

ICE/IStructE/ACED Annual Conference

Bologna - the impact on UK university degrees

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2nd May 2007



Issues to be covered

- Brief introduction to the Bologna process.
- What are the concerns for Civil / Structural Engineering degrees ?
- How should we move forward ?



The Bologna Declaration

The aim of the Bologna Declaration is to create a European Higher Education Area by 2010 to foster employability and mobility in Europe¹.

The Declaration is an intergovernmental agreement signed by the UK Government in 1999.

At present there are 45 signatories, 25 of which are EU countries.



The Bologna Declaration

The decision making process is carried out through an intergovernmental process by Ministers from the signatory countries meeting at biennial summits to move the process forward¹.

The Ministerial summits:

Prague 2001, Berlin 2003, Bergen 2005
& London 16 -18 May 2007.



Bologna Declaration – June 1999

6 key objectives:

- System of easily readable and comparable degrees.
- Two cycle degrees (bachelor, master).
- System of credits eg ECTS to promote mobility.
- Promotion of mobility for students and teachers.
- European co-operation in quality assurance.
- Promotion of the European dimension.



Prague - May 2001

- Lifelong learning to build a knowledge-based society.
- Involvement of students and institutions.
- Promoting European Higher Education Area to students in Europe and beyond.



Berlin - September 2003

- Quality assurance:
 - overarching qualifications framework.
 - ECTS as an accumulation and transfer system.
- All students graduating from 2005 to receive a Diploma Supplement.



The Bologna Declaration - Action line 2

Adoption of a system essentially based on three cycles (undergraduate, postgraduate & doctoral).

The first cycle should last a minimum of 3 years while no length is specified for the second cycle masters qualification¹.



The European Higher Education Area (EHEA)

The Framework for Qualifications of the EHEA adopted at the Bergen summit in 2005 includes typical credit ranges for first (180 - 240 ECTS credits) and second (90 -120 ECTS credits with a minimum of 60 credits at the second cycle level) cycles¹.



How does the UK model fit?

- Two cycle degrees – but generally shorter than emerging mainland norm.
(UK: 3+1; many mainland: 3+2).
- Credit-based system, but not based on ECTS.



How does the UK model fit?

- MSc degrees are normally 180 UK CATS credits (approx 90 ECTS credits) and hence should be compliant.
- MEng degrees are normally 120 UK CATS credits (approx 60 ECTS credits) in addition to 360 CATS credits (approx 180 ECTS credits) at undergraduate level.

Integrated MEng degrees normally = 480 CATS credits



How does the UK model fit?

However, Bologna suggests that the MEng degree should be between 90 to 120 ECTS credits with at least 60 ECTS credits at masters level.

Bologna MEng degree = $(60 \times 3) + 90 = 270$ ECTS credits
= approx 540 UK CATS credits.

Consequently the integrated MEng degree appears to be 30 ECTS credits below the minimum Bologna requirement.



How should we move forward ?

To redress this anomaly, 60 CATS credits (approx 30 ECTS credits) may need to be added to the integrated MEng degree.

This could be achieved by:

- Work – based learning.
- The inclusion of more modules.
- An extended project.
- A five year degree.
- A full calendar 4th year.



Questions we need to consider

Do we need to enhance our MEng degrees ?

If so, how best to achieve this ?



Thank you for listening.

