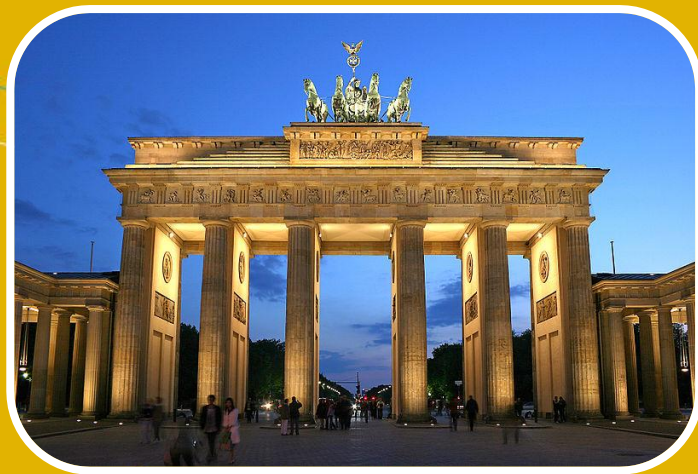




Joint Project Curricula Reform  
**Two cycle E-Commerce curricula to serve Information Society in RU, UA and IL**



**Coordination Conference  
& Interproject-Coaching with Tempus-PROMENG**

**Berlin Institute of Technology  
02 - 04 April 2012 - Berlin, Germany**

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 <http://ec.europa.eu/tempus>





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# European Credit Transfer and Accumulation System (ECTS)

## and VGTU case



# What is ECTS?

ECTS - The European credit transfer and accumulation system is a student-centred system based on the student workload required to achieve the objectives of a programme, objectives preferably specified in terms of the learning outcomes and competences to be acquired.

ECTS was started under the Erasmus programme in **1988**.

The three main ways of ECTS credit introduction at national level:

1. **Legal (LT);**
2. Consensus-based;
3. Recommendation-based

The main principles of philosophy:

1. Value of the studies abroad;
2. Knowledge of and trust in partner HEI;
3. Voluntary basis for its introduction;
4. Full recognition of the courses completed abroad by the mobile students.

# The Key ECTS Features

In 2002 (Zurich Conference) they were presented by the European Commission in the separate document which stated:

1. ECTS is a student-centred system based on student workload required to achieve expected learning outcomes;
2. ECTS is based on convention that 60 credits are attached to the national workload of a full-time student during one academic year;
3. Credits are allocated to entire qualifications or study programmes as well as to their educational components;
4. Credits are awarded to individual students;
5. Credits may be accumulated with a view to obtaining qualifications, as decided by the degree-awarding institution;
6. Credits awarded in one programme may be transferred into another programme.”

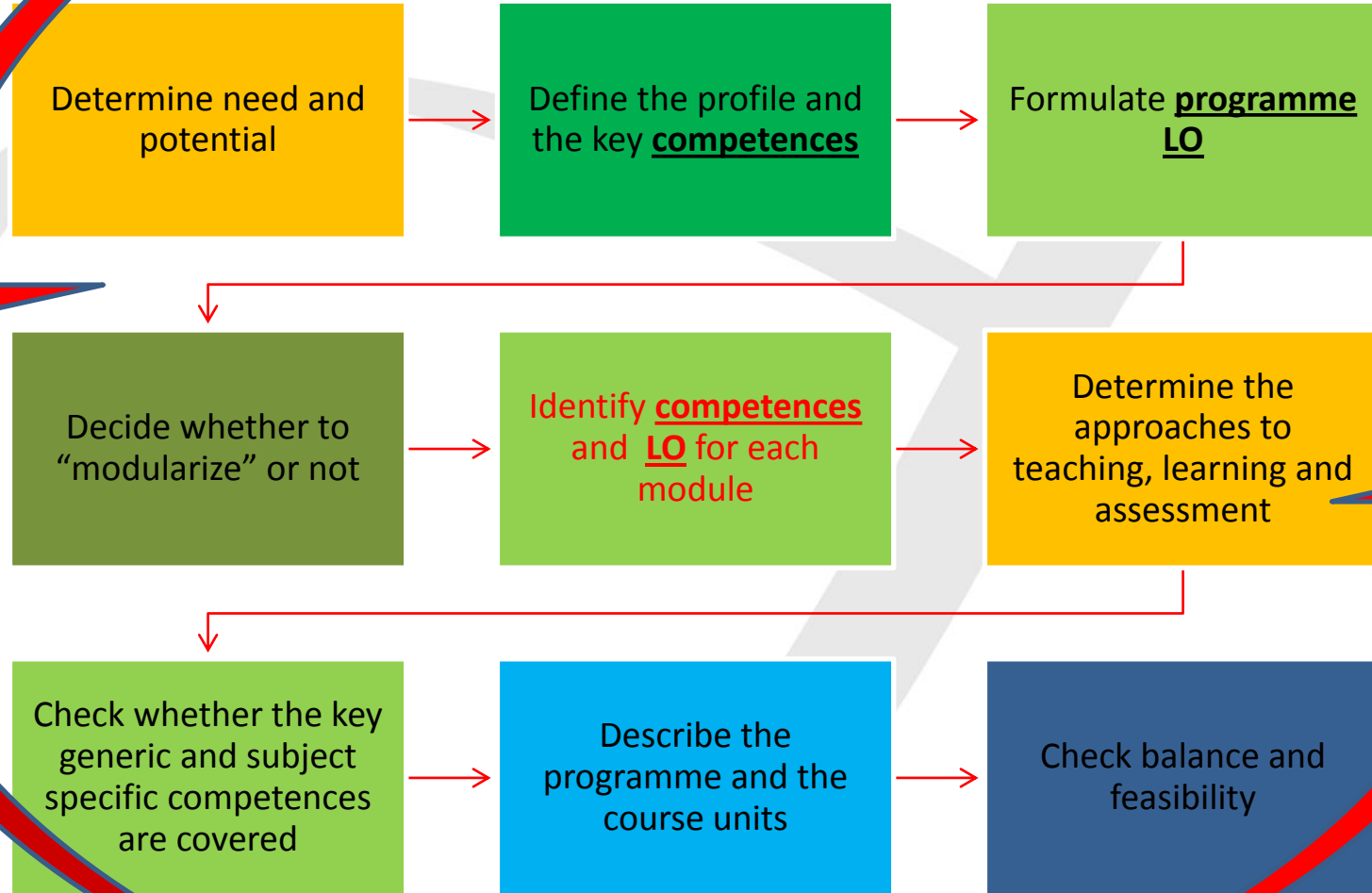
# The main ECST elements

ECTS requires to use new elements in approach to study programmes design:

1. student workload;
2. learning outcomes and competences;
3. use of ECTS credits.



## 10 steps for designing a programme – Tuning approach



Implement, monitor, improve

# Development of the module

Aims and competences of the module



Aims are reflected in the module LO (LO written in a way that they may be tested)



Assessment tasks



Criteria for grading the assessment



Teaching and learning strategy

## NOTE:

- 1) Small modules – information more specialized but less integrated
- 2) Big modules – clearer structure of the programme, better coherence in the studied subject, but more difficult to transfer to other context and compare.

# Challenges for HEI

## Learning outcomes

- Confusion between competences and LO
- Lack of skills in formulating LO
- Problems of translating the term and using appropriate language

## Workload

- There is no tradition to calculate workload and consult students – time and activities do not match
- Organization of teaching and learning still teacher centrlised

## Credits

- No credit thinking in the country and most of the institutions
- Credits are not seen as a tool for programme design
- Limited use of credits to measure student progress



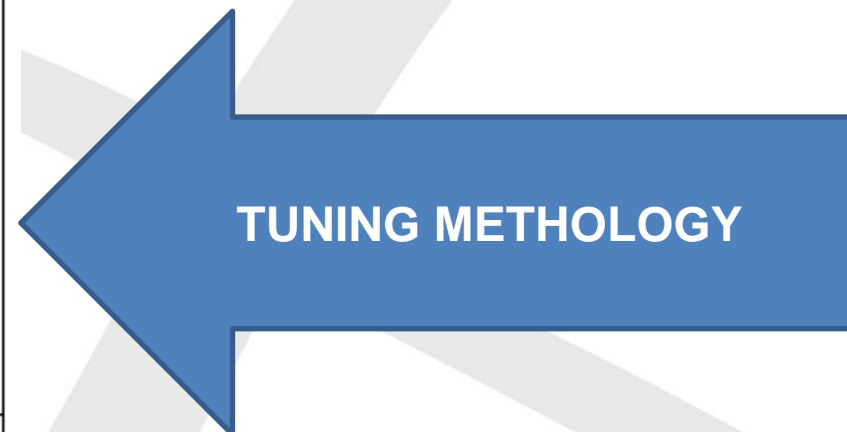


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# Student workload

Student workload in ECTS consists of the time required to complete all planned learning activities such as attending lectures, seminars, independent and private study, preparation of projects, examinations, and so forth.

<p><i>I. Introducing modules/courses units</i></p>	<p>There are non-modularized systems and modularized systems. In a <u>non-modularized system</u> each course unit can have a different number of credits although the total for one year will still be 60. In contrast, in a <u>modularized system</u> the course units/modules have a fixed workload, 5 credits for example, or a multiple of this number. The workload of a module is based on the total amount of tasks a student is expected to do as part of the overall programme of study. These tasks are defined with a view to the learning outcomes to be achieved, and the time (work hours) a student needs to achieve them. For example, a module of 5 credits allows for around 125 hours of work of a typical student.</p>
<p><i>II. Estimating student workload</i></p>	<p>Each module is based on a number of educational activities:</p> <p><u>types of courses</u>: lecture, seminar, research seminar, exercise course, practical, laboratory work, guided personal study, tutorial, independent studies, internship, placement or 'stage', fieldwork, project work, etc.</p> <p><u>types of learning activities</u>: attending lectures, performing specific assignments, practicing technical or laboratory skills, writing papers, reading books and papers, learning how to give constructive criticism of the work of others, chairing meetings, etc.</p> <p><u>types of assessment</u>: oral examination, written examination, oral presentation, test, paper, portfolio, thesis, report about an internship, report on fieldwork, continuous assessment, etc.</p> <p>Teachers estimate the time required to complete the activities foreseen for each course unit / module. The workload expressed in time should match the number of credits available for the course unit. Teachers must develop suitable strategies to use to best advantage the time available.</p>
<p><i>III. Checking the estimated workload through student evaluations</i></p>	<p>The most common method to check whether the estimated student workload is correct is the use of questionnaires to be completed by students, either during the learning process or after the completion of the course.</p>
<p><i>IV. Adjustment of workload and/or educational activities</i></p>	<p>Monitoring process or an updating of the course content might lead to an adjustment of the workload and/or of the educational activities of the course unit/module. In a <u>modularized model</u> it will be necessary to adjust the amount of learning material and/or the types of teaching, learning and assessment activities, because the number of credits (e.g., in our example, 5 or a multiple of 5) is fixed. In a <u>non-modular model</u> also the number of credits can be changed, but this will have an effect on other units, because the total number of credits of the programme of study is fixed (e.g. 30 per semester, 60 per year etc.). An adjustment of workload and/or activities is required anyway when student workload does not correspond to the actual workload.</p>



TUNING METHODOLOGY

# Estimation of workload in ECTS

The learning activities may vary in different countries, institutions and subject areas, but typically the estimated workload will result from the sum of:

1. the contact hours for the educational component (number of contact hours per week x number of weeks);
2. the time spent in individual or group work required to complete the educational component successfully (i.e. seminar or laboratory work; collection and selection of relevant material; required revision, study of that material; writing of papers/projects/dissertation; practical work, e.g. in a laboratory);
3. the time required to prepare for and undergo the assessment procedure (e.g. exams);
4. the time required for obligatory placement(s).

# Competences and learning outcomes

Competences - a dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, ethical values and attitudes.

Learning outcomes - statements of what a learner is expected to know, understand and be able to do after successful completion of a process of learning.

# Accumulation and transfer approaches

The ECTS for accumulation and transfer is guided by the following approaches:

- „1. It is a learner-centred system which aims to increase transparency of learning outcomes and learning process;
2. It aims to facilitate planning, delivery, evaluation, recognition and validation of qualifications and units of learning as well as student mobility;
3. It can be applied to lifelong learning activities;
4. Non-invasive allowing to preserve national educational autonomy;
5. It is applicable to all sectors of higher education.“



# VGTU case

Scope of studies in Lithuania is measured in credits.

One credit ~ 40 hours of study (in classrooms, laboratories, self and others.), it its one working week, or ~ 1.5 ECTS

The average one-year full-time study scope is 40 credits or 60 ECTS

Non-modularized system - each course unit can have a different number of credits although the total number for one year - 60 ECTS

Countries	Hours range/academic year	Hours range/credit
Germany	1,800h	30h
Lithuania	1,600h	
Netherlands	1,680h	28

**1 ECTS = 26, 66 h**



# Example

## Business Management (who admitted at 2011)

University first cycle (undergraduate, Bachelor' s) studies

Faculty: Faculty of Business Management

Mode of studies: Continual studies

Name of qualification: Bachelor of Business

6 Semester 15 weeks (teaching course) + 4 weeks (session) + 1 weeks (independent work) = 20 weeks

Course number and description	Course title	Hours/Sem.	Credits (PC)	ECTS credits	Assessment
<i>Information Business Management</i>					
<a href="#">VVEVB11601</a>	International Economics	30 00 015 15	3,0	3,00	E1
<a href="#">VVEVB11602</a>	Innovation Management	30 00 030 06	6,0(2,0)	6,00	E
<a href="#">VVF8B11601</a>	Business Projects	30 00 030 06	6,0(2,0)	6,00	E
<a href="#">VVF8B11604</a>	Business Risk	30 00 015 03	3,0	3,00	E
<a href="#">VVF8B11605</a>	Financial markets and institutions	30 00 015 03	3,0	3,00	E1
<a href="#">VYVTR11601</a>	Logistics	30 00 030 15	5,0	5,00	E
Free choice obligatory course			4,0	4,0	



# DESCRIPTION OF THE ECOMMIS Curricula/Module (1)

TITLE OF THE MODULE		Code	
Teacher(s)		Department	
Coordinating:			
Others:			
Study cycle	Level of the module	Type of the module	
Form of delivery	Duration	Language(s)	
Prerequisites			
Prerequisites:		Co-requisites (if necessary):	
Credits of the module	Total student workload	Contact hours	Individual work hours
Aim of the module (course unit): competences foreseen by the study programme			
---			
Learning outcomes of module (course unit)		Teaching/learning methods	Assessment methods
* ---			
* ---			
* ---			





# DESCRIPTION OF THE ECOMMIS Curricula/Module (2)

Themes	Contact work hours							Time and tasks for individual work	
	Lectures	Consultations	Seminars	Practical work	Laboratory work	Placements	Total contact work	Individual work	Tasks
1.									
2.									
3.									
4.									
5.									
6.									
<b>At all:</b>									

Assessment strategy	Weight in %	Deadlines	Assessment criteria

Author	Year of issue	Title	No of periodical or volume	Place of printing. Printing house or internet link
<b>Compulsory literature</b>				
<b>Additional literature</b>				



# Information sources:

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2. European credit transfer and accumulation system (ECTS)  
[http://ec.europa.eu/dgs/education\\_culture/publ/pdf/ects/en.pdf](http://ec.europa.eu/dgs/education_culture/publ/pdf/ects/en.pdf)
3. The ECTS system <http://www.studyineurope.eu/ects-system>
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5. „Europos kreditų perkėlimo ir kaupimo sistemos (ECTS) nacionalinės koncepcijos parengimas: kreditų harmonizavimas ir mokymosi pasiekimais grindžiamų studijų programų metodikos kūrimas ir diegimas.  
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6. Calculating and measuring student workload and a method to allocate workload (StOEHN)  
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7. Asko Karjalainen, Katatiina Alha and Suvi Jutila, *Give me time to think. Determining student workload in higher education*, Oulu University Press 2006, ISBN 951-42-8020-2.