



The **European Maturity Model** for **Blended Education**

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EMBED as strategic partnership

- About **introducing innovation in higher education** by the implementation of blended learning (b-learning)
- We will **create a reference model for developing and implementing blended learning**, embracing all levels of an institution: the design of the blended course, organisational aspects such as staff support and training, and institutional leadership, developing policies and strategies making the institution continuously innovative.
- The **partnership** consists of frontrunner universities in b-learning European wide.

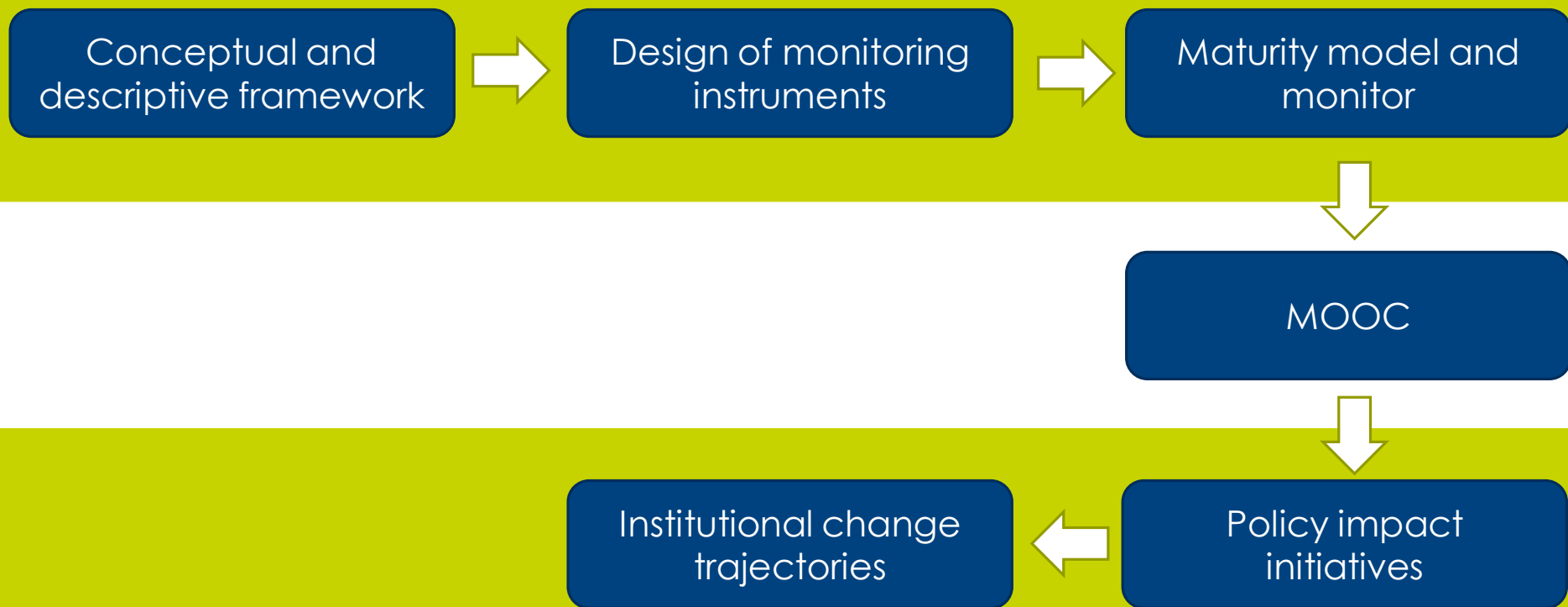


THE UNIVERSITY
of EDINBURGH



Co-funded by the
Erasmus+ Programme
of the European Union

Process





What are we blending?

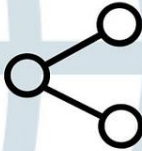
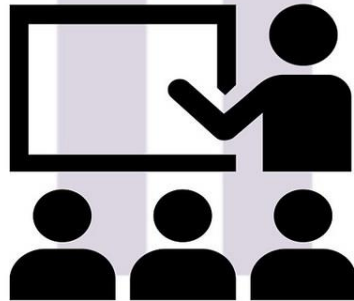
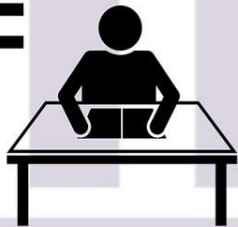
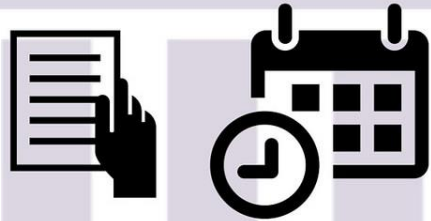
Facilitated, personalised, class-based instruction,
personal learning community, tutorials, seminars.

Independent, flexible, timely, virtual instruction,
forums, webinars, online learning communities.

TRADITIONAL CLASSROOM

ONLINE LEARNING

BLENDED LEARNING



Defining the blend

Blended learning

learning as a result of a **deliberate, integrated combination** of online and face-to-face learning activities.

Blended teaching

designing and facilitating blended learning activities.

Blended education

the formal context of BL that is determined by **policies and conditions** with regard to the organization and support of blended learning.

Three levels

Macro (government & society)

Policy

Rules &
Regulations

Meso (institute)

Policies

Conditions

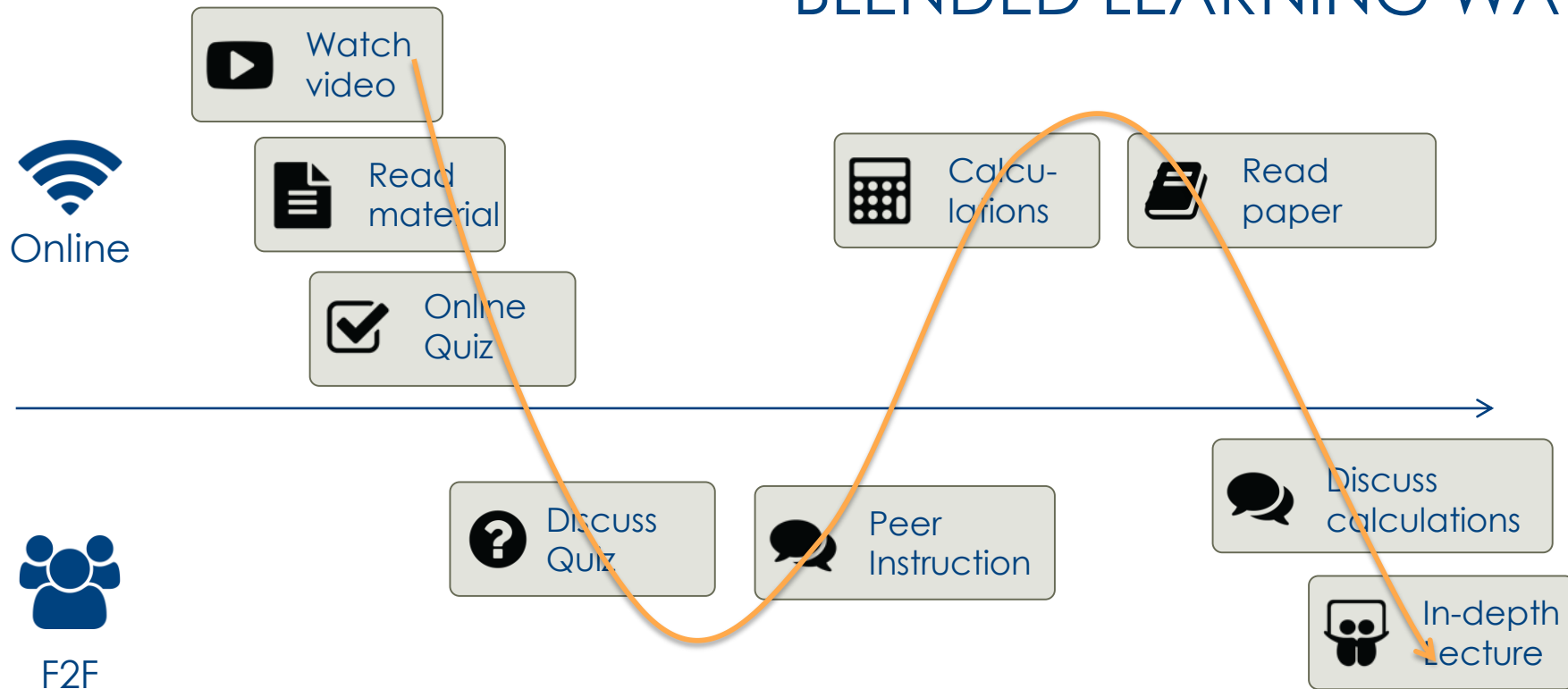
Micro (course/programme)

Teaching

Learning

MICRO LEVEL

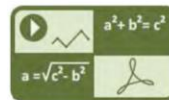
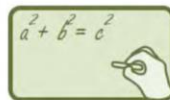
BLENDED LEARNING WAVE



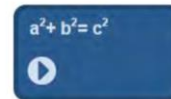
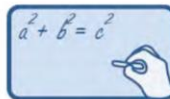
MESO LEVEL

Cookbook

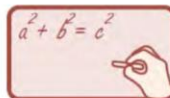
Frontal Teaching is teacher-centred. The lecturer situated at the front elaborates on a subject, shows a presentation on the screen or chalks a formula on the board. The expert explains and elaborates about a topic, and the students take home individual work or group assignments. Active learning components are gradually being brought into these practices, such as direct interaction with a feedback tool.



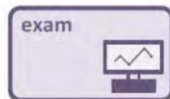
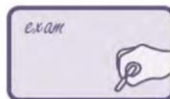
Mixed Practice is student-centred. Students follow classes with alternating practices, such as a frontal introduction and subsequently working in student groups on assignments. The teacher and assistants walk around to help where needed.



Collaborating focuses on team work and group assignments. Students have to apply their knowledge in projects and learn to communicate, collaborate and cooperate in teams while they are coached by the instructor.

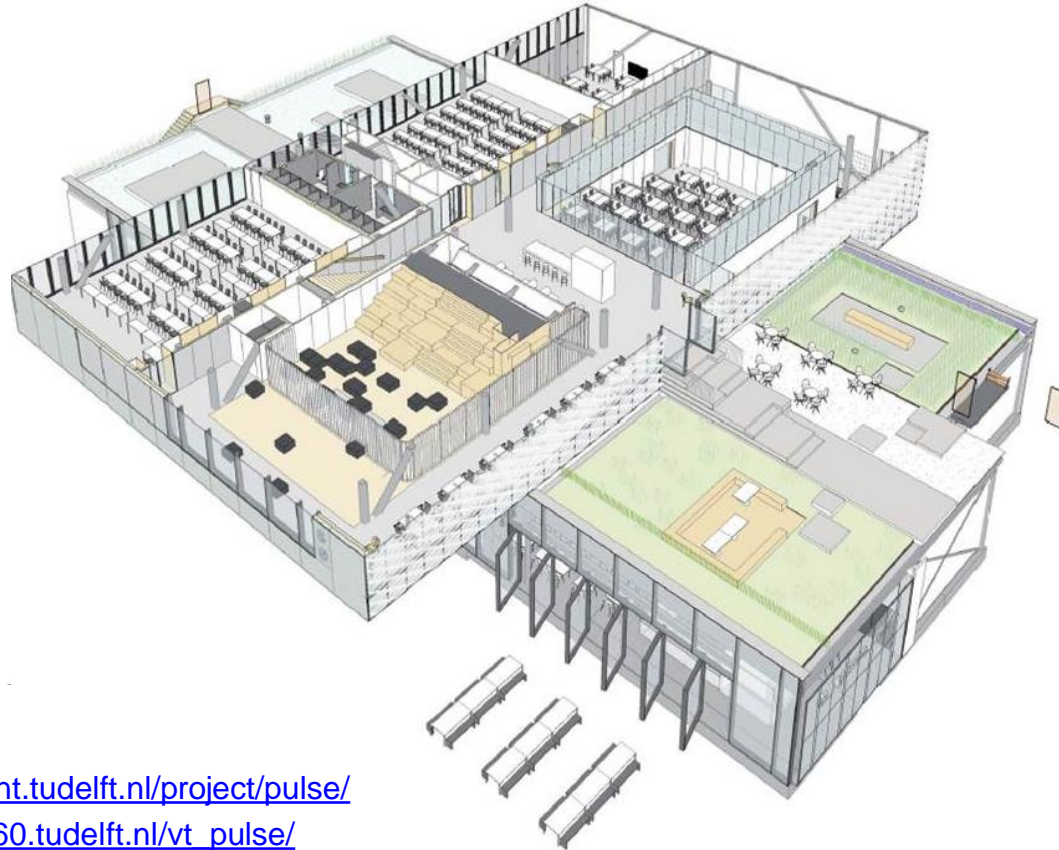


Testing is for students to demonstrate what they have learned. Digital tests on computers bridge the online practices of tomorrow. Digital exam halls can also be used for computer practical.



Seat capacity	X Small < 30	Small 30-60	Medium 60-90	Large 90-150	X Large 150-350+
Frontal teaching	X	Instruction room Flat-level floor Furniture in rows	Lecture hall Tiered floor Furniture in rows	Lecture hall Tiered floor Furniture in rows	Lecture hall Tiered floor Furniture in rows
Mixed practice	X	Instruction room Flat-level floor Moveable furniture in rows and groups	Instruction room Flat-level floor Moveable furniture in rows and groups	Instruction hall Terrace floor Moveable furniture in rows and groups	X
Testing	X	Instruction room Flat-level floor Furniture in rows	Instruction room Flat-level floor Furniture in rows	Instruction hall Flat-level floor Furniture in rows	Exam hall Flat-level floor Furniture in rows
Digital testing	PC-hall Flat-level floor Furniture in rows or groups	PC-hall Flat-level floor Furniture in rows or groups	PC-hall Flat-level floor Furniture in rows or groups	PC-hall Flat-level floor Furniture in rows or groups	PC-hall / Advanced exam hall Flat-level floor Furniture in rows
Collaborating	Project room Flat-level floor Furniture in groups	Project room / Advanced instruction room Flat-level floor Furniture in groups	Project room / Advanced instruction room Flat-level floor Furniture in groups	Project hall / Advanced instruction hall Flat-level floor Furniture in groups	X

New education building Pulse



<http://campusdevelopment.tudelft.nl/project/pulse/>

Virtual tour: https://nmc360.tudelft.nl/vt_pulse/





Least squares problems

$$A = \begin{bmatrix} 1 & 3 \\ -1 & 1 \\ 2 & -1 \end{bmatrix}, \mathbf{b} = \begin{bmatrix} 10 \\ 8 \\ 5 \end{bmatrix}$$

MACRO LEVEL

Governmental policy

- Teachers get paid based on **hours in class**
- **Reducing class time** is political sensitive
- Some governments are promoting blended learning with **grant programme** for digital education

CONCEPTUAL FRAMEWORK



Maturity \neq Quality



*“Maturity is a measurement of the
ability of an organization for
continuous improvement in a
particular discipline”*

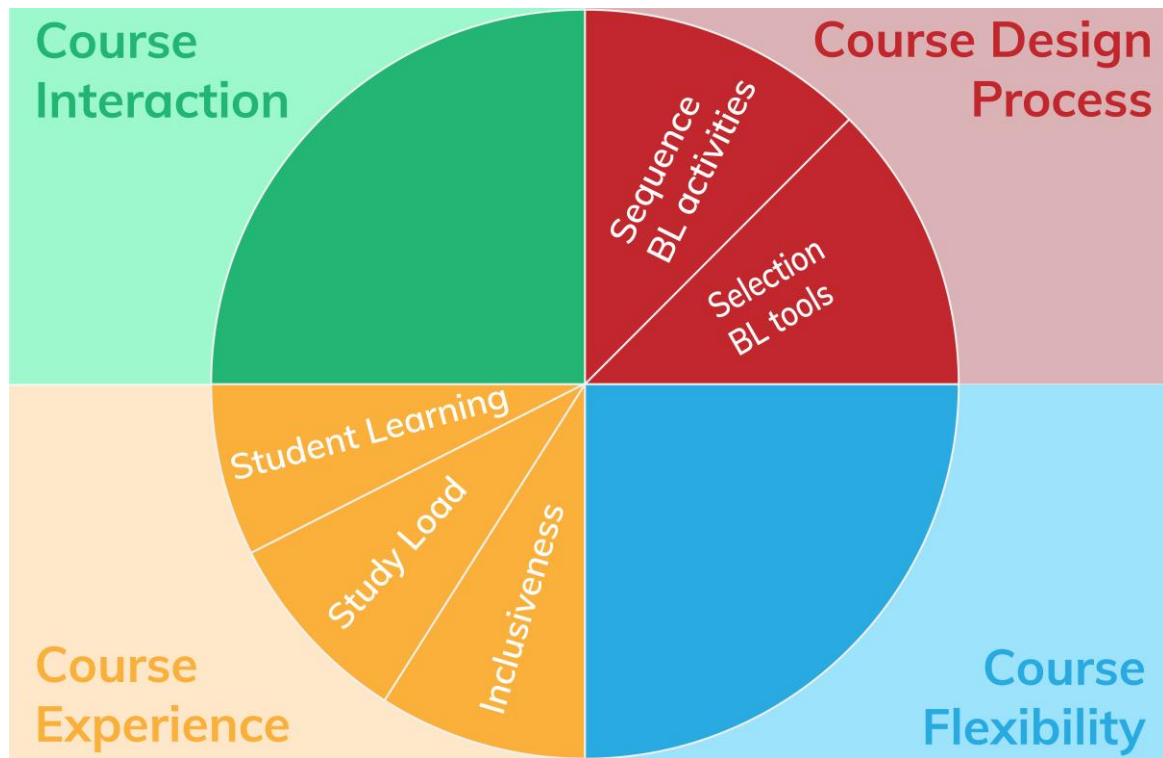
INSTITUTIONAL SUPPORT

The manner in which an institution supports teachers and students' blended learning activities

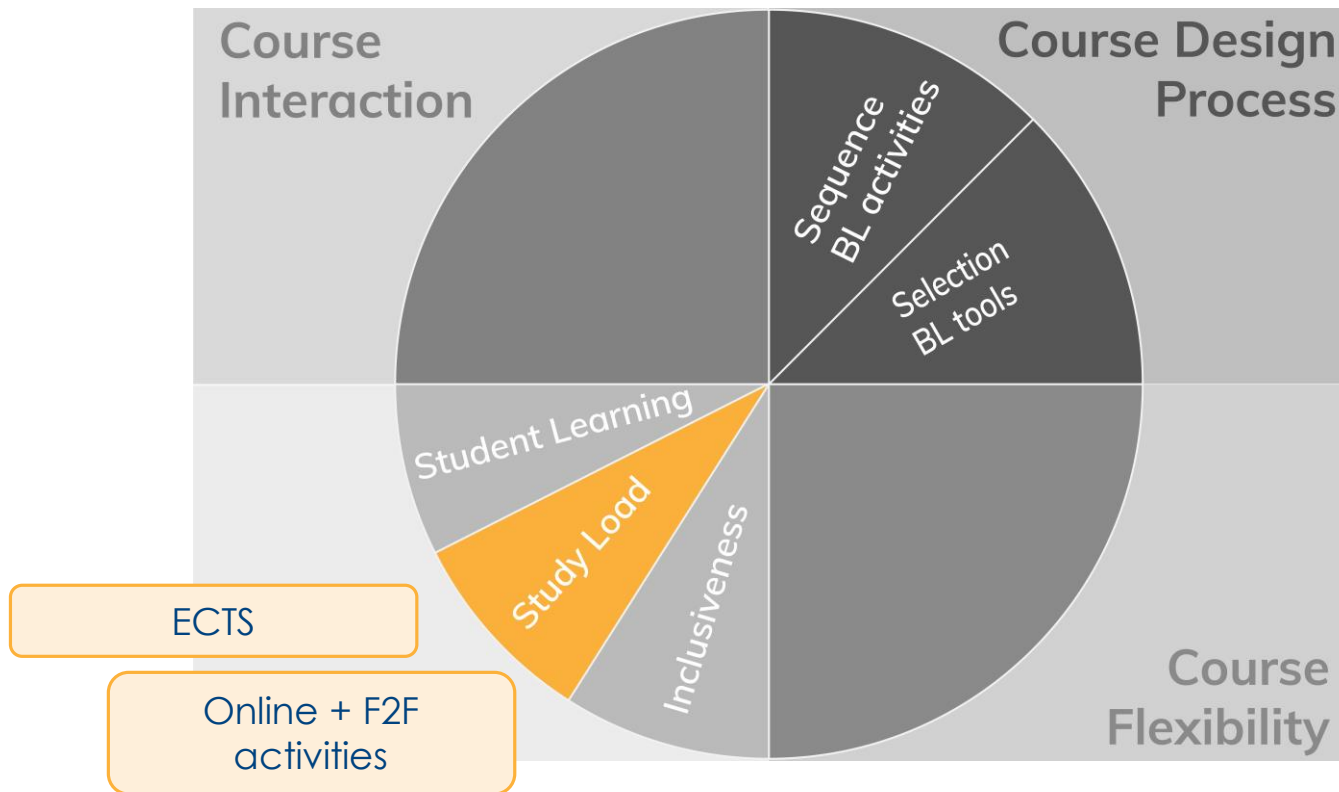
Level 1 Ad Hoc	Level 2 Consolidated	Level 3 Strategic
Limited support for blended learning and teaching aimed at individual teaching staff and students	Dedicated support for blended learning and teaching is available for all teachers, students and departments.	Support for blended learning and teaching is part of the standard support services of the institution. Continuous quality improvement is deliberately embedded in order to improve the support for blended learning.

COURSE LEVEL

COURSE LEVEL



COURSE LEVEL



Starting at La Trobe ▾

Student administration ▾

Your course ▾

Study support and resources ▾

Help and Support ▾

Careers and Opportunities ▾

International ▾

Domestic student fees —

- Calculating fees
- Undergraduate fees
- Postgraduate fees
- Single subject fees
- Calculating study load (EFTSL)

Domestic student fees

Use the fee calculator below to calculate your course fees and study load (EFTSL) values for your course. Click the Add (+) button next to the subject details to add it to your cart.

Fee Calculator

This fee calculator is for domestic (local) students only. International students can find course fee information on the [International Students](#) site.

Step 1

What is your student type?

Select your student type ▾

Which year did you start your study?

Select your commencement year ▾

Fees for the year

2019 ▾

Guideline on calculating student workload

The purpose of this guideline is to provide course leaders at UNIS with tools to better comprehend and calculate student workload when revising or planning new courses.

1. Defining workload

The time a student needs to efficiently learn a curriculum and complete course activities, constitutes the *workload* of a course. The workload includes both the scheduled activities and study time outside class (reading, preparation, writing reports, reflection, exam etc.).

2. Defining ECTS

Workload is measured in ECTS credits and the European countries (EHEA) have defined 60 ECTS as a fulltime year of studies¹. The full time student in Norway is expected to complete 60 ECTS credits in an academic year of app. 1600h, which gives *40h of student learning per week* (1 ECTS = 26-27h workload). Thus a 5 ECTS credit course equals 133h, a 10 ECTS credit course 266h and a 15 ECTS credit course 400h.

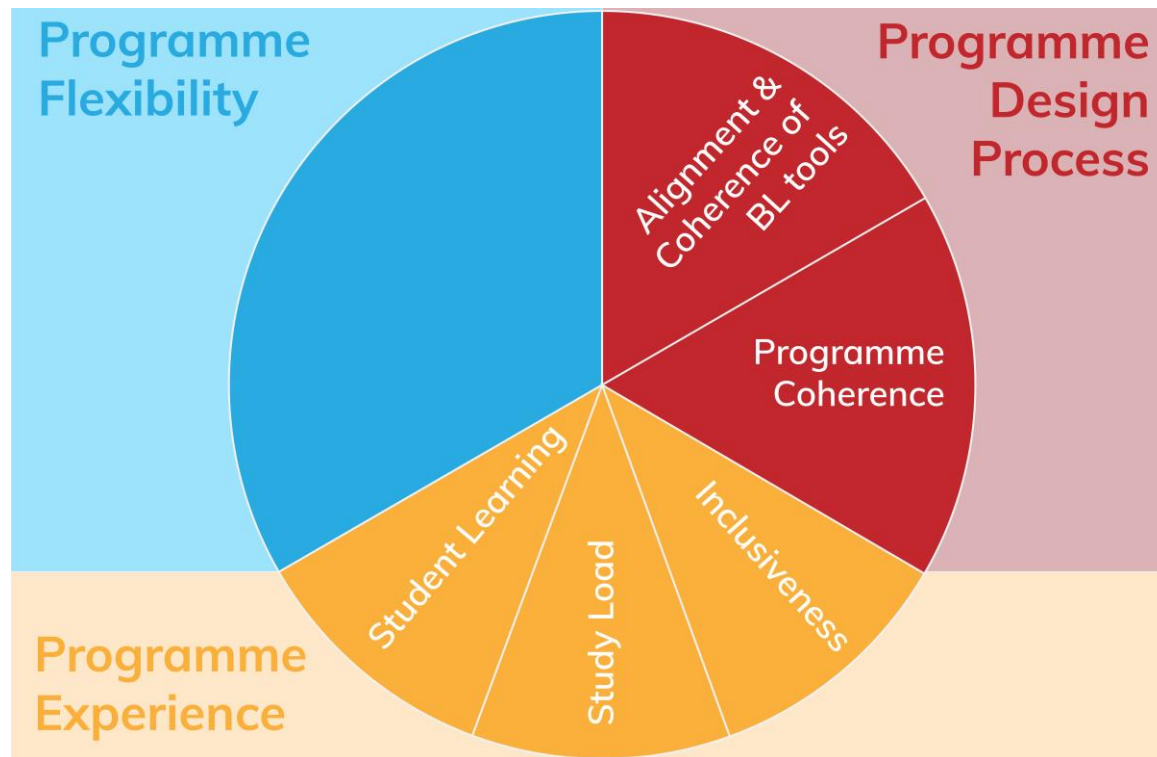
3. Calculating workload

To ensure students have enough time to learn it is important to list up all activities involved in the course. Course responsible should have an idea of the time required to complete each of the learning activities. In addition, time for reading the curriculum, preparing for exam and preparation time for lectures, seminars, labs etc. should be taken into account when calculating workload. Each activity should therefore include enough time for deep and

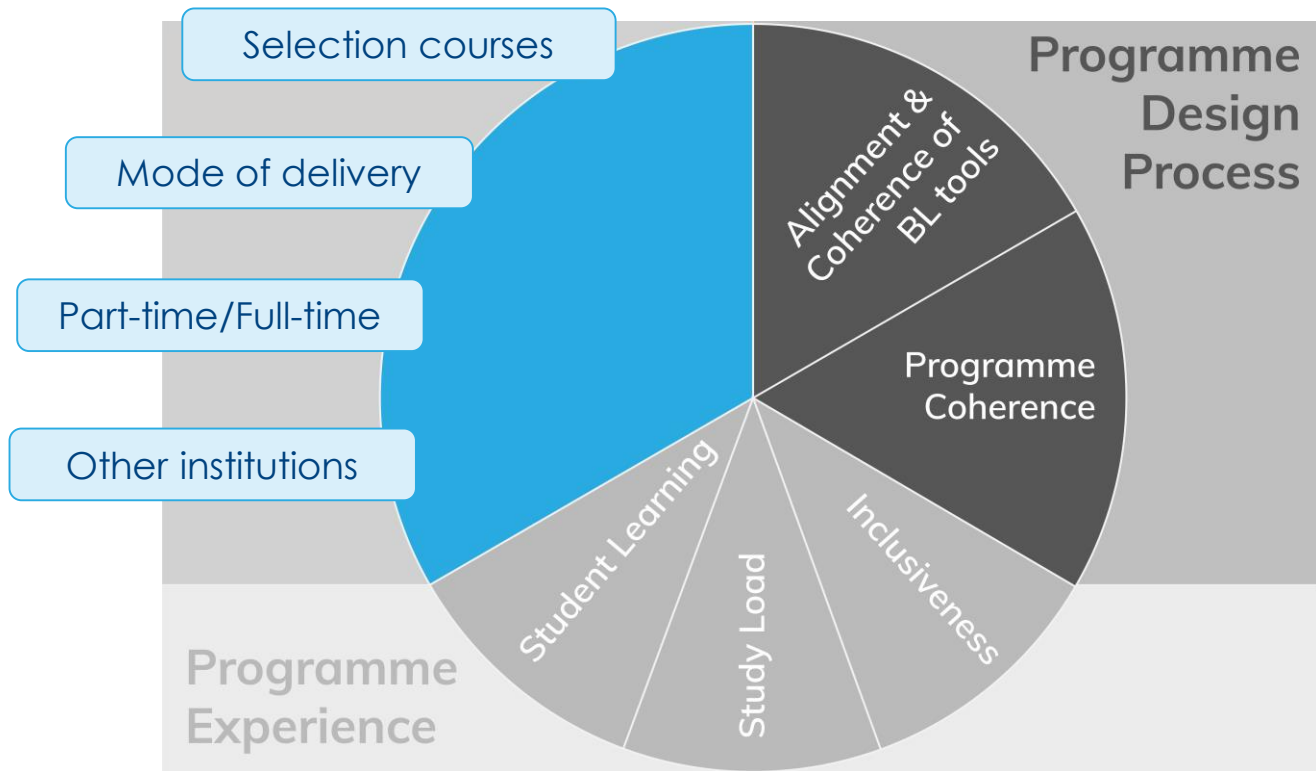
<https://www.unis.no/wp-content/uploads/2018/02/Guideline-on-calculating-student-workload.docx>

PROGRAMME LEVEL

PROGRAMME LEVEL



PROGRAMME LEVEL



MSc Track: Applied
Geophysics

MSc Track: Building
Engineering

MSc Track:
Environmental
Engineering

MSc Track:
Environmental
Engineering

MSc Track:
Environmental
Engineering

MSc Track: Geo-
Energy Engineering

MSc Track: Geo-
Engineering

MSc Track: Geo-
Engineering

MSc Track: Geoscience
and Remote Sensing

MSc Track: Geoscience

MSc Track: Geoscience

MSc Track: Hydraulic

Variants

This Master's programme is offered in a **full-time** variant (average of 40 hours of study per week) or a **part-time** variant (average of 20 hours of study per week).

Virtual Exchange Program



The Virtual Exchange Program gives you access to world-class online education from top universities around the globe whilst remaining at your home university.



Benefits

You earn credits for your degree learning at your own pace and at a time and place that suits you. Find out how it works and how you will benefit from participating.

STEP 1



STEP 2



STEP 3



Apply

Enrolment in these courses is easy – it only takes 3 steps! Follow the link to your home university enrolment pages.

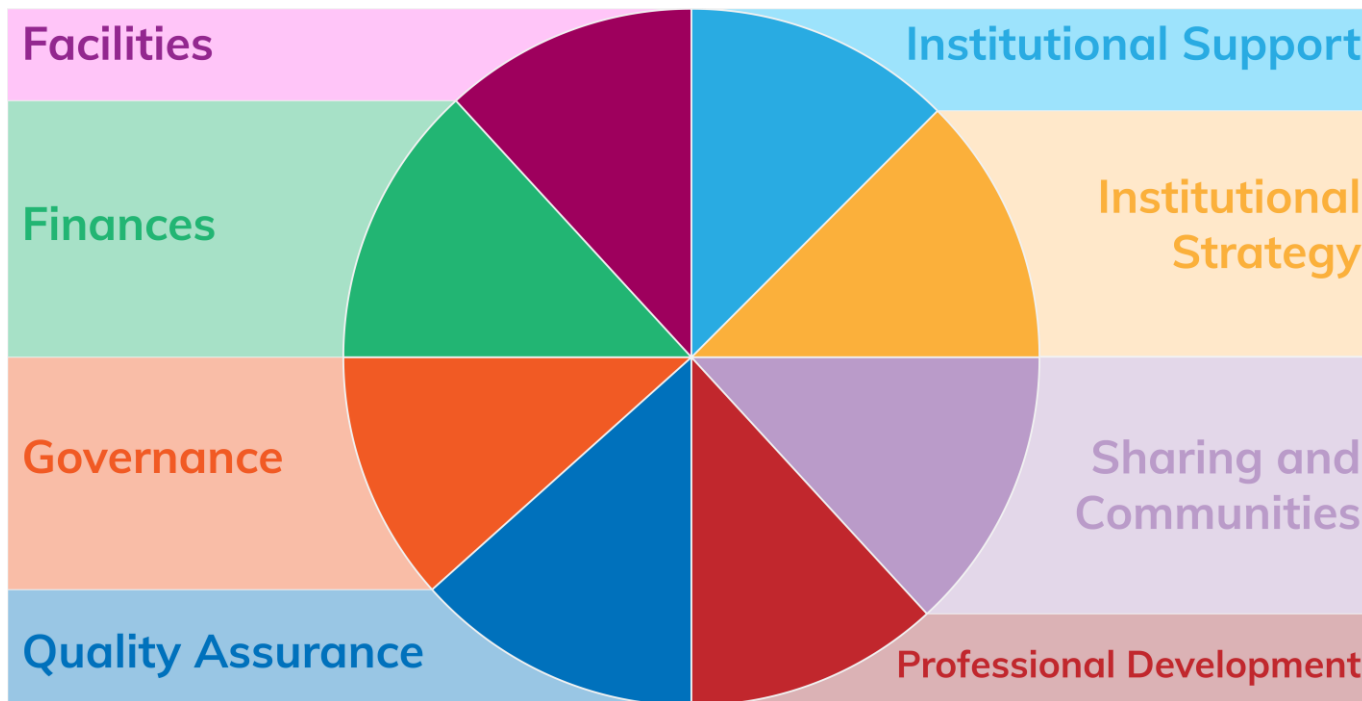


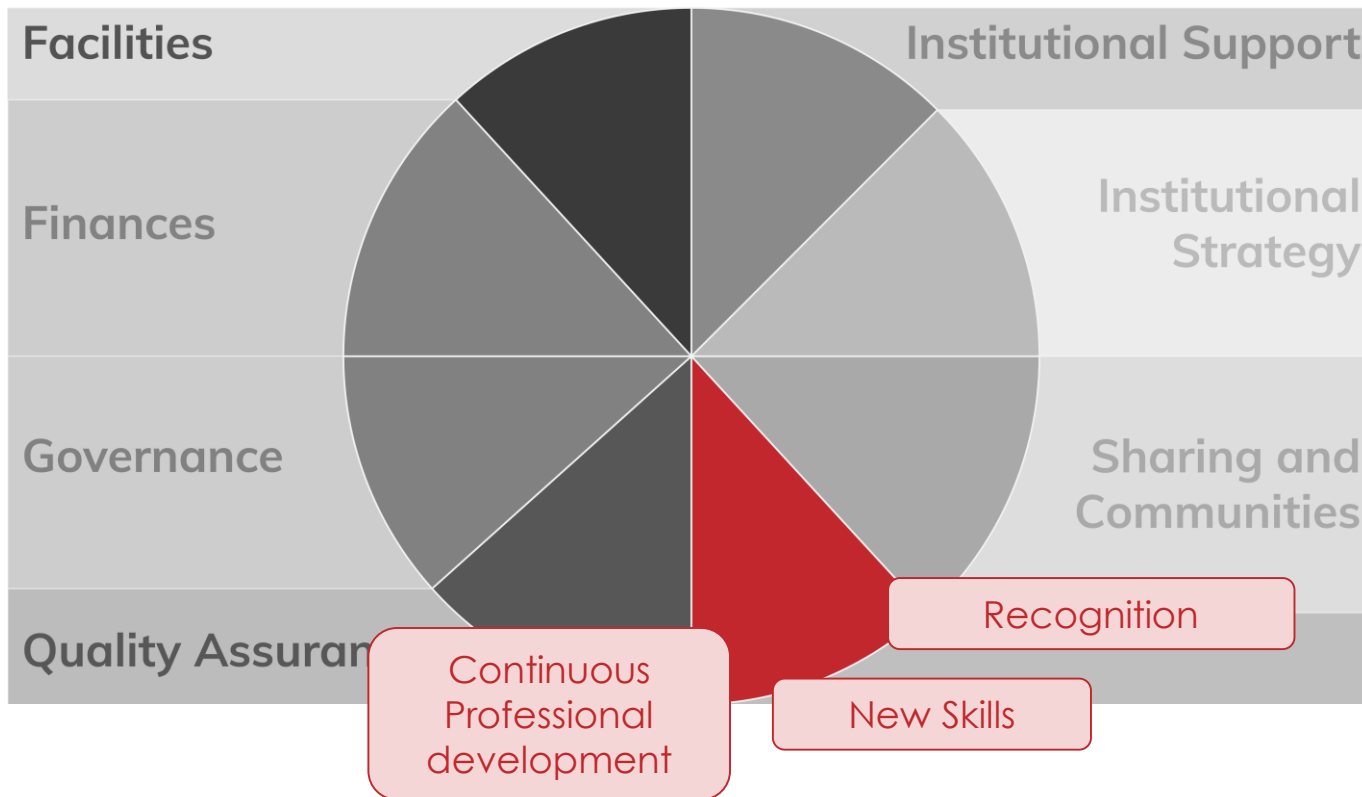
Partners

This program is a collaboration among leading international universities. See which universities are part of it.



INSTITUTION LEVEL







FORUM





Augmented & Virtual Reality Educational Accelerator

Generate ideas, support the development, implementation and evaluation of augmented and virtual reality learning experiences in education.



Designing an online course – TUD Style

Learn about online education at TU Delft, the Online Learning Experience model and build a learning sequence into the platform.



Community Management

A hands-on workshop that helps you engage your MOOC students on the EdX forums, emails and social media.



Blending your Education

Blended learning is integrating online learning into campus education. Together we'll discover the possibilities of blended learning.



Hands-on open edX

Introduction how to build your course in edX. Learn the possibilities and tools of this platform. For MOOCs and ProfEds.



Teaching an online course

Learn about teaching an online course: the role of an e-moderator, engaging your online students and building a learning community.



Do-It-Yourself video

Create and publish your own video with TU Delft tools Kaltura (simple and fast) and Camtasia (lots of editing options).



Presenting in front of a camera

Experience what it is like to be in front of the camera and learn to tell a story in a natural way. Improve your presenting and overcome camera shyness.



Writing a script

In this online, self-paced course, you will learn script-writing techniques that will help you tell your story in a natural way.



Effective use of video in education

This online, self-paced course about the use of, the different functions, and includes do and don'ts of using videos in education.



Open Textbook in a Day

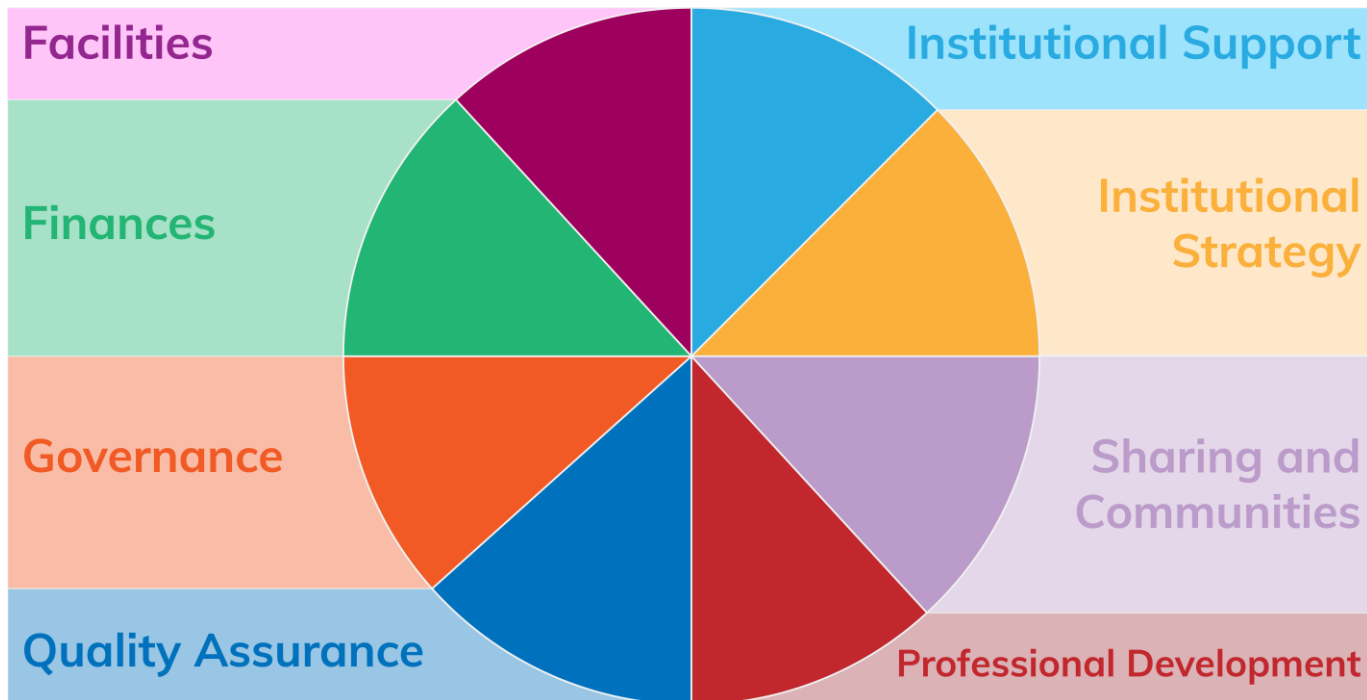
This one-day workshop will cover all the aspects of the publication process: content preparation, content creation/conversion and publishing.

EMBED IN PRACTICE




TU Delft

A wide-angle photograph of the TU Delft campus. On the left is a long, modern building with a white facade and vertical slats. A red brick path runs alongside it. In the center is a large green lawn with a grey paved path winding through it. Several trees are scattered across the lawn. In the background, a tall, blue glass skyscraper stands out against a cloudy sky. The TU Delft logo, consisting of a stylized flame icon and the text "TU Delft", is overlaid in the center of the image.



INSTITUTIONAL STRATEGY

The extent to which blended learning, teaching and education are embedded in the vision, educational model and goals of an institution.

Level 1 Ad Hoc	Level 2 Consolidated	Level 3 Strategic 
No uniform blended learning strategy is in place.	A dedicated blended learning strategy is consolidated within the institution. University administrators recognize and advocate the importance of blended learning, teaching and education.	Blended learning is an integral part of the institutional strategy . The strategy is embedded in the whole institution (throughout faculties and departments), well documented, and evaluated and adjusted on a regular basis. University administrators and departments recognize and advocate for the importance of blended learning, teaching and education.

INSTITUTIONAL SUPPORT

The manner in which an institution supports teachers and students' blended learning activities

Level 1 Ad Hoc	Level 2 Consolidated ✓	Level 3 Strategic
Limited support for blended learning and teaching aimed at individual teaching staff and students	Dedicated support for blended learning and teaching is available for all teachers, students and departments.	Support for blended learning and teaching is part of the standard support services of the institution . Continuous quality improvement is deliberately embedded in order to improve the support for blended learning.

SHARING AND COMMUNITIES

The degree to which an institution facilitates communities for sharing blended practices, materials and courses.

Level 1 Ad Hoc	Level 2 Consolidated ✓	Level 3 Strategic
<p>Individual teachers or departments share 'blended' best practices with colleagues.</p>	<p>Communities for sharing 'blended' best practices are facilitated. Processes and/or platforms are in place for sharing good practices and/or materials.</p>	<p>Communities for sharing 'blended' best practices are facilitated, actively built and maintained. Processes and platforms are in place for sharing good practices and materials. Processes are in place for quality assurance of the shared materials.</p>

PROFESSIONAL DEVELOPMENT

The extent to which teaching staff are able to develop their blended teaching skills.

Level 1 Ad Hoc	Level 2 Consolidated ✓	Level 3 Strategic
<p>A few different workshops or courses related to blended learning and teaching are offered.</p>	<p>Solid efforts to organise workshops and/or courses related to blended learning and teaching are offered for the teaching staff. The blended teaching activities of staff are incidentally recognized.</p>	<p>All teaching staff is trained in blended learning and teaching. The institution offers a well aligned portfolio of workshops and/or courses (related to blended learning and teaching) for the continuous professional development of their staff. The blended teaching activities of staff are recognized and valued by the institution.</p>

QUALITY ASSURANCE

The process where blended courses, programs, strategy, rules and regulations are evaluated and revised on a regular basis

Level 1 Ad Hoc ✓	Level 2 Consolidated	Level 3 Strategic
<p>No deliberate quality assurance for blended courses, programs, strategy and policies.</p>	<p>Special processes for evaluation of blended courses, programs, strategy and policies are developed and implemented. Some research is conducted on blended courses and/or programs.</p>	<p>Quality assurance for blended courses is part of the standard quality assurance processes of the institution. The evaluation and improvement are based on clear criteria and multiple data sources. The institution has a research agenda for researching its own courses, programs and education.</p>

GOVERNANCE

The way in which the vision and policies are translated to rules, regulations and actions that facilitate blended education

Level 1 Ad Hoc ✓	Level 2 Consolidated	Level 3 Strategic
<p>Some informal policies, rules, regulations, action plans and guidelines related to blended learning are used in the institution. The institution does not have standardized models for blended course and program design.</p>	<p>Policies, rules, regulations, action plans and guidelines related to blended learning are developed and implemented in the institution. Some key actors in the institution are involved in the process of developing new and existing policies, rules, regulations and action plans. Models for blended course and program design are shared in the institution.</p>	<p>Policies, rules, regulations, action plans and guidelines related to blended learning are embedded in the standard governance structure of the institution. The governance of the institution is systematically reviewed and adjusted. Key actors, at different levels in the institution, are involved in the process of reviewing, adjusting and developing new and existing policies, rules, regulations and action plans. Standardized models for blended course and program development are provided.</p>


FINANCES

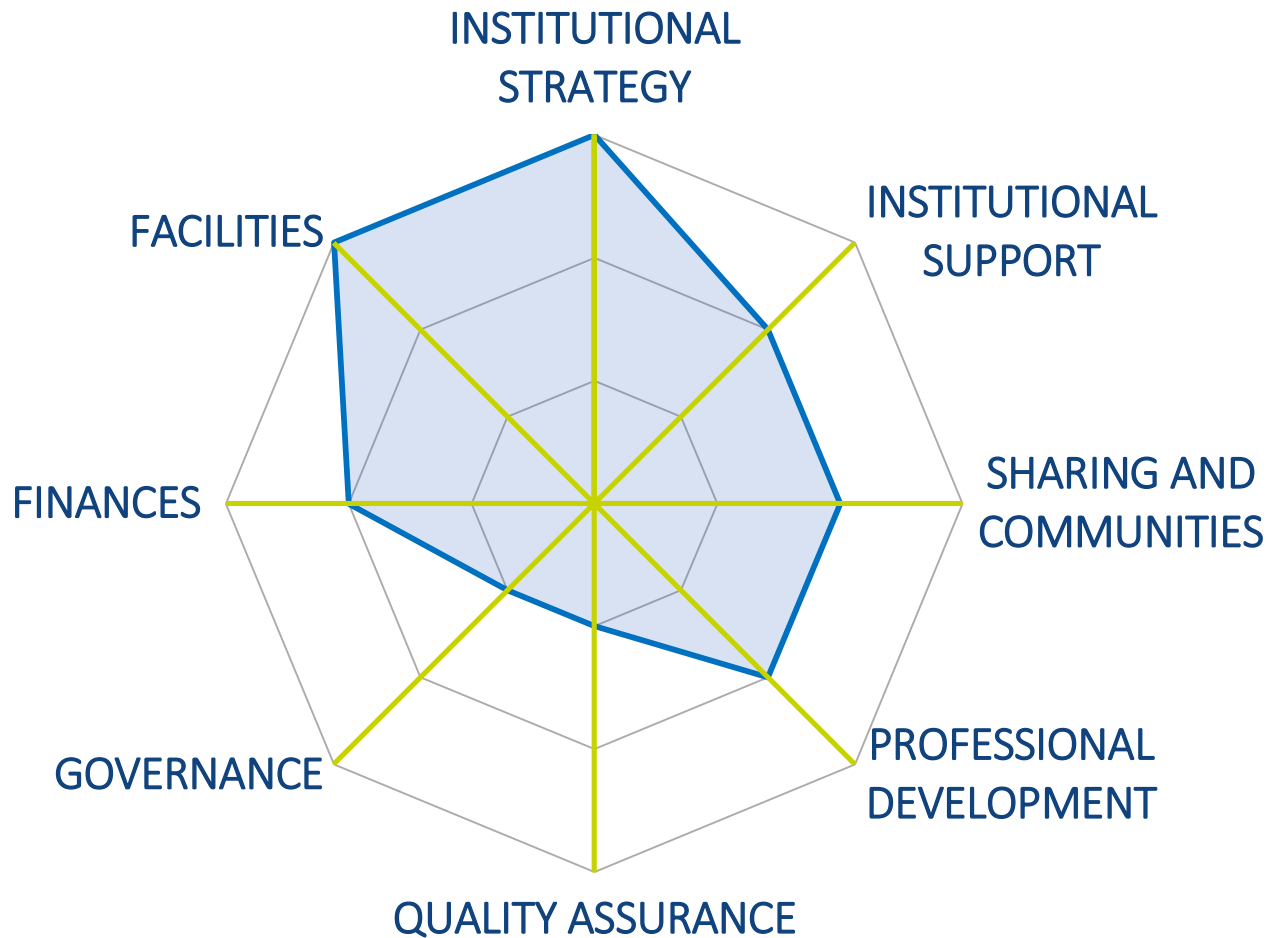
The extent to which financial resources are allocated to develop, support, and stimulate blended learning

Level 1 Ad Hoc	Level 2 Consolidated ✓	Level 3 Strategic
<p>No allocation of financial resources specifically for blended learning purposes.</p>	<p>Financial resources are incidentally allocated (e.g. projects, pilots) to develop, support, stimulate and improve blended learning and teaching. The allocation of the resources is evaluated.</p>	<p>Financial resources are structurally allocated to develop, support, stimulate and improve blended learning, teaching and blended education. The allocation of the resources is systematically evaluated and adjusted, based on clear criteria and qualitative and quantitative data.</p>

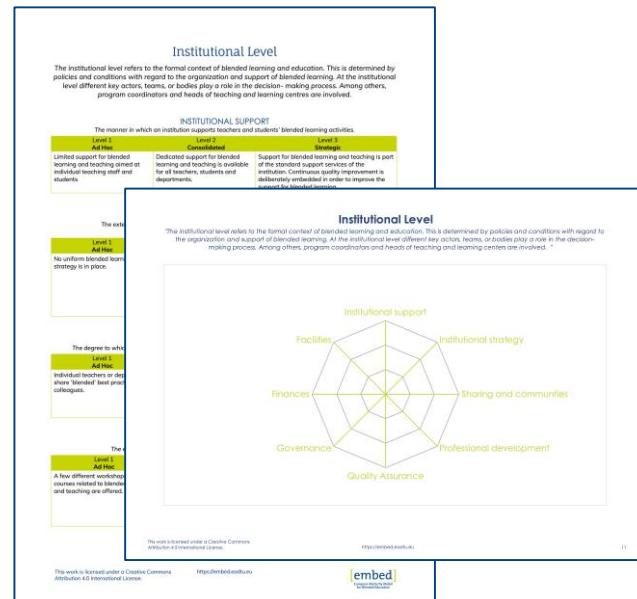
FACILITIES

The extent to which institutions are equipped to facilitate blended learning and teaching.

Level 1 Ad Hoc	Level 2 Consolidated	Level 3 Strategic 
Limited availability of blended learning and teaching facilities.	A wide variety of facilities is available. This includes both digital (e.g. digital learning environment, educational tools) and physical (e.g. video recording studios, the availability of different classroom set-ups) facilities.	A wide variety of facilities is available. This includes both digital (e.g. digital learning environment, educational tools) and physical (e.g. the availability of different classroom set-ups, video recording studios) facilities. Teachers have influence on the scheduling of the facilities. The development of facilities is aligned with the institutional strategy. The quality, quantity and assortment of facilities is systematically evaluated and adjusted , based on clear criteria and multiple data sources.



Let's get to work





Action Plan

1	What do you want to change?
	Why do you want to change it?
	Who needs to be involved
	When are you going to do this?
2	What do you want to change?
	Why do you want to change it?
	Who needs to be involved
	When are you going to do this?
3	What do you want to change?
	Why do you want to change it?
	Who needs to be involved
	When are you going to do this?

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<https://embed.edathu.eu>



NEXT STEPS FOR EMBED

Next Steps

- Self Assessment tool
 - Excel version is almost ready
 - Online version will come later
- Implementation guidelines
- MOOC on FutureLearn (May)

COURSE LEVEL

The course level refers to the core of the educational system, where both learning processes and instructional processes are situated. It refers to the primary educational process, in other words the development, execution and evaluation of courses. The stakeholders of this level are mainly teachers/educators and students, but also instructional designers, learning developers, content developers and sometimes management.

COURSE DESIGN PROCESS

The process of planning, designing, developing and evaluating a blended learning course

Selection of blended learning activities and their sequencing

The rationale for the deliberate selection and integration of face-to-face and online learning activities.

Level 1 Explorative	Level 2 Design-based	Level 3 Course cycle	Your score
No considered selection and integration of face-to-face and online learning activities.	Learning activities (both face-to-face as online) are deliberately selected, integrated, and sequenced based on a design method or design principles.	Learning activities (both face-to-face as online) are deliberately selected, integrated, and sequenced based on a design method or design principles. Quality assurance processes are deliberately embedded in order to continuously improve a course in an iterative manner.	1

Selection of blended learning tools

The rationale for selecting tools for delivery and organization of blended learning activities

Level 1 Tool-based	Level 2 Design-based	Level 3 Course cycle	Your score
The selection of particular tools is based on their availability at the institution.	The selection of particular tools is based on learning activities, informed by evidence or experience.	The offering (or not offering) of course flexibility is deliberately designed, informed by evidence or experience. The flexibility is adapted based on the learners' needs. Continuous quality improvement is deliberately embedded in order to enhance course flexibility.	2

COURSE FLEXIBILITY

Opportunities for learners to adjust particular features of the blended learning course, based on their needs and preferences. This includes features such as the selection of learning activities, the selection of resources, the mode of delivery (online/face-to-face activities), pace (educator-paced/self-paced).

Level 1 No flexibility	Level 2 Flexible	Level 3 Adaptive flexibility	Your score
No deliberate course flexibility.	The course's flexibility is deliberately designed. Its design is based on evidence or experience.	The course's flexibility is deliberately designed. Its design is based on evidence or experience. Continuous quality improvement is deliberately embedded in order to enhance course flexibility.	3

COURSE INTERACTION

Extent to which the blended course facilitates learners' interaction (learner-content, learner-learner, learner-educator)

Level 1 Non-responsive	Level 2 Interactive	Level 3 Responsive	Your score
No deliberate course interaction.	The interaction in the course is deliberately designed, informed by evidence or experience.	The interaction in the course is deliberately designed, informed by evidence or experience. Interactions are monitored, evaluated and changed based on data and feedback.	3

COURSE EXPERIENCE

Fit of particular blended course components with the course outcomes

Student learning

The use of blended course features which facilitate students' self-regulated learning (orienting and planning, monitoring, adjusting and evaluating).

Level 1 Standard	Level 2 Advanced	Level 3 Comprehensive	Your score
No deliberate consideration for student learning.	Blended course features are used in order to facilitate student learning, informed by evidence or experience.	Blended course features are used in order to facilitate student learning, informed by evidence or experience. Continuous quality improvement is deliberately embedded in order to enhance student learning.	2

Study load

The match between the intended and achieved study load of a course (distribution and correctness).

Level 1 Standard	Level 2 Advanced	Level 3 Comprehensive	Your score
The calculation of the study load of a course is based on a guess.	The study load of a course is calculated based on experience. Different course elements (e.g. online learning activities, face-to-face learning activities, exam preparations) are taken into consideration for the calculation of the study load.	The study load of a course is calculated based on data and experience. All course elements (e.g. online learning activities, face-to-face learning activities, exam preparations) are taken into consideration for the calculation of the study load. The study load is monitored, evaluated and changed based on quantitative and qualitative data.	2

Inclusiveness

The consideration for the diverse needs (including accessibility aspects) and backgrounds of all students to create an online and face-to-face course experience where all students feel valued, safe, have a sense of belonging, and where all students have equal access to learn.

Level 1 Standard	Level 2 Advanced	Level 3 Comprehensive	Your score
No deliberate consideration for inclusiveness.	Initial attempts to facilitate and include the different needs and backgrounds of all learners. Special attention is paid to the social belonging and identity in the online course environment. The process is informed by evidence or experience.	The different needs and backgrounds of all learners are included and facilitated. Students feel valued, safe, and have a feeling of belonging. The realization of inclusiveness is based on evidence or experience. Continuous quality improvement is deliberately embedded in order to improve inclusiveness in the course.	3

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