

# THE BOLOGNA PROCESS

Towards the European Higher  
Education Area

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- ◎ The Bologna Process aims to **create a European Higher Education Area by 2010**, in which students can choose from a wide and transparent range of high quality courses and benefit from smooth recognition procedures.



- ◎ The Bologna Declaration of June 1999 has put in motion a series of reforms needed to make European Higher Education more compatible and comparable, more competitive and more attractive for Europeans and for students and scholars from other continents.
- ◎ The three priorities of the Bologna process are: (1) Introduction of the three cycle system(bachelor/master/doctorate), (2) quality assurance and (3) mutual recognition of qualifications and periods of study.

- ① 1) Adoption of a system of **easily readable and comparable degrees**, also through the adoption of the **Diploma Supplement**
- ② 2) Adoption of a **system of 2 main cycles**, undergraduate and graduate; access to the second cycle requires successful completion of the second cycle.
- ③ 3) Establishment of a **credits** system –such as **ECTS**.
- ④ 4) Promotion of **mobility** for students and teachers

- ⑤ 5) Promotion of European cooperation in **quality assurance** with a view to developing comparable criteria and methodologies
- ⑥ 6) Promotion of the necessary **European dimensions in higher education**, particularly with regards to curricula development, inter-institutional cooperation, mobility schemes and integrated programs of study, training and research.

# ● The European Higher Education Area

## ● Participating countries

- Albania, Georgia, Norway, Andorra, Germany, Poland, Armenia, Greece, Portugal, Austria, Romania, Azerbaijan, Hungary, Russian Federation, Belgium, Iceland, Serbia, Bosnia-Herzegovina, Ireland, Slovak Republic, Bulgaria, Italy, Slovenia, Croatia, Latvia, Spain, Cyprus, Liechtenstein, Sweden, Czech Republic, Lithuania, Switzerland, Denmark, Luxembourg, Turkey, Estonia, Malta, Ukraine, Finland, Moldova, United Kingdom, The Former Yugoslav Republic of Macedonia, Montenegro, France, Netherlands

## ● Participating organisations

- European Commission Council of Europe, UNESCO, European Centre for Higher Education, European University Association, European Association of Institutions in Higher Education, European Students' Union, European Association for Quality Assurance in Higher Education, International Pan-European Structure BUSINESSEUROPE

- Every second year the Ministers meet to measure progress and set priorities for action. After Bologna (1999), they met in Prague (2001), Berlin (2003) and Bergen (2005). They met again in London (2007) and in reconvene Leuven (April 2009).
- At the London meeting of 17/18 May Ministers adopted **a strategy on how to reach out to other continents.**
- They also gave the green light to create a **Register of European Quality Assurance Agencies.**

- ◎ All across Europe, countries and universities are engaged in a process of modernisation. From a EU perspective, these reforms are:
- ◎ Reinforcement of the cooperation in vocational education and training (Copenhagen process)
- ◎ Establishment of synergies between Copenhagen and Bologna
- ◎ European Qualifications Framework for lifelong learning (EQF)
- ◎ Transparency of qualifications (EUROPASS), credit transfer (ECTS - ECVET) and quality assurance (ENQA - ENQAVET).
- ◎ link between the European Higher Education Area and the European Research Area (EHEA and ERA).

- The European Commission aims to support these efforts with the help of programmes like [Erasmus](#), [Tempus](#) in respect of neighbouring countries, and more globally through [Erasmus Mundus](#).
- The Commission also works to support the modernisation agenda through the implementation of the [7th EU Framework Programme for Research](#) and the [Competitiveness and Innovation Programme](#), as well as the [Structural Funds](#) and the [European Investment Bank](#).

- The Commission contributed to the Bologna Stocktaking exercise through the contributions of the [Eurydice network](#), which produced country analyses as well as comparative overviews.
- In May 2007, the Commission published a [special Eurobarometer Survey](#), which shows strong and encouraging support for modernisation among teaching professionals in higher education.

# Credits system

- **What is a credit system?**
- A credit system is a systematic way of describing an educational programme by attaching credits to its components.
- The definition of credits in higher education systems may be based on different parameters, such as student workload, learning outcomes and contact hours.

# ECTS

- ⦿ ECTS was introduced in 1989, within the framework of Erasmus, now part of the Socrates programme.
- ⦿ ECTS is the only credit system which has been successfully tested and used across Europe. ECTS was set up initially for credit transfer.
- ⦿ The system facilitated the recognition of periods of study abroad and thus enhanced the quality and volume of student mobility in Europe. Recently ECTS is developing into an accumulation system to be implemented at institutional, regional, national and European level. This is one of the key objectives of the Bologna Declaration of June 1999.

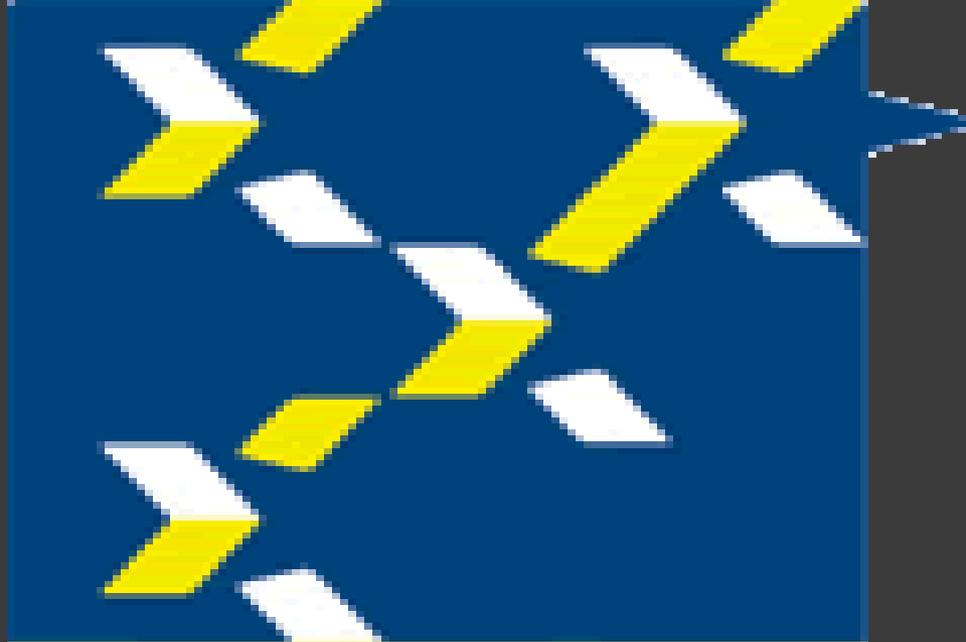
- ECTS is based on the principle that 60 credits measure the workload of a full-time student during one academic year. The student workload of a full-time study programme in Europe amounts in most cases to around 1500-1800 hours per year and in those cases one credit stands for around 25 to 30 working hours.

- ◎ Credits are allocated to all educational components of a study programme (such as modules, courses, placements, dissertation work, etc.) and reflect the quantity of work each component requires to achieve its specific objectives or learning outcomes in relation to the total quantity of work necessary to complete a full year of study successfully.

- ① The Learning Agreement contains the list of courses to be taken with the ECTS credits which will be awarded for each course. This list must be agreed by the student and the responsible academic body of the institution concerned. In the case of credit transfer, the **Learning Agreement has to be agreed by the student and the two institutions concerned before the student's departure and updated immediately when changes occur.**
- ① The Transcript of Records documents the performance of a student by showing the list of courses taken, the ECTS credits gained, local or national credits (if any), local grades and possibly ECTS grades awarded. In the case of credit transfer, the Transcript of Records has to be issued by the home institution for outgoing students before departure and by the host institution for incoming students at the end of their period of study.

# What is the Diploma Supplement (DS)?

- The Diploma Supplement is a document attached to a higher education diploma providing a standardised description of the nature, level, context, content and status of the studies that were successfully completed by the graduate. The Diploma Supplement provides transparency and facilitates academic and professional recognition of qualifications (diplomas, degrees, certificates).



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# The *sui generis* HES of Greece

- ⦿ 6 years Primary School
  - ⦿ 3 years High School
  - ⦿ 3 years Lyceum
  - ⦿ Panhellenic exams to enter Greek Universities (*numerus clausus*)
  - ⦿ Faculty of Engineering (**Civil Engineering**, Architecture, Mechanical Eng., Electrical Eng, Chemical Eng, Surveying, etc.
- 5 years 1<sup>st</sup> Degree (MSc in Engineering)
- 1 or 1,5 years 2<sup>nd</sup> Degree (MSc –specialization)
- 3-5 years PhD (Doctoral dissertation)

## Example: Civil Engineering Department- Aristotle University of Thessaloniki

- ◎ 150 students after successful exams
- ◎ 5 years undergraduate curriculum with 4 study directions (structural, hydraulics, geotechnical, management)+Diploma Thesis
- ◎ General degree in Civil Engineering

# Graduate studies (specialization):

- ① 1) Earthquake resistant structures design (20 students)
- ② 2) Environment (20 students)
- ③ 3) Management of civil engrg projects (25 students)
- ④ 4) Transportation\* (25 students)
- ⑤ 5) Rehabilitation of historical buildings\* (30 students)

2<sup>nd</sup> Degree – MSc Specialization

# Graduate studies (PhD):

Selection

1<sup>st</sup> year: participation to courses with exams

Next year **Research activity** (possibly with a Research project, but not always)

Presentation and examination of a dissertation in front of an exam committee

Doctoral Degree (PhD)

- Most European Union countries  
(Engineering Faculties):

3 – 4 years Bachelor

2-1 years MSc

3-6 years PhD

- Greece:

5 years MSc in Engineering

1-1.5 year MSc specialization

3-6 years PhD

# ECTS

## European Credits Transfer System

- ◎ **Credits** for each course, practice, project, thesis, etc. recognised after the respective **examination**
- ◎ **Each semester=750-900 workhours = 30 credits**

Responsible admin. Organ: General Assembly of the Department

- ◎ **Activity corresponding to less than 2 credits is not permitted**

# Transcript of Records

- Certifies the student's progress and presents analytically all the courses he followed and successfully passed and includes the teaching and credit units and the grades/ranking.
- It is written in the local language and in English.
- **For Mobility:** +Learning Agreement

# Ranking system

- Grade A 10% Best successful
- Grade B 25% next successful
- Grade C 30% next successful
- Grade D 25% next successful
- Grade E 10% next successful
  
- FX Failed but...
- F Fail

■ Promotion of **mobility** for students and teachers

- ◎ **SOCRATES – ERASMUS** (2 semester maximum duration-European mobility scheme)
- ◎ **ERASMUS MUNDUS** (International mobility scheme)
- ◎ **SOLON** (National mobility scheme)

Promotion of European cooperation in **quality assurance** with a view to developing comparable criteria and methodologies

Promotion of the necessary **European dimensions in higher education**, particularly with regards to curricula development, inter-institutional cooperation, mobility schemes and integrated programs of study, training and research.

**EXAMPLE: TIME NETWORK (Imperial, Delft TU, Aachen TU, AUTH, ETH Zuerich & Ecole Polytechnique)**  
**4 years + 2 years = 6 years instead of 5 years**  
**Leads to 2 MSc's**

Thank you very much for your attention!