.

2nd course
Topography, construction, electricity, engines, ecology, genetics, basic animal and crop production, etc.

3th course
Field crops, pomology, horticulture, animal production, agric. and animal production facilities, irrigation systems, food science and technology, food processing, agric. engines, landscape, etc.

Depending on the specialty

4th course
Advanced courses of the previous subjects, depending on the specialty and Project end of studies
Conclusions

The new programs will increase the number of years for obtaining a University degree.

Many Universities with Agricultural/Forestry schools disagree with the new system, because it does not add anything really new, many schools already had a two level system.
Thank you

Campus of ETSEA (School of Life Sciences Engineering)