TUNING PROJECT 2000 - 2004

GENERAL PRESENTATION

The Tuning Methodology

Tuning Management Committee

The TUNING project is a project by and for universities.

It is the Universities' response to the challenge of the Bologna Declaration

TUNING MOTTO

Tuning of educational structures and programmes on the basis of diversity and autonomy

WHY TUNING?

The objectives:

- **To implement the Bologna - Prague - Berlin process on university level**
- **To find ways to implement two cycles**
- **To identify common reference points from discipline and university perspective**
- **To develop professional profiles and comparable and compatible learning outcomes**
- **To facilitate employability by promoting transparency in educational structures (easily readable and comparable degrees)**
- **To develop a common language which is understood by all stakeholders (Higher education sector, employers, professional bodies)**

Berlin Communiqué

(19 September 2003)

Degree structure: adoption of a system essentially based on two main cycles

"Ministers encourage the member States to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of qualifications for the Higher Education Area."

TUNING METHODOLOGY:
learning outcomes and competences

General tendencies in higher education:

- **Shift of paradigm: moving from a staff oriented approach to a student centred approach**
- **Less specialised academic education in the first cycle**
- **More flexibility in first and second cycle programmes**

What should a student know, understand and be able to do to be employable?

The Tuning Methodology

- **Line 1: Generic competences**

  Consultation with graduates, employers and academics on the importance of 30 generic competences and an evaluation of how well HE institutions develop them.

- **Line 2: Subject specific competences (knowledge, understanding and skills)**

  Mapping of subject areas and development of common reference points and subject specific competences of each of the pilot disciplines.

- **Line 3: ECTS as a European credit accumulation system new perspectives**

  Development of ECTS as a tool for programme design: basis is student workload measured in time.

- **Line 4: Mapping of approaches to teaching / learning and assessment in different countries**
- **Line 5: Quality enhancement**

Why Focus on competences?

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Educational Structures
in Europe

1. Further transparency of professional profiles in study programmes and emphasis on learning outcomes
2. Shift to a more learner oriented approach to education
3. Growing demands of a lifelong learning society which requires more flexibility
4. Need for higher levels of employability and citizenship
5. Enhancement of the European dimension of Higher Education
6. Need for a shared language for consultation with all stakeholders

THE TUNING QUESTIONNAIRE

FOCUS ON GENERIC COMPETENCES (GENERAL ACADEMIC SKILLS)

TARGET GROUPS:

- GRADUATES
- EMPLOYERS
- ACADEMICS

WHAT ARE THE MOST IMPORTANT COMPETENCES TO BE EMPLOYABLE INDEPENDENT OF ONE'S SUBJECT AREA?

ARE THESE ACTUALY TAUGHT AND TO WHAT EXTENT?

THE TUNING QUESTIONNAIRE

TYPES OF COMPETENCES MEASURED:

- **Instrumental competences**: cognitive abilities, methodological abilities, technological abilities and linguistic abilities
- **Interpersonal competences**: individual abilities like social skills (social interaction and co-operation)
- **Systemic competences**: abilities and skills concerning whole systems (combination of understanding, sensibility and knowledge; prior acquisition of instrumental and interpersonal competences required)

THE TUNING QUESTIONNAIRE

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TYPES OF COMPETENCES MEASURED:

Instrumental competences:

- Capacity for analyses and synthesis
- Capacity for organisation and planning
- Basic general knowledge
- Grounding in basic knowledge of the profession
- Oral and written communication in your native language
- Knowledge of a second language
- Elementary computing skills
- Information management skills (ability to retrieve and analyse information from different sources)
- Problem solving
- Decision-making

THE TUNING QUESTIONNAIRE

TYPES OF COMPETENCES MEASURED:

Interpersonal competences:

- Critical and self-critical abilities
- Teamwork
- Interpersonal skills
- Ability to work in an interdisciplinary team
- ability to communicate with experts in other fields
- Appreciation of diversity and multiculturality
- Ability to work in an international context
- Ethical commitment

THE TUNING QUESTIONNAIRE

TYPES OF COMPETENCES MEASURED:

Systemic competences:

- Capacity for applying knowledge in practice
- Research skills
- Capacity to learn
- Capacity to adapt to new situations
- Capacity for generating new ideas (creativity)
- Leadership
- Understanding of cultures and customs of other countries
- Ability to work autonomously
- Project design and management
- Initiative and entrepreneur spirit
- Concern for quality
- Will to succeed

Methodology and Results

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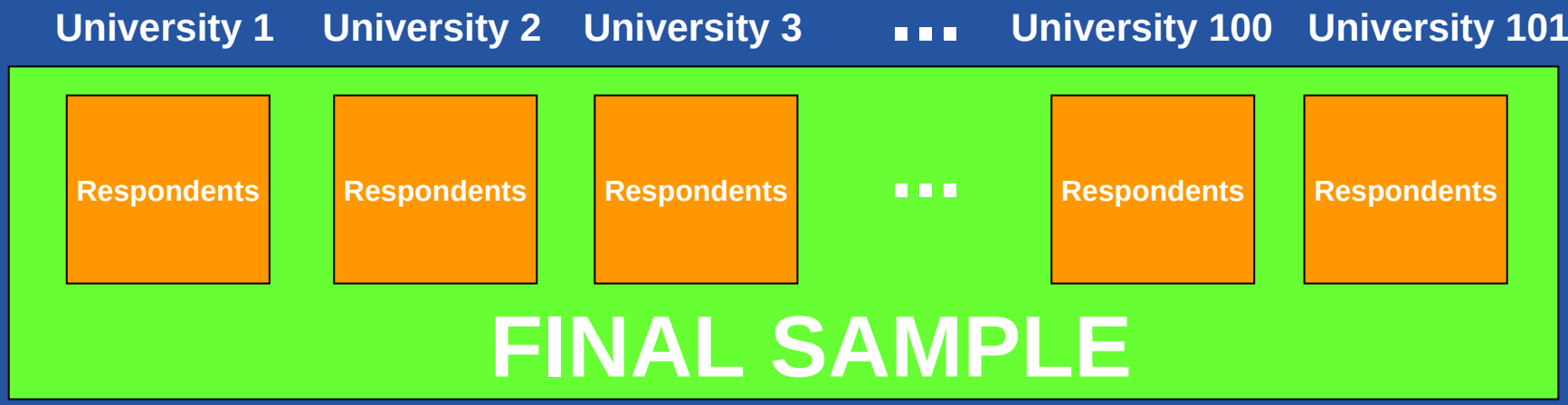
Procedure of sample selection

- Graduates
- Employers
- Academics

RESPONDENTS

Cluster sampling:



Data

7 Areas & 101 university depart. & 16 Countries

- Business
- Geology
- History
- Mathematics
- Physics
- Education
- Chemistry

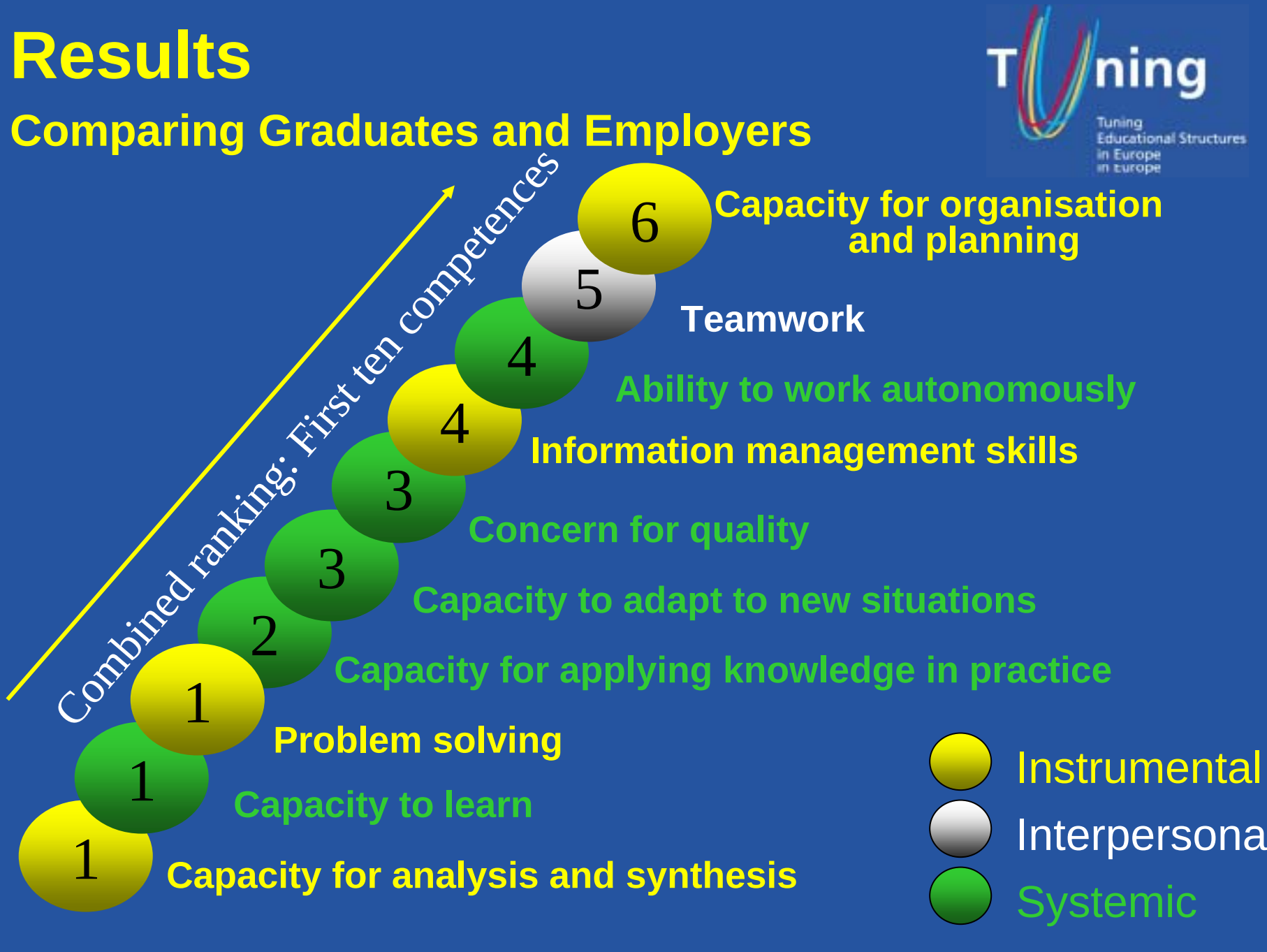
Total number of respondents:

- 5183 Graduates
- 944 Employers
- 998 Academics

- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Iceland
- Ireland
- Italy
- Netherlands
- Norway
- Portugal
- Spain
- Sweden
- United Kingdon

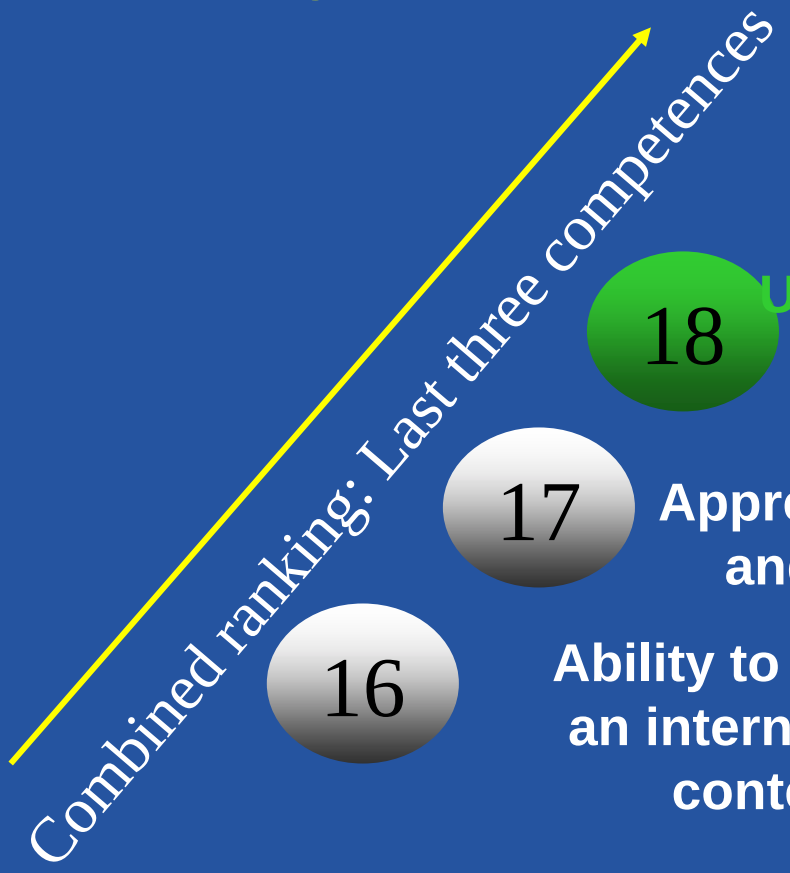
Results

Comparing Graduates and Employers



Results

Comparing Graduates and Employers



18 **Understanding of cultures and customs of other countries**

17 **Appreciation of diversity and multiculturality**

16 **Ability to work in an international context**

Instrumental

Interpersona

Systemic

Results: Country effect

30 items

STRONG

- Knowledge of a second language
- Ability to work autonomously
- Will to succeed
- Capacity for applying knowledge in practice
- Concern for quality
- Initiative and entrepreneurial spirit
- Ability to work in an interdisciplinary team

MILD
&
NO EFFECT

REMAINING 23 ITEMS

Fundamental Importance: Weighted Ranking of the Most Importance Competences. All Subjects

Graduates	Employers	Academics
▪ Capacity for analysis and synthesis ▪ Capacity to learn ▪ Capacity for applying knowledge in practice ▪ Elementary computing skills ▪ Capacity to adapt to new situations	▪ Capacity to learn ▪ Capacity for applying knowledge in practice ▪ Capacity for analysis and synthesis ▪ Capacity to adapt to new situations ▪ Interpersonal skills	▪ Basic knowledge of the field of study ▪ Capacity for analysis and synthesis ▪ Capacity to learn ▪ Capacity for generating new ideas (creativity) ▪ Capacity for applying knowledge in practice

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TUNING DEFINITIONS:

Competences: The Tuning Project focuses on subject specific competences and generic competences. These competences represent a dynamic combination of attributes, abilities and attitudes. Fostering these competences are the object of educational programmes.

Competences will be formed in various course units and assessed at different stages.

[competences are obtained by the student]

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TUNING DEFINITIONS:

Learning outcomes: Statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning. They can refer to a single course unit or module or else to a period of studies, for example, a first or a second cycle programme. Learning outcomes specify the minimum requirements for award of credit.

[learning outcomes are formulated by academic staff]

Tuning definitions

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How are competences and learning outcomes related?

- Learning outcomes **according to Tuning methodology should be** formulated in terms of competences**.**
- Learning outcomes **are** minimum requirements **of a unit or a programmes and are expressed in terms what the learner knows and is able to do at the end of the learning experience.**
- Competences **may be** developed to a greater degree **than the level required by the learning outcome.**

TUNING METHODOLOGY:
learning outcomes and competences

Steps in designing degrees:

1. Identification of social needs
2. Definition of academic and professional profiles: translation into learning outcomes and generic and subject specific competences
3. Translation into curricula
4. Translation into modules and approaches towards teaching, learning and assessment
5. Programme quality assurance: built in monitoring, evaluation and updating procedures

A methodology for designing, planning and implementing curricula

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Traditional methodology:

- developed in a national context largely for mono-disciplinary study programmes
- intended for educating graduates with a traditional profile
- focussing on knowledge and content

Approach:

- staff / teacher oriented
- compulsory subjects to be covered
- input oriented

A methodology for designing, planning and implementing curricula

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Tuning approach:

- student centred
- definition of academic and professional profiles
- definition of learning outcomes
- identifying generic and subject specific competences
- output oriented curricula

Tuning methodology and model:

- appropriate for mono-disciplinary, inter- and multidisciplinary, integrated and joint degree programmes
- valid for graduates with wide range of profiles
- focussing on competences

Tuning model for European comparable degrees

IDENTIFICATION OF SOCIAL NEEDS

CONSULTATION AT EUROPEAN LEVEL

EMPLOYERS AND OTHER STAKEHOLDERS

ACADEMIC COMMUNITY: COMMON REFERENCE POINTS

PROFESSIO-NALS AND PROFESSIO-NAL BODIES

LOCATION OF RESOURCES

- ACADEMIC RESOURCES
- ORGANISATIONAL RESOURCES
- FINANCIAL RESOURCES
- STRATEGIC ALLIANCES WITH OTHER BODIES

DEFINITION OF ACADEMIC AND PROFESSIONAL PROFILES

TRANSLATION INTO DESIRED LEARNING OUTCOMES:

- GENERIC COMPETENCES
- SUBJECT SPECIFIC COMPETENCES

TRANSLATION INTO EDUCATIONAL UNITS AND ACTIVITIES TO ACHIEVE DEFINED LEARNING OUTCOMES

TRANSLATION INTO CURRICULA:

- CONTENT (KNOWLEDGE, UNDERSTANDING AND SKILLS)
- STRUCTURE (MODULES AND CREDITS)

ASSESSMENT

PROGRAMME QUALITY ASSURANCE

APPROACHES TO TEACHING AND LEARNING

THE TUNING DYNAMIC QUALITY DEVELOPMENT CIRCLE

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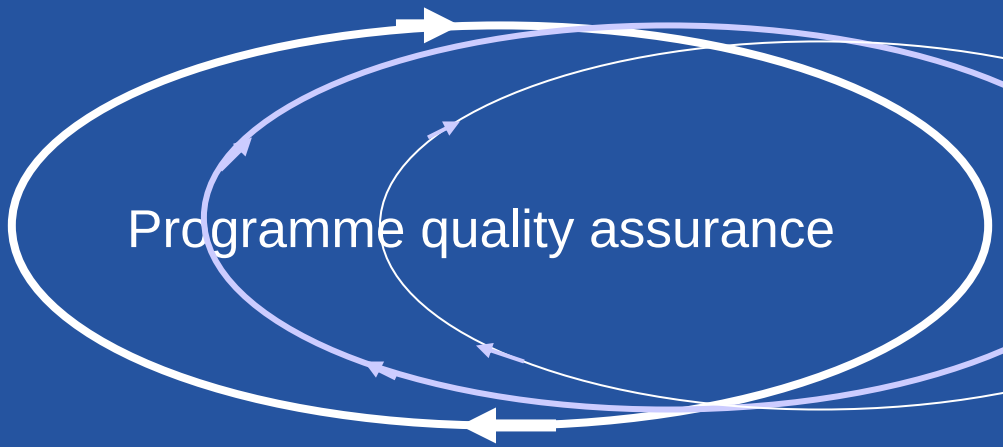
Definition of academic and professional profiles

Identification of resources

Programme design: definition of learning outcomes / competences

Evaluation and improvement **(on the basis of feed back and back forward)**



Construction of curricula: content and structure

Selection of types of assessement

Selection of teaching and learning approaches

LEARNING OUTCOMES AND COMPETENCES IN STUDY PROGRAMMES

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Professional profile

2nd. cycle

Second cycle learning outcomes defined in terms of generic and subject specific competences

Professional profile

1st. cycle

First cycle learning outcomes defined in terms of generic and subject specific competences

Course unit

LEARNING OUTCOMES AND COMPETENCES IN STUDY PROGRAMMES

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Example

Course unit/ learning outcome	Competence									
	A	B	C	D	E	F	G	H	I	F
Unit 1		X			X					
Unit 2	X			X			X			
Unit 3		X				X			X	
Unit 4	X		X							X

X = THIS COMPETENCE IS DEVELOPED AND ASSESSED AND IS MENTIONED IN THE LEARNING OUTCOME OF THIS UNIT

Websites

http://europa.eu.int/comm/education/socrates/

TuningProject

http://www.relint.deusto.es/TuningProject/index.htm

http://www.let.rug.nl/TuningProject/index.htm