

# How are ECTS, Modularisation and Learning Outcomes Related?



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# In this talk.....

1. The big picture – ECTS, Qualification Frameworks, Dublin Descriptors.
2. How are competences and learning outcomes related?
3. What is modularisation?
4. What is the experience of my university in introducing modularisation?

# European Credit Transfer and Accumulation System (ECTS)

- The European Credit Transfer System (ECTS) was initially set up in 1989 as a pilot scheme within the framework of the Erasmus programme.
- Its aim at that time was to facilitate the recognition of study periods undertaken abroad by mobile students through the transfer of credits.
- A credits system is a systematic way of describing an educational programme by allocating a certain value (credits) to each module of the programme to describe the student workload required to complete the module.
- Mobility to Accumulation. Bologna Process has developed the ECTS system from simply being a system for recognising study at foreign institutions into a Credit Transfer and Accumulation System. This takes ALL learning into account – not just study in other countries.
- Hence, ECTS now stands for “European Credit Transfer and Accumulation System”.

# ECTS, Learning Outcomes and Modularisation

- “ECTS is a tool that helps to design, describe, and deliver programmes and award higher education qualifications. The use of ECTS, **in conjunction with outcomes-based qualifications frameworks**, makes programmes and qualifications more transparent and facilitates the recognition of qualifications. ....ECTS is one of the cornerstones of the Bologna Process.”

ECTS Users' Guide p.7 (2009)

- “ECTS is a learner-centred system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes. It aims to facilitate planning, delivery, evaluation, recognition and validation of qualifications and units of learning as well as student mobility”.
- ECTS credits are based on the workload students need in order to achieve expected learning outcomes

ECTS Users' Guide p.7 (2009)

- “Workload indicates the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations) required to achieve the expected learning outcomes.”
- “60 ECTS credits are attached to the workload of a full-time year of formal learning (academic year) and the associated learning outcomes.”
- 1 ECTS credit = 25 – 30 hours of work.

ECTS Users' Guide p.11 (2009)

# ECTS and LEARNING OUTCOMES

- “ECTS is a learner-centred system because it helps institutions to shift the emphasis in programme de-sign and delivery from traditional teacher-centred approaches to approaches that accommodate for learners’ needs and expectations.”
- “In traditional teacher-centred approaches, subject requirements, knowledge and the teaching process itself were considered the main elements of educational programmes. Learner-centred learning puts learning at the heart of curriculum design and delivery.....”

ECTS Users’ Guide p.11 (2009)



# Framework of Qualifications for European Higher Education Area (EHEA)

- Conference of European Ministers Responsible for Higher Education in Bergen, Norway (2005) adopted the overarching framework for qualifications in EHEA.
- This framework shows
  - **Three cycles** (including within national contexts, the possibility of intermediate qualifications)
  - **Generic descriptors** for each cycle based on learning outcomes and competences.
  - **ECTS credit ranges** in the first and second cycles (i.e. Bachelors and Masters levels).
- Ministers committed themselves to drawing up National Frameworks for Qualifications compatible with Framework of Qualifications for European Higher Education area by 2010.



Bergen, Norway (2005)



# Dublin Descriptors

- Descriptors drawn up at meeting of Education Ministers in Dublin
- These generic descriptors are used in The Framework for Qualifications of EHEA (Bologna Process). Adopted in 2005.



# First Cycle : Bachelor's Cycle

[180 – 240 ECTS credits]

	Outcomes	ECTS Credits
First cycle qualification	<p>Qualifications that signify completion of <b>the first cycle</b> are awarded to students who:</p> <ul style="list-style-type: none"><li>• have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</li><li>• can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</li><li>• have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;</li><li>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</li><li>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</li></ul>	Typically include 180-240 ECTS credits

Minimum of  
3 years =  
180 credits

4 years =  
240 credits.

# Second Cycle: Master's cycle

[60 – 120 ECTS credits]

Second cycle qualification	<p>Qualifications that signify completion of <b>the second cycle</b> are awarded to students who:</p> <ul style="list-style-type: none"><li>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</li><li>• can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</li><li>• have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;</li><li>• can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</li><li>• have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</li></ul>	Typically include 90-120 ECTS credits, with a minimum of 60 credits at the level of the 2 <sup>nd</sup> cycle
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1 year  
or  
2 years

# Third Cycle: Doctoral cycle

[Number of ECTS credits not specified]

Third cycle qualification	<p>Qualifications that signify completion of <b>the third cycle</b> are awarded to students who:</p> <ul style="list-style-type: none"><li>• have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</li><li>• have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</li><li>• have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</li><li>• are capable of critical analysis, evaluation and synthesis of new and complex ideas;</li><li>• can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</li><li>• can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</li></ul>	Not specified
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See two page summary of framework of qualifications on:

[www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/Framework\\_qualificationsforEHEA-May2005.pdf](http://www.ond.vlaanderen.be/hogeronderwijs/bologna/documents/Framework_qualificationsforEHEA-May2005.pdf)

# Time involved in various cycles

- Bachelor's degree = 3 or 4 years
- Master's degree = 1 or 2 years
- Doctoral degree = 3 years

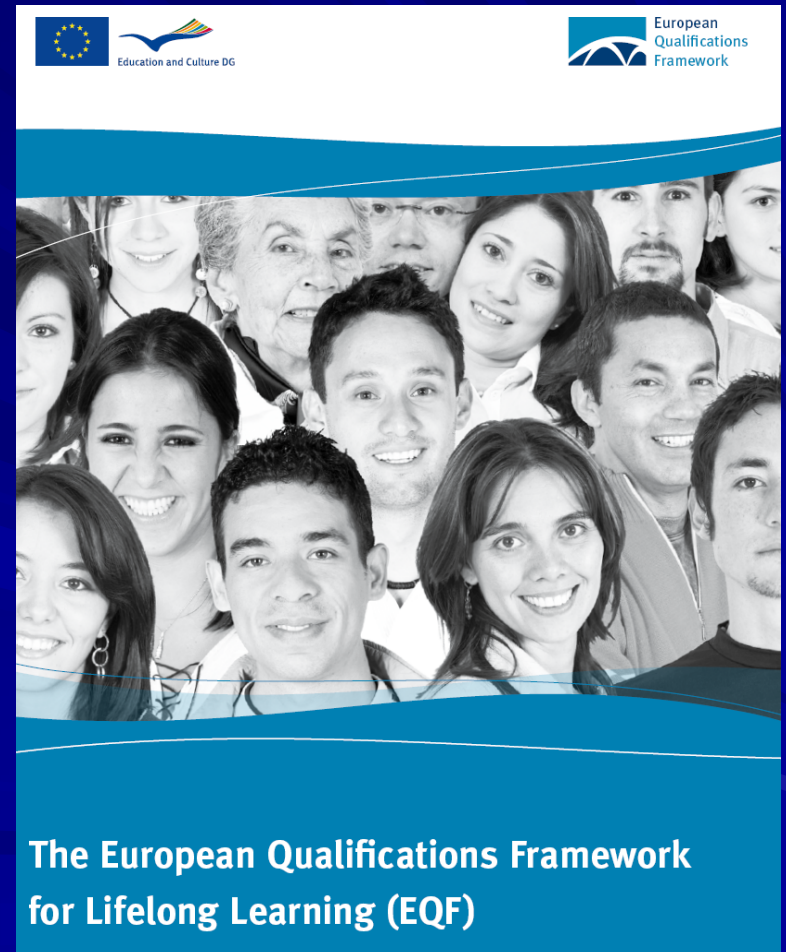
Each of the three Bologna cycles is described in terms of learning outcomes as outlined in the “Dublin descriptors” (2005).

Note: The three cycles are closer to models in the UK and Ireland than in many countries of continental Europe where the model is based on the Magister or Diploma.



# European Qualifications Framework for Lifelong Learning (EQF)

- Adopted by EU in 2008.
- A common European reference framework that links together the qualification systems of EU countries.
- A “Translation Device” to make qualifications easier to understand.
- Has 8 levels with a set of descriptors for each level. These descriptors describe the learning corresponding to each level under the heading of knowledge, skills and competence.

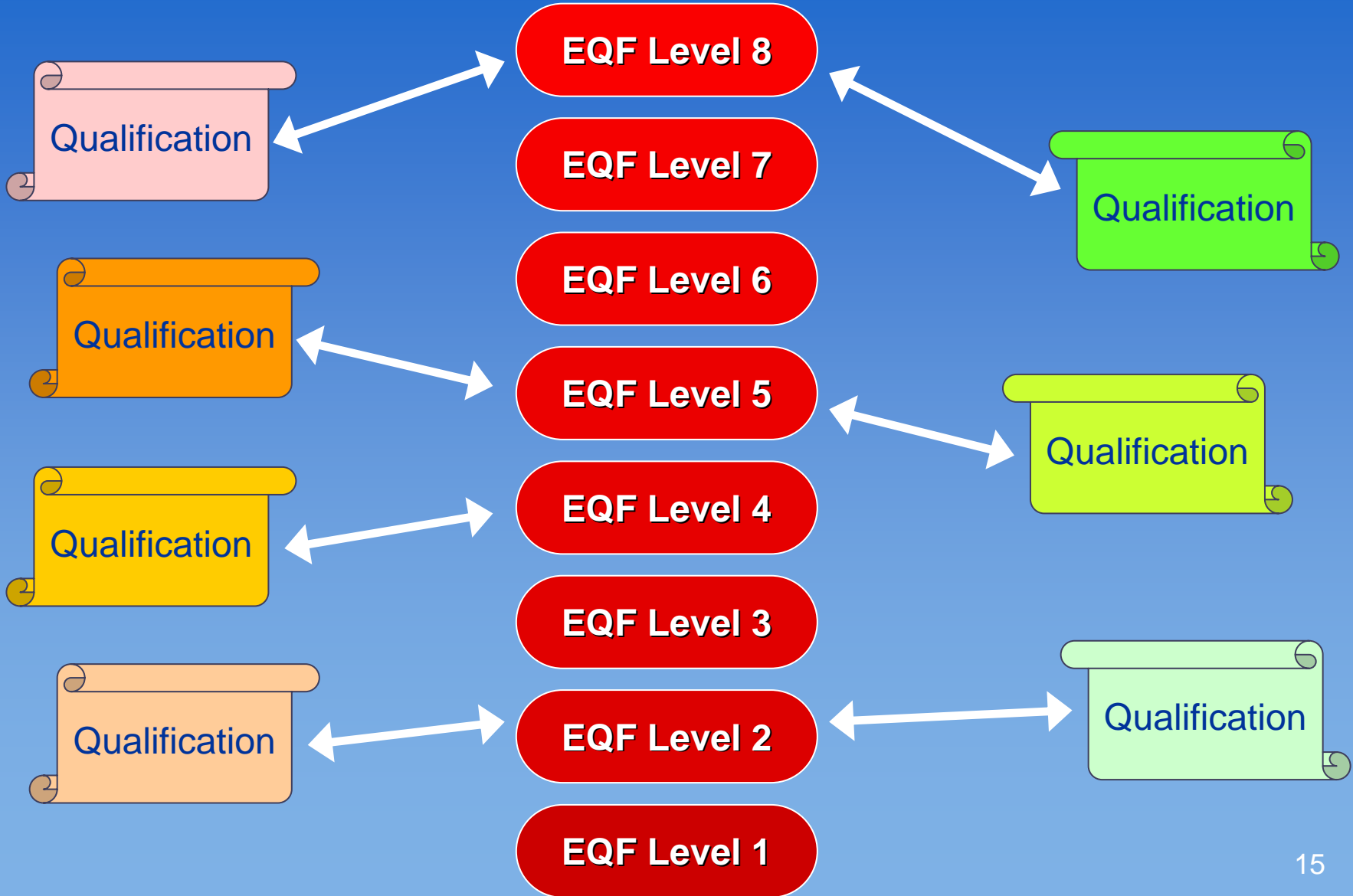






# Country A

# Country B



## THE EUROPEAN QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING

### DESCRIPTORS DEFINING LEVELS IN THE EUROPEAN QUALIFICATIONS FRAMEWORK (EQF)

		KNOWLEDGE	SKILLS	COMPETENCE
Each of the 8 levels is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications.		In the context of EQF, knowledge is described as theoretical and/or factual.	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).	In the context of EQF, competence is described in terms of responsibility and autonomy.
LEVEL 5*	The learning outcomes relevant to <b>Level 5</b> are	<ul style="list-style-type: none"> <li>comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge</li> </ul>	<ul style="list-style-type: none"> <li>a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems</li> </ul>	<ul style="list-style-type: none"> <li>exercise management and supervision in contexts of work or study activities where there is unpredictable change</li> <li>review and develop performance of self and others</li> </ul>
	The learning outcomes relevant to <b>Level 6</b> are	<ul style="list-style-type: none"> <li>advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</li> </ul>	<ul style="list-style-type: none"> <li>advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</li> </ul>	<ul style="list-style-type: none"> <li>manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts</li> <li>take responsibility for managing professional development of individuals and groups</li> </ul>
LEVEL 7***	The learning outcomes relevant to <b>Level 7</b> are	<ul style="list-style-type: none"> <li>highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research</li> <li>critical awareness of knowledge issues in a field and at the interface between different fields</li> </ul>	<ul style="list-style-type: none"> <li>specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</li> </ul>	<ul style="list-style-type: none"> <li>manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches</li> <li>take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</li> </ul>
	The learning outcomes relevant to <b>Level 8</b> are	<ul style="list-style-type: none"> <li>knowledge at the most advanced frontier of a field of work or study and at the interface between fields</li> </ul>	<ul style="list-style-type: none"> <li>the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</li> </ul>	<ul style="list-style-type: none"> <li>demonstrate substantial authority in innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</li> </ul>

## Recommendation that Member States:

“Use an approach based on learning outcomes when defining and describing qualifications, and promote the validation of non-formal and informal learning... paying particular attention to those citizens most likely to be subject to unemployment or insecure forms of employment, for whom such an approach could help increase participation in lifelong learning and access to the labour market”

(EU Commission, 2008)

# Some Further Points about EQF

- The 8 levels span the full scale of qualifications.
- Work started in 2004 in response to requests from member states.
- The EQF is compatible with the EHEA framework and cycle descriptors of Bologna Process.
- Whilst the Bologna descriptors were developed specifically for higher education, the EQF is a lifelong learning framework.
- The EQF emphasises the results of learning rather than focussing on inputs such as length of study.
- The EQF defines a learning outcome as “a statement of what a learner knows, understands and is able to do on completion of a learning process”.
- Each of the 8 reference levels are described in terms of learning outcomes.

- The EQF supports providers of education and training by increasing transparency of qualifications awarded outside the national systems, e.g. by sectors and multinational companies. International sectoral organisations can relate their qualifications systems to a common European reference point. Thus, relationship between international sectoral qualifications and national qualification systems is clarified
- The EU recommends enhanced cooperation in vocational education and training within the EQF.
- The EQF describes levels of qualifications. It does not award qualifications. Awarding of qualifications is still left to national qualification bodies.
- Main users of EQF will be bodies in charge of national and/or sectoral qualification systems and frameworks.
- Generic descriptors of Bologna cycles and EQF are not specific enough to be used as programme learning outcomes.

	EHEA Framework (Bologna)	European Qualifications Framework for Lifelong Learning (EQF) EU only
Honours Bachelor Degree	First cycle	Level 6
Masters Degree	Second cycle	Level 7
Doctorate	Third cycle	Level 8



# Relationship between Dublin Descriptors of Bologna Process and reference levels of European Qualifications Framework

Qualifications that signify completion of the first cycle are awarded to students who:	EQF-level 6
<p><i>have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education<sup>27</sup>, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</i></p>	<p>Use detailed theoretical and practical knowledge of a field. Some knowledge is at the forefront of the field and will involve a critical understanding of theories and principles</p> <p>Demonstrate mastery of methods and tools in a complex and specialised field and demonstrate Innovation in terms of methods used Devise and sustain arguments to solve problems</p>
<p><i>can apply their knowledge and understanding in a manner that indicates a professional<sup>2</sup> approach to their work or vocation, and have competences<sup>3</sup> typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</i></p>	<p>Demonstrate administrative design, resource and team management responsibilities in work and study contexts that are unpredictable and require that complex problems are solved where there are many interacting factors Show creativity in developing projects and show initiative in management processes that includes the training of others to develop team performance</p>
<p><i>have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</i></p>	<p>Consistently evaluate own learning and identify learning needs</p>
<p><i>can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</i></p>	<p>Communicate, ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques involving qualitative and quantitative information</p>
<p><i>have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</i></p>	<p>Express a comprehensive internalised personal world view manifesting solidarity with others</p> <p>Gather and interpret relevant data in a field to solve problems Demonstrate experience of operational interaction within a complex environment Make judgements based on social and ethical issues that arise in work or study</p>

# National Framework of Qualifications

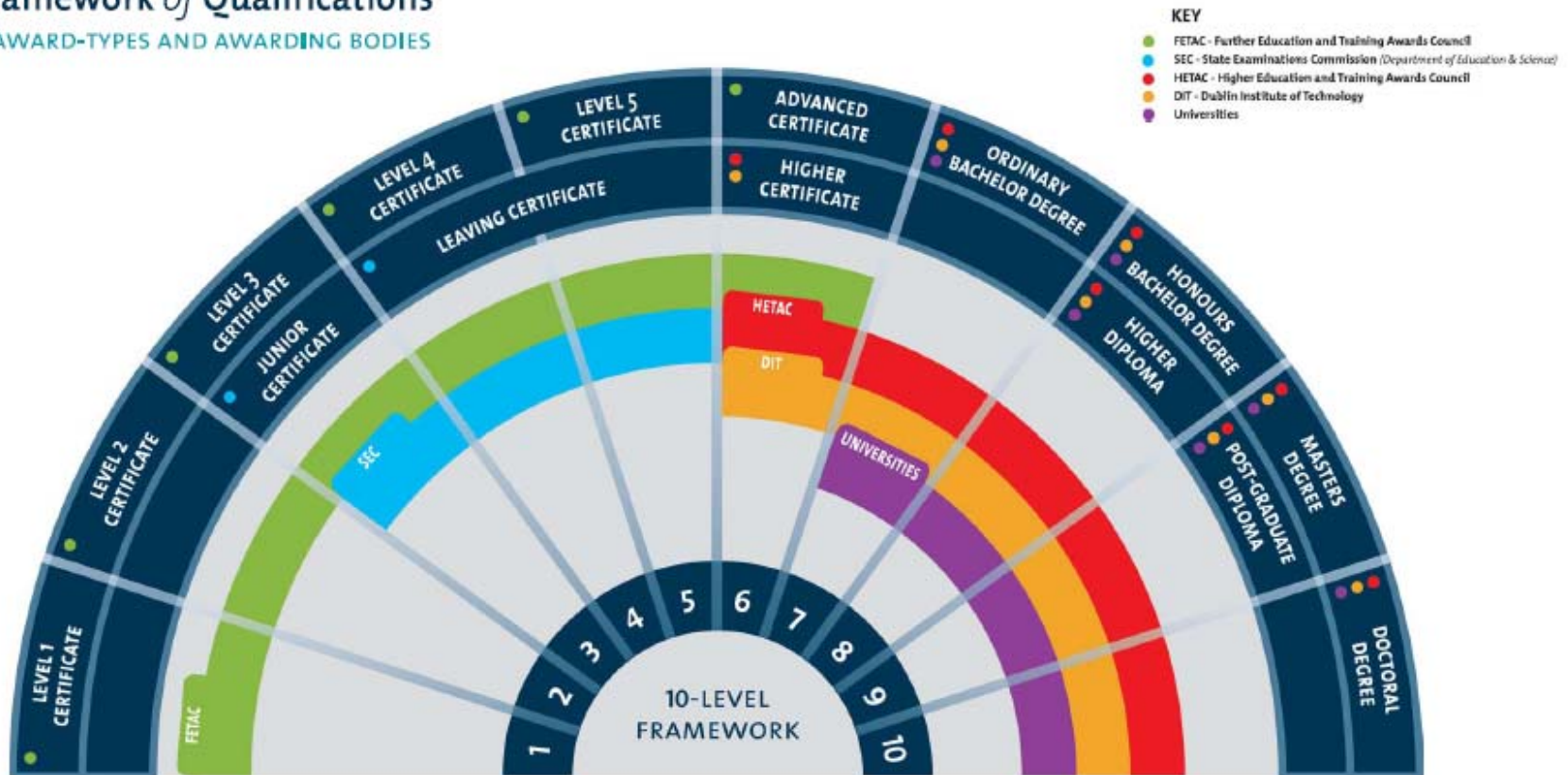
- Putting the Bologna Process into practice.
- A national framework of qualifications “is an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society”.

(EQF 2008)

- For many countries, one of the most challenging parts of the Bologna reform process is to make their National Framework of Qualifications compatible with the Framework for Qualifications of the European Higher Education Area.
  - Showing that National Qualifications Framework is compatible with Framework of Qualifications of EHEA and EQF
  - Introducing Learning Outcomes and writing modules and programmes in terms of Learning Outcomes.
  - Showing evidence that the Learning Outcomes have been achieved.
  - Workload in terms of ECTS credits and credit accumulation rather than teaching time.
  - Showing how the National Framework of Qualifications facilitates Lifelong Learning.
  - Lifelong Learning the only way to avoid obsolescence and is the key for ensuring progress.

# National Framework of Qualifications in Ireland

## National Framework of Qualifications INITIAL MAJOR AWARD-TYPES AND AWARDBODIES





benelux  
2009

## The Bologna Process 2020 - The European Higher Education Area in the new decade

Communiqué of the Conference of  
European Ministers Responsible for Higher Education,  
Leuven and Louvain-la-Neuve, 28-29 April 2009

**12.** The development of national qualifications frameworks is an important step towards the implementation of lifelong learning. We aim at having them implemented and prepared for self-certification against the overarching Qualifications Framework for the European Higher Education Area by 2012. This will require continued coordination at the level of the EHEA and with the European Qualifications Framework for Lifelong Learning. Within national contexts, intermediate qualifications within the first cycle can be a means of widening access to higher education.



# National Qualification Frameworks and EQF

- The European Commission has set 2010 as the recommended target date for countries to relate their national qualification frameworks to the EQF.
- “Adopt measures, as appropriate, so that by 2012 all new qualification certificates, diplomas and ‘Europass’ documents issued by the competent authorities contain a clear reference, by way of national qualification systems, to the appropriate European Qualifications Framework level” – EU Commission (2008)



# What is meant by credit transfer?

- This means that students can be given credit for their prior certified learning, i.e. learning which the student has undertaken and has been assessed as part of a qualification, e.g. a module.
- Credit transfer enables a student to transfer credit gained in one programme of study to another programme of study.

# What is meant by recognition of prior learning (RPL)

- This is a system where a student is given credit for learning gained through experience which took place before the student enrolls on a formal programme leading to a qualification.
- It involves the student (a) reflecting on life and work experiences and non-formal learning experiences, (b) identifying learning outcomes achieved, (c) providing evidence of the learning.

# What is the relationship between Learning Outcomes and Competences?

- Difficult to find a precise definition for the term “competence”.
- “Some take a narrow view and associate competence just with skills acquired by training” (Stephen Adam, 2004)
- In Tuning project, the term competence is used to represent a combination of attributes in terms of knowledge and its application, skills, responsibilities and attitudes and an attempt is made to describe the extent to which a person is capable of performing them
- ECTS Users’ Guide (2005) describes competences as “a dynamic combination of attributes, abilities and attitudes. Fostering these competences is the object of educational programmes. Competences are formed in various course units and assessed at different stages. They may be divided in subject-area related competences (specific to a field of study) and generic competences (common to any degree course)” (ECTS, 2005)

## Competences

A dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, ethical values and attitudes. Fostering competences is the object of all educational programmes. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any degree course). It is normally the case that competence development proceeds in an integrated and cyclical manner throughout a programme.

ECTS Users' Guide (2009)

SKILLS

KNOWLEDGE

**Competent**

ATTITUDE

# Competence – a “fuzzy” concept (Van der Klink and Boon)

- Van der Klink and Boon (2002) describe competence as a “fuzzy concept”
- On the positive side they state it is a “useful term, bridging the gap between education and job requirements”.

*Int. J. Human Resources Development and Management, Vol. 3, No. 2, 2003*

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## Competencies: the triumph of a fuzzy concept

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**Abstract:** This article investigates the current popularity of the concept of competencies. After a brief exploration of perspectives on the concept of competencies, a study will be presented that was conducted in order to gain more insight into the backgrounds of the current status of this concept and to investigate competency-based practices. The study investigated the applications in enterprises and higher education. The last section summarises the main findings and raises some issues that need further elaboration.



- The European Qualifications Framework for Lifelong Learning defines competence as follows:  
“Competence” means the proven ability to use knowledge, skills and personal, social and / or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy. (EQF 2008).
- The above definition is quoted in the ECTS Users Guide (2009) as is summarised as EQF interpreting competence as “the capacity to transfer knowledge into practice”.
- Advice – if you have to write competences use the language of learning outcomes to describe competences.

## Competence:

- The student should be able to use the mass and energy balances for a given food process.

## Objectives:

- Understand scope of mass balances in food processing systems.
- Understand appropriate use of mole fractions and mass fractions in mass balances

## Learning outcomes:

- Describe the general principles of mass balances in steady state systems.
- Draw and use process flow diagrams with labels on flow streams for mass balance problems.
- Solve mass balance problems associated with food processing operations.
- Design and solve mass balances for complex process flow systems, including batch mixing problems, multiple stage flow problems, problems with multiple inflows and outflows, recycle streams and multiple components, and processes where chemical reactions take place.

Hartel and Foegeding (2004)

Learning outcomes, skills and competences

Defining degree structures and identifying their characteristics

## **Learning Outcomes and Competences**



**Declan Kennedy / Áine Hyland / Norma Ryan**

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### **Abstract**

There is wide variation in the literature regarding the interpretation of the meaning of the term competence. This interpretation ranges from a description of competence in terms of performance

# Transnational Implications of Learning Outcomes

Learning Outcomes have applications at three levels:

1. **Local level** – individual third level institutions for describing modules and programmes.
2. **National level** – within each country for describing National Qualification Frameworks and systems for Quality Assurance.
3. **International Level** – facilitate clarity and transparency of qualifications and mutual recognition of qualifications.

Learning outcomes provide the common language in the clear description of programmes and modules. The ECTS system provides the common currency.

# Learning Outcomes - Facilitating Transnational Mobility

- Traditional approach focuses on input (e.g. emphasis on just listing content of programmes) but Learning Outcomes provide a clear and comprehensive set of statements outlining what students have achieved after successfully completing a course of study.
- Greater participation in higher education in many countries has resulted in the need for clearer information about programmes, qualifications, clarity about standards and levels of qualifications, i.e. more precision in curriculum design.
- Internationally, statements of Learning Outcomes contribute to the mobility of students since recognition of qualifications is made easier due to the explicit nature of Learning Outcomes and the clarity associated with them. Hence, qualifications are made more transparent and this simplifies credit transfer.
- Learning outcomes provide a common language for describing different structures of teaching and learning, e.g. traditional formal teaching, distance education, part-time, full-time, etc.
- Learning Outcomes help to form a link at both national and international level between vocational/training courses and higher education enhancing the concept of lifelong learning.

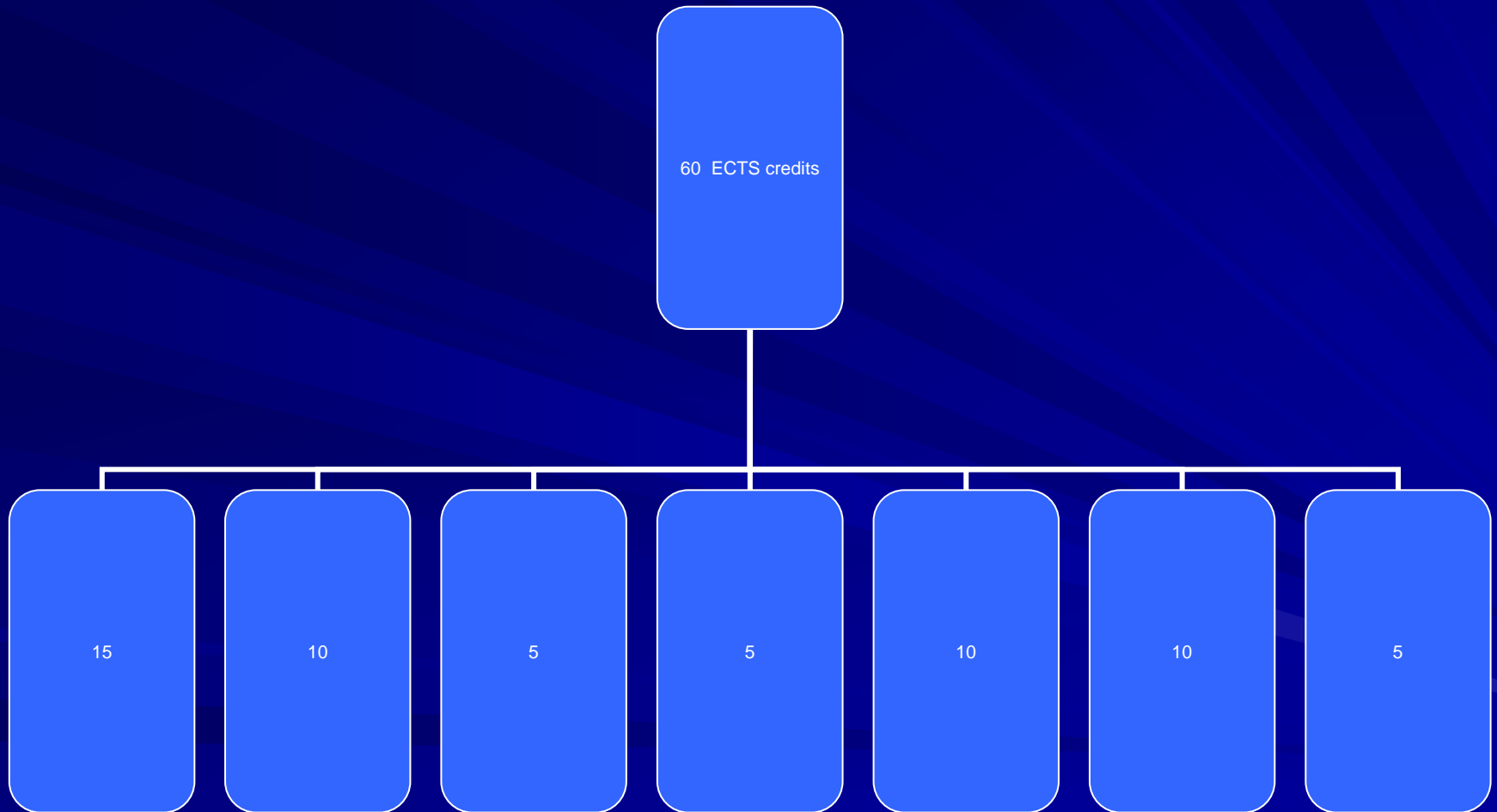
# International Recognition and Mobility

“Learning outcomes are important for recognition, since the basis for recognition procedures is in the process of shifting from quantitative criteria such as the length and type of courses studied, to the outcomes reached and competencies obtained during these studies. The principal question asked of the student or the graduate will therefore no longer be “What did you do to obtain your degree?” but rather “What can you do now you have obtained your degree?”. This approach is of more relevance to the labour market and is certainly more flexible when taking into account issues of lifelong learning, non-traditional learning and other forms of non-formal educational experiences”

Council of Europe, 2002.



# What is modularisation all about?



# ECTS and MODULARISATION

In ECTS, the formulation of learning outcomes is the basis for the estimation of workload and hence for credit allocation. When those responsible for designing educational programmes establish the qualification profile and the expected learning outcomes of the programme and its components, ECTS credits help them to be realistic about the necessary workload and to choose learning, teaching and assessment strategies wisely.

ECTS Users' Guide p. 14 (2009)

# Modularisation

- A module is a self-contained fraction of a student's workload for the year and carries a unique examination/assessment mark.
- The size of a module is indicated by its credit weighting.
- Under ECTS system, each year of degree programme = 60 credits.
- Modules are allocated 5, 10, 15 or 20 credits depending on the fraction of the programme workload covered in the module.
- Each module is given a unique code, e.g. ED2013

ED2013

↑  
Education    Year 2    Number assigned to this module

# Advantages of modularisation

- Gives greater clarity of structure and helps to establish clear relationship between credits and student workload in ECTS system.
- Reflects more accurately the various elements of students' workload.
- Facilitates work abroad, work placement, off-campus study as modules for degree examinations.
- Gives greater clarity and consistency in assessment.
- Provides flexibility in the design of degree programmes by incorporating modules from different areas.

- Facilitates credit accumulation, i.e. increases number of pathways to final degree award. Hence, encourages greater diversity of students, e.g. mature and part time students.
- Allows third level institutions to participate in schemes like SOCRATES so that students obtain ECTS credits towards their degree.
- Facilitates greater ease of student transfer between institutions offering ECTS-based programmes.
- Facilitates resource allocation within university.

# Introducing Modularisation into University College Cork



# Modularisation: The Re-Organisation of Teaching

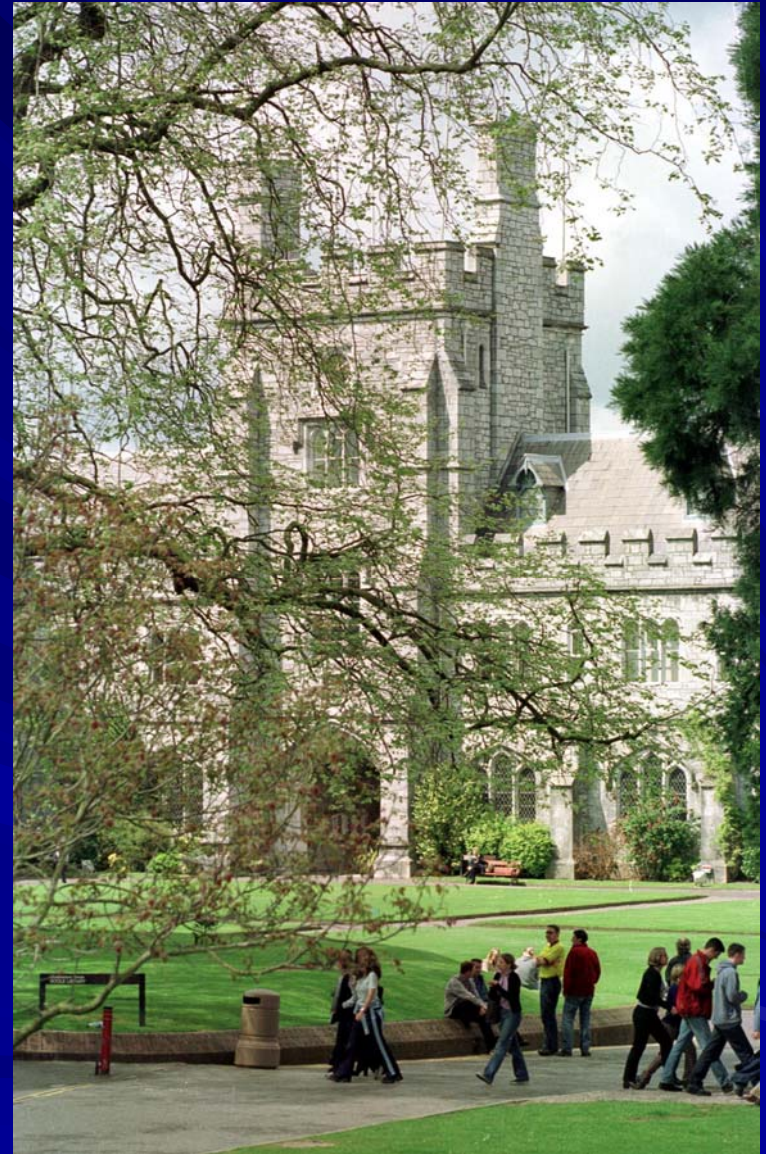
- Old system was a unitised system, i.e. teaching organised in amounts called units.
- Problems with unitised system.
- Degree programmes comprised variable numbers of units,
  - Often of different sizes within and between disciplines and faculties
  - With very different student workloads
  - Little opportunity for inter-disciplinary collaboration.
- UCC began modularising undergraduate programmes in 1998/1999, starting with first years across all faculties

# Credits allocated to modules

- A module is a self-contained fraction of a student's programme workload for the year with a unique examination and a clear set of learning outcomes and appropriate assessment criteria.
- Individual modules grouped together to make up degree programmes.
- The size of a module is indicated by its credit weighting. Under modularisation, each academic year of a degree programme is worth 60 ECTS credits.
- ECTS credits are the value allocated to modules to describe the student workload required to complete them.
- The number of credits allocated to each module will vary depending on the fraction of programme workload it represents, e.g. 5, 10, 15 or 20 credits.

In University College Cork, a 5-credit module normally consists of 24 hours of lectures plus associated tutorials/essays / readings/practical/coursework  
OR

The equivalent in student workload such as literature projects, field courses, or indeed set reading assessed by written examination, work for problem sets, studying of legal material and cases outside of lecture hours, etc.



# Modules, Marks, Exams in UCC

Module	Student Workload	Marks	Exam Paper
5 credits*	125 – 150 hours	100	1.5 hours
10 credits	250 – 300 hours	200	3 hours
15 credits	375 – 450 hours	300	3 hours
20 credits	500 – 600 hours	400	2 x 3 hours

Note: Total per year = 60 credits = 1200 marks



# Challenges to be addressed when introducing modularisation

- Danger of over-teaching by departments - filling the credits or expanding amount of material previously delivered)
- Initial difficulties in dividing the programme material into set module sizes (5, 10, 15 and 20 credits blocks of work)
- Potential for excessive compartmentalisation of learning – need for programme co-ordinator.
- Danger of increased or decreased workloads for students
- Possible increase in number of elective (choice) modules to attract funding into departments/schools
- Timetabling issues to be addressed teaching and examining timetables, elective modules.

# What information is needed to describe a particular module?

- **Module Code and Title:** unique six character code (identifies subject and level)
  - **Credit weighting:** (5, 10, 15 or 20 credits)
  - **Pre-requisite(s):**
  - **Co-requisite(s):**
  - **Teaching Methods:**
  - **Module Co-ordinator:**
  - **Lecturer(s):**
  - **Module Objective:**
  - **Module Learning Outcomes:**
  - **Module Content:**
- etc.
- See book of modules in [www.ucc.ie](http://www.ucc.ie)



# Conclusions

Some words of wisdom from Prof Paul Giller, Registrar  
UCC

- The introduction of Modularisation was not easy - easiest for Biological Sciences, hardest with Law!
- To ensure full benefits of cross-disciplinary interactions, it must be done across the entire institution at the same time, although this process can be phased in by programme year, i.e. all first years one year.
- There is also the need for a high-level committee to drive the process and dedicated administrative support.
- Requires patience, negotiation, arguments, persuasion, bribery, and stubbornness.
- Standardise across the institution.
- Do not allow for any exceptions
- Allow time to embed before making changes