Micro-credentials and the link to the OpenU project

13 October 2021
9:30-13:00 CET

The meeting will not be recorded.

OpenU
High-level Authorities' Meeting
hosted by the
Flemish Ministry of Education and Training

DAAD
Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Flemish Ministry of Education and Training

OPEN U

Agenda

9.30-9.45 Welcome Speeches

a. Flemish Ministry of Education and Training – Magalie Soenen
b. OpenU Coordination – Julién Frémont / Yasmine Cherif, Paris 1
c. OpenU Policy Cluster Coordination – Alexander Knoth, Chief Digital Officer DAAD

9.45-10.00 The OpenU Project and the current status

10.00-10.45 Overview of European and Flemish policy on Micro-credentials

a. Micro-credentials in the EU and EHEA – Magalie Soenen
b. Flexibility and micro-credentials in the Flemish Higher Education System – Liesbeth Hens

10.45-11.00 Q&A Session

11.00-11.20 Health Break

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Agenda

The **chat** is always open for your questions.

Please use the **„raise hand“** function to indicate you want to contribute to the discussion.

11.20-12.10 Institutional perspectives

a. KU Leuven – Una Europa, Peter Lievens
b. Artevelde University College, Dries Vanacker & Ingrid Verbanck
c. Ghent University – ENLIGHT, Frederik De Decker

12.10-12.30 Concrete ways in which Micro-credentials can be supported by the OpenU project / the BLOOM hub – Johannes Posel, FU Berlin

12.30-13.00 Questions & Discussion

a. Which parts in the puzzle are missing?
b. What is needed at the HEIs?
c. How can OpenU/ BLOOM hub respond to that?

13.00 End of Meeting

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OpenU : Current status

High Level Authorities' Meeting
hosted by the Flemish Ministry of Education and Training

13 October 2021

OpenU – a brief description

Erasmus+ program – KA3 Support for policy reform, European Policy Experimentation

Partners : 21 partners and 10 associated partners

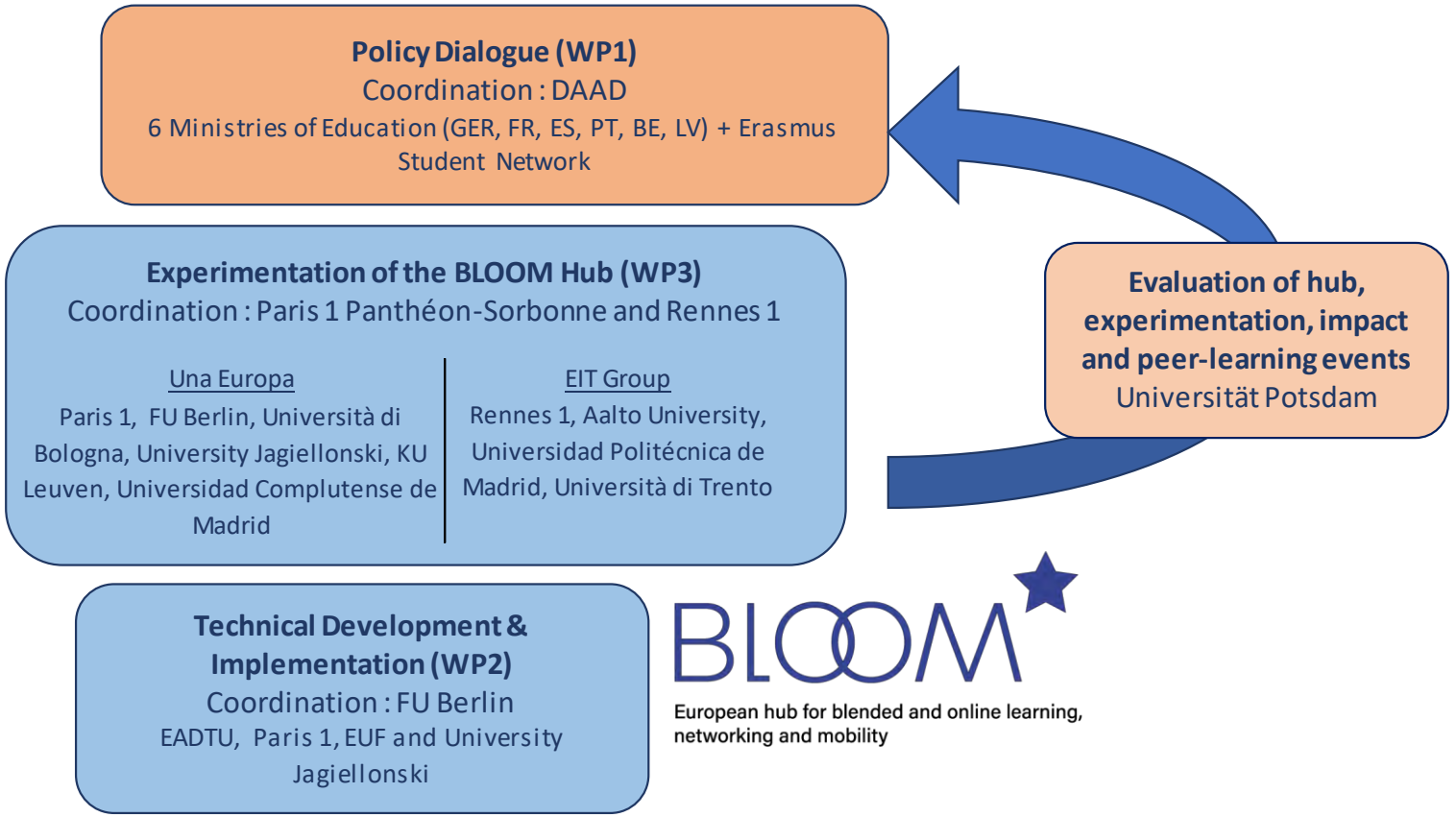
Duration : 20 February 2019 – 19 December 2022 (47 months)

Objectives :

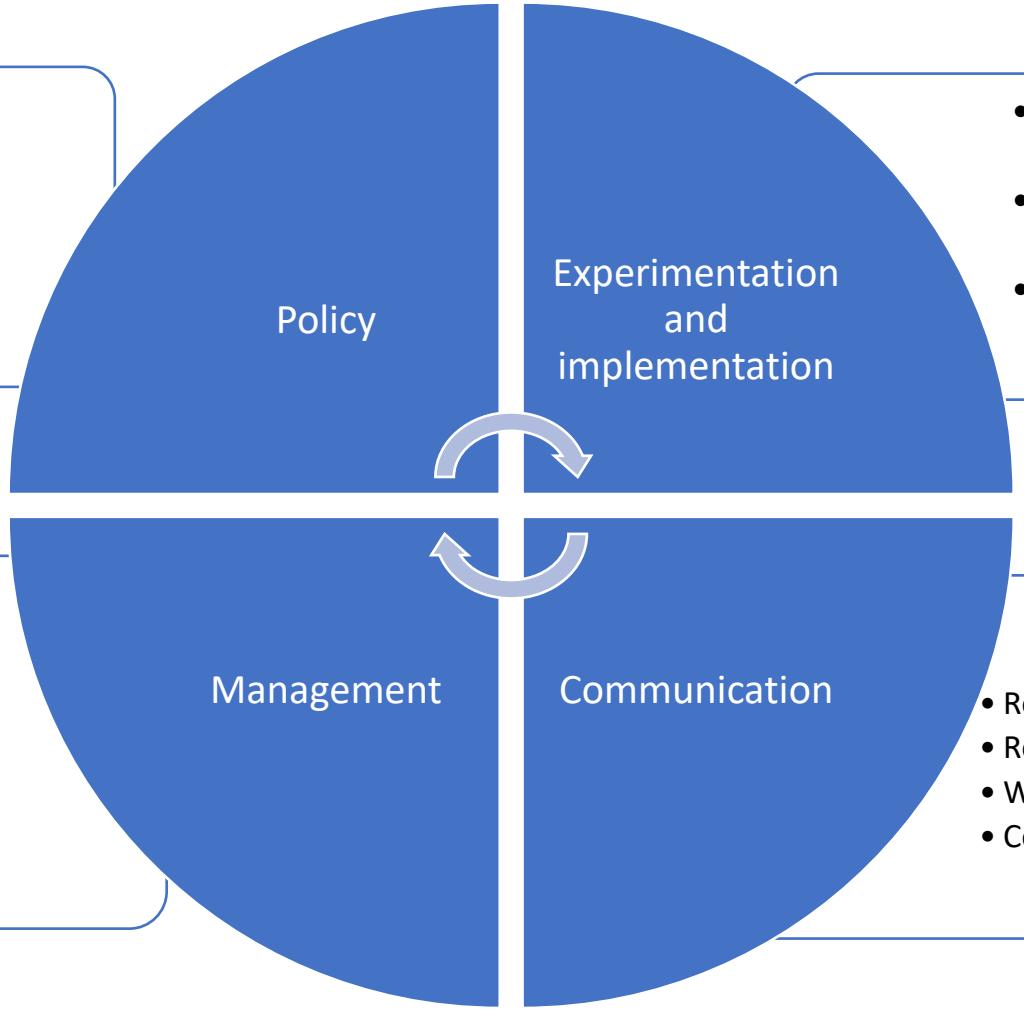
- Develop policies to support innovative teaching
- Create a European-wide hub for online learning, blended and virtual mobility, virtual campuses and collaborative exchange of practices
- Bringing researchers, practicioners and policy-makers together

Target groups: Students, HEIs and their staff, European university alliances and initiatives, National and European policies

OpenU structure



Notable outcomes and activities in 2020-2021



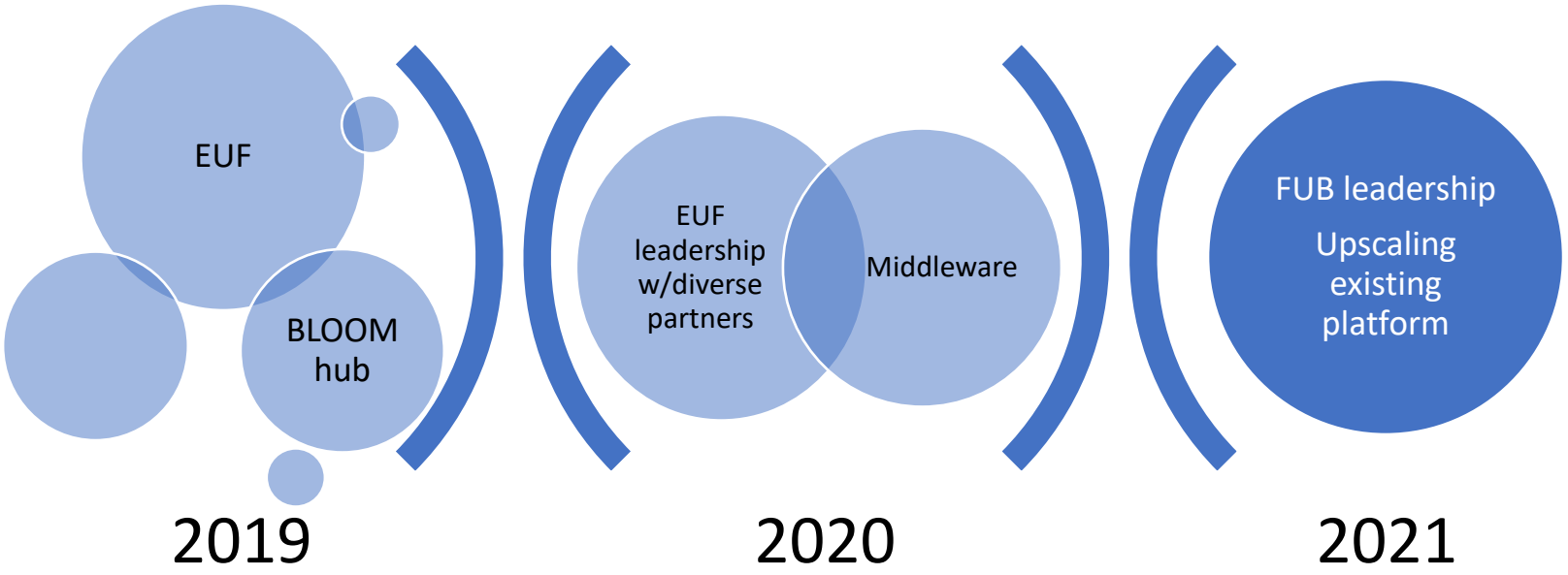
- Resumption of Policy Dialogues
- 1 HLAM (PT) + Policy Recommendations
- 2 webinars on Quality Assurance

- Pedagogical Guidelines and COPs
- Alternative to Potsdam withdrawal
- Pre-call and launch of 1st exp. Phase

- Regular meetings, permanent communication
- Approval NWP
- Submittal progress report
- 19 partnership agreements
- Quality Assurance and Risk mitigation

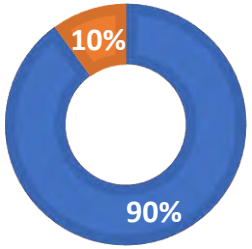
- Resumption of DAC meetings
- Release of 3 newsletters (1 public)
- Website update
- Communication material

Implementation Cluster – current status and update



Experimentation Cluster – Update on the WP3 submitted projects

July 2021
14 experimentations online cooperation/modules, trainings
Most covered PAs: 4, 5, 6, 7, 8



Regular meetings and interactions : 9 partners involved
Followers in each project

October – November 2021
Coordination of Phase 2 Experimentation
OpenU and Alliances partners
2/3 experiments of phase 1 involved

January 2022
Phase 1 Experimentation
Internal workshop
Sharing experiences, work in progress, key debates, policy session

Expected next steps : October – December 2021

October 2021

- Flemish HLAM
- 2nd Interim Progress Report
- Start of the BLOOM hub development

November 2021

- WP1 public webinar
- Interim evaluation report
- Needs' analysis
- Pedagogical Guidelines

December 2021

- HLAM (Germany), consortium meeting
- End of 1st experimentation phase
- End of 1st evaluation phase
- 2nd call for projects

Thank you!

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

Contact : Yasmine Cherif, OpenU Project Officer, Université Paris 1 Panthéon-Sorbonne openu@univ-paris1.fr

Julien Frémont, Deputy Director of International Relations, Université Paris 1 Panthéon-Sorbonne
international-cooperation@univ-paris1.fr

Micro-credentials in European perspective

HLAM Belgium OpenU project

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Magalie Soenen

-

13 October 2021

European Framework: EU-level

Micro-credentials

A joint initiative: Cssrs Gabriel and Schmit

Achieving a European Education Area by 2025

Digital Education Action Plan

New Skills Agenda

European Framework: EU-level

European Framework: EU-level

Part of the Skills Agenda:

- The new initiative will support the quality, transparency and use of micro-credentials throughout the EU
- The Commission will work with all stakeholders to develop European standards of quality and transparency
- Explore the inclusion of micro-credentials in qualification frameworks
- Inclusion in Europass (Europass Digital Credentials Initiative)

European Framework: EU-level

Part of the European Education Area:

- Focus on HE, re-skilling and upskilling
- Higher Education Consultation Group on Micro-credentials at the level of DG EAC
- Commission preparing Council recommendations to be published in December 2021 (consultation in spring 2021)
- European actions should support European trust in micro-credentials
- Member States should strive to take all necessary steps for a wider use, portability and recognition of these micro-credentials by 2025

European Framework: EU-level

Higher Education Consultation Group on Micro-credentials:

European Framework: EU-level

Higher Education Consultation Group on Micro-credentials:

- 3 meetings in 2020
- aim: develop a proposal for a common definition and recommendations for a European approach to micro-credentials in Europe
- final report presented on 14 December 2020 “A European approach to micro-credentials - output of the micro-credentials higher education consultation group”

European Framework: EU-level

Higher Education Consultation Group on Micro-credentials:

- Definition:

A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards.

The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable and may be combined into larger credentials or qualifications. They are underpinned by quality assurance following agreed standards

European Framework: EU-level

Proposed EU Standard of constitutive elements of micro-credentials

The essence of an EU Standard

- Identification of the **learner**
- **Title** of the micro-credential
- **Country/Region of the issuer**
- **Awarding body**
- Date of issuing
- **Notional workload** needed to achieve the learning outcomes (in **ECTS**, wherever possible)
- **Level** (and cycle, if applicable) of the learning experience leading to the micro-credential (EQF, QF-EHEA)
- **Learning outcomes**
- Form of participation in the learning activity
- **Type of assessment**
- **Quality assurance of the credential** and, where relevant, of the learning content

This information should offer **verifiable**, **free and secure access to data**, which is **available over time**, in order to support transparency and recognition.

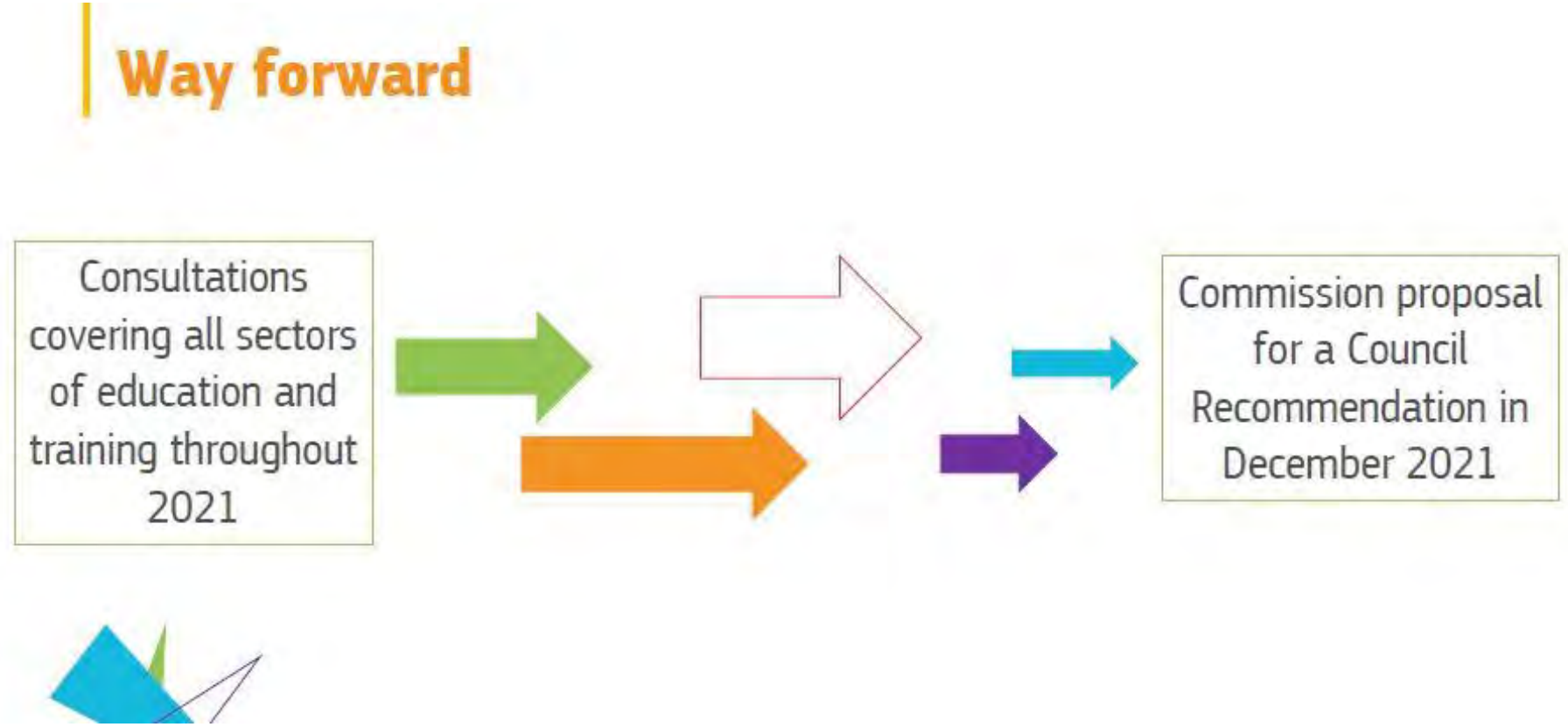
- Prerequisites needed to enrol in the learning activity*
- Supervision and identity verification during assessment *
- Grade achieved*
- Integration / stackability options*
- Further information*

** Optional information*

European Commission

European Framework: EU-level

Roadmap:



European Framework: EHEA-level

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Micro-credentials linked to the Bologna Key Commitments

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

Details project:

- Title: Micro-credentials linked to the Bologna Key Commitments
- Erasmus+ KA3: Initiatives to support the implementation of European Higher Education Area (EHEA) reforms, 2019
- Period: March 2020 – March 2022

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Partners:

- Belgium – Flemish Ministry of Education and Training
- Finland – Ministry of Education and Culture
- Italy – CIMEA
- EUA
- ENQA

- Experts: Anthony F. Camilleri, Frederik De Decker, Ann Katherine Isaacs, George Ubachs, Peter Van der Hijden

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Aim project:

- Raise awareness among national governments
- Encourage and guide national governments to include micro-credentials on the agenda
- Check whether existing Bologna tools are fit for micro-credentials and/or propose changes for adaptations on European level
- Recommendations to check and adapt national legislations
- Create a European Framework for micro-credentials to propose to ministers in BP

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Structure & timeline:

- Desk research (April-Aug ’20)
- Kick-off conference (Aug-Sept ’20)
- Working groups (Sept ’20–May ’21)
  - Quality Assurance (Belgium – Flemish Community, Peter van der Hijden, Anthony Camilleri)
    - 70 participants, 34 countries, 7 stakeholder organisations
  - Recognition (Italy, Frederik De Decker, Peter van der Hijden)
    - 60 participants, 33 countries, 5 stakeholder organisations
  - Qualification Frameworks (Finland, George Ubachs, Ann Katherine Isaacs)
    - 60 participants, 32 countries, 7 stakeholder organisations
- Survey among EHEA countries (Okt ’20-Feb ’21)
- Recommendations on QA, Recognition & QF&ECTS (May-June ’21)
- European Framework for Micro-credentials (July-Dec ’21)
- Final Conference (Jan ’22)

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Working definition:

A micro-credential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by higher education institutions or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A micro-credential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Micro-credentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG.

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MICROBOL survey:

- Aim of the survey: gain a picture on the state-of-play on micro-credentials in different member states of the European Higher Education Area and encouraging national discussion

- Target: members of the Bologna Follow Up Group as well as the nominated representatives in the MICROBOL working groups

- Respondents: 35 countries participated in the survey

Section 1
Investigating the use of micro-credentials

- Overview of micro-credentials offered or being developed
- Regulation of micro-credentials at national level

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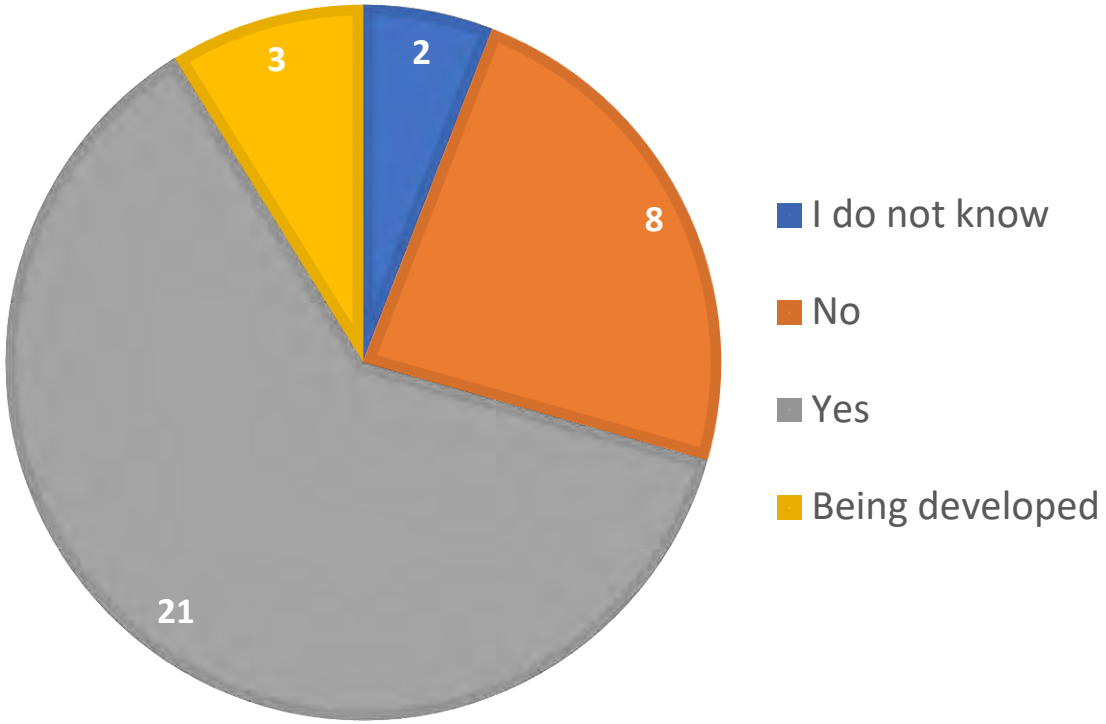
Countries that offer or are developing micro-credentials



- Offered: 21 countries
- Being developed: 3 countries
- Not offered/not being developed: 8 countries

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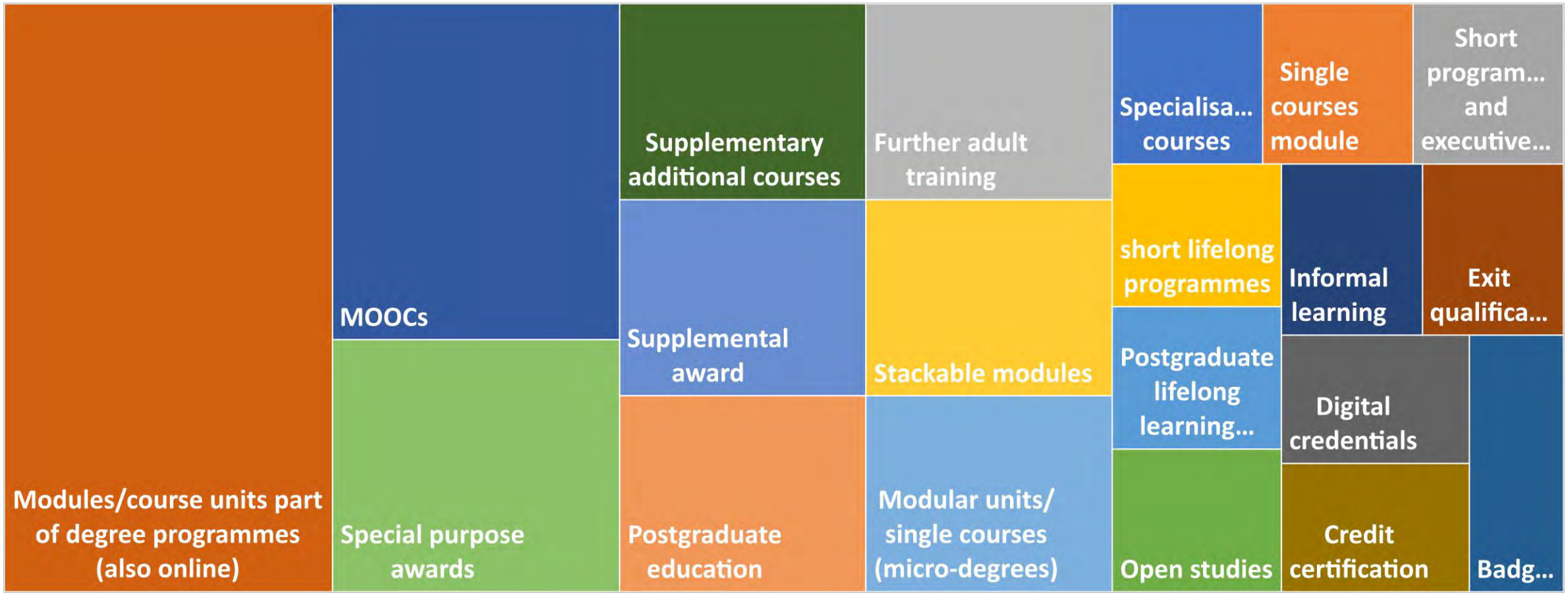
Examples of micro-credentials offered/recognised by HEIs



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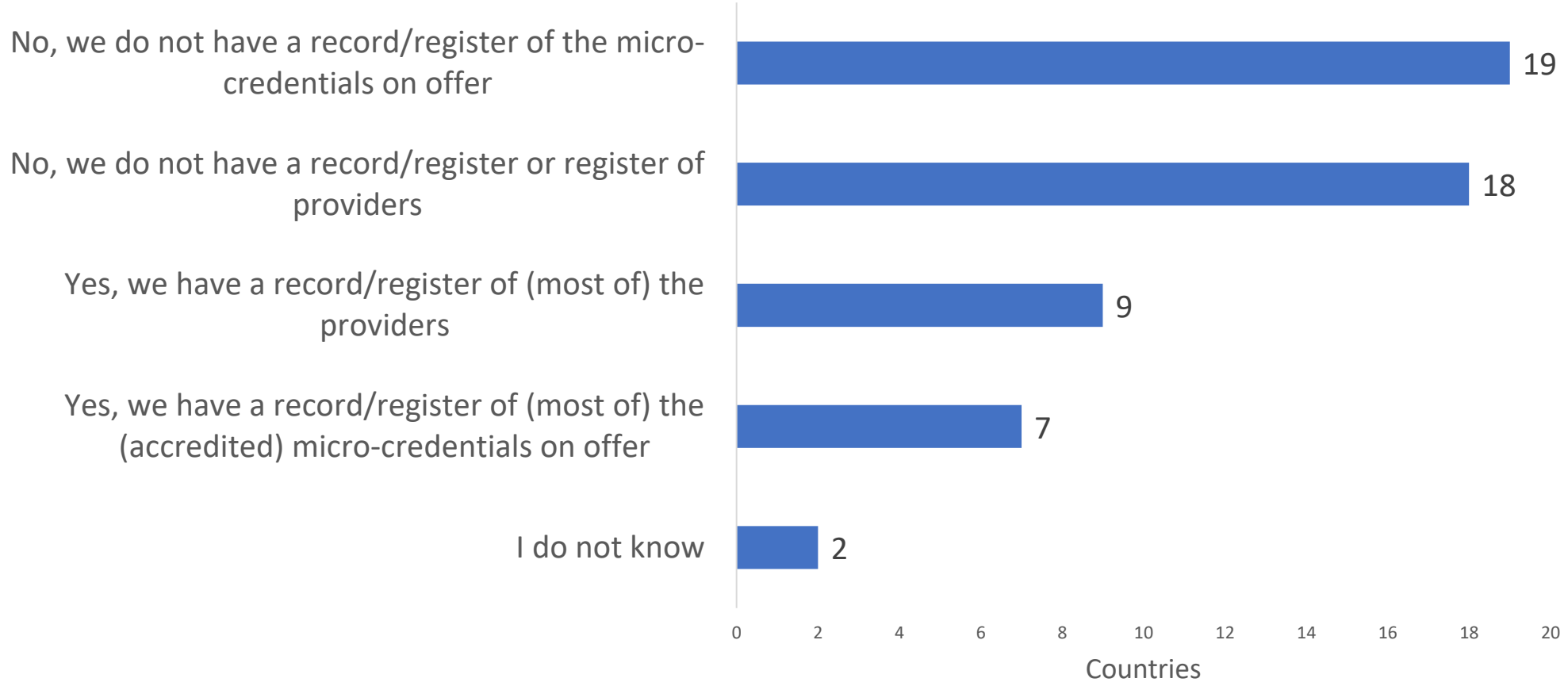
Official record or register of micro-credentials and providers



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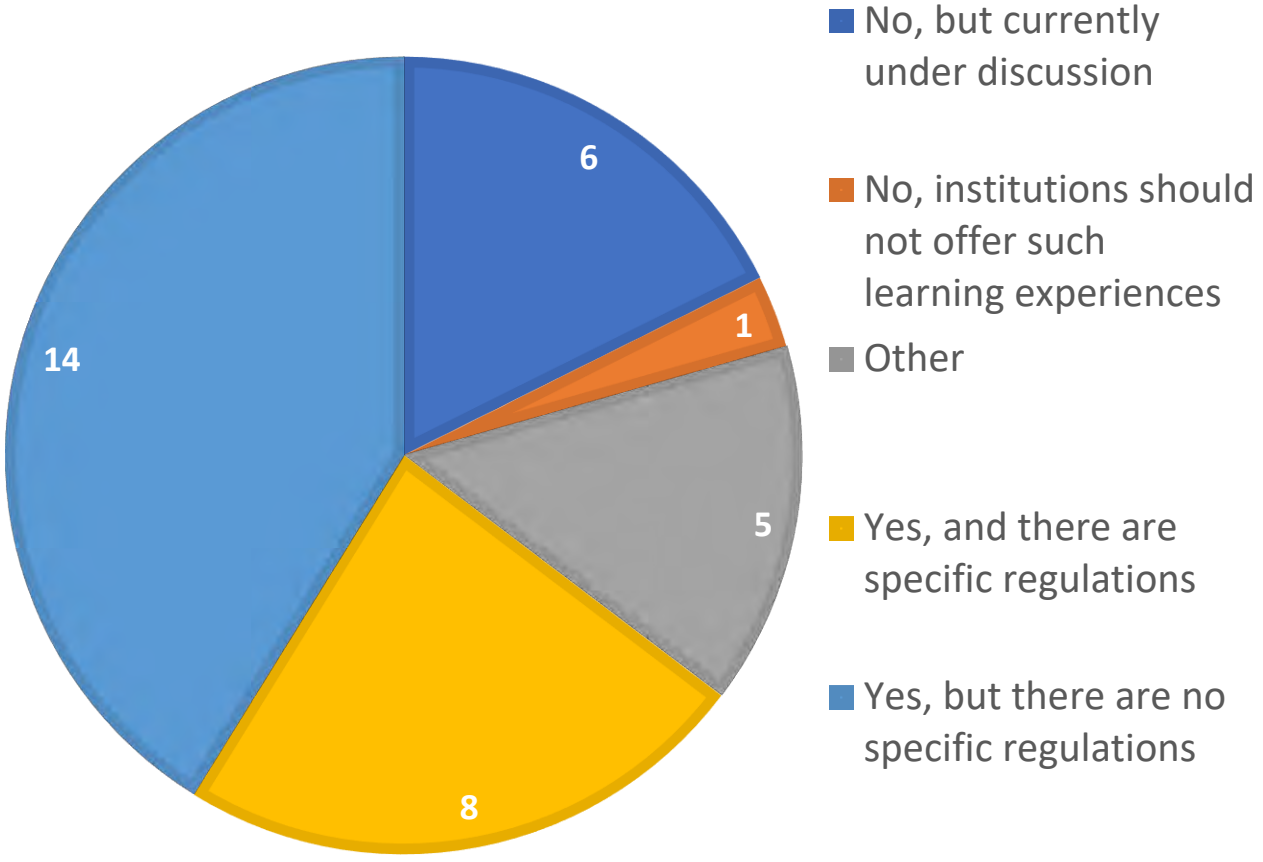
Regulation of micro-credentials at national level



- Regulated/allowed at national level: 22 countries
  - Specific regulations: 8
  - No specific regulations: 14
- Under discussion: 6 countries
- Institutions should not offer MCs: 1 country

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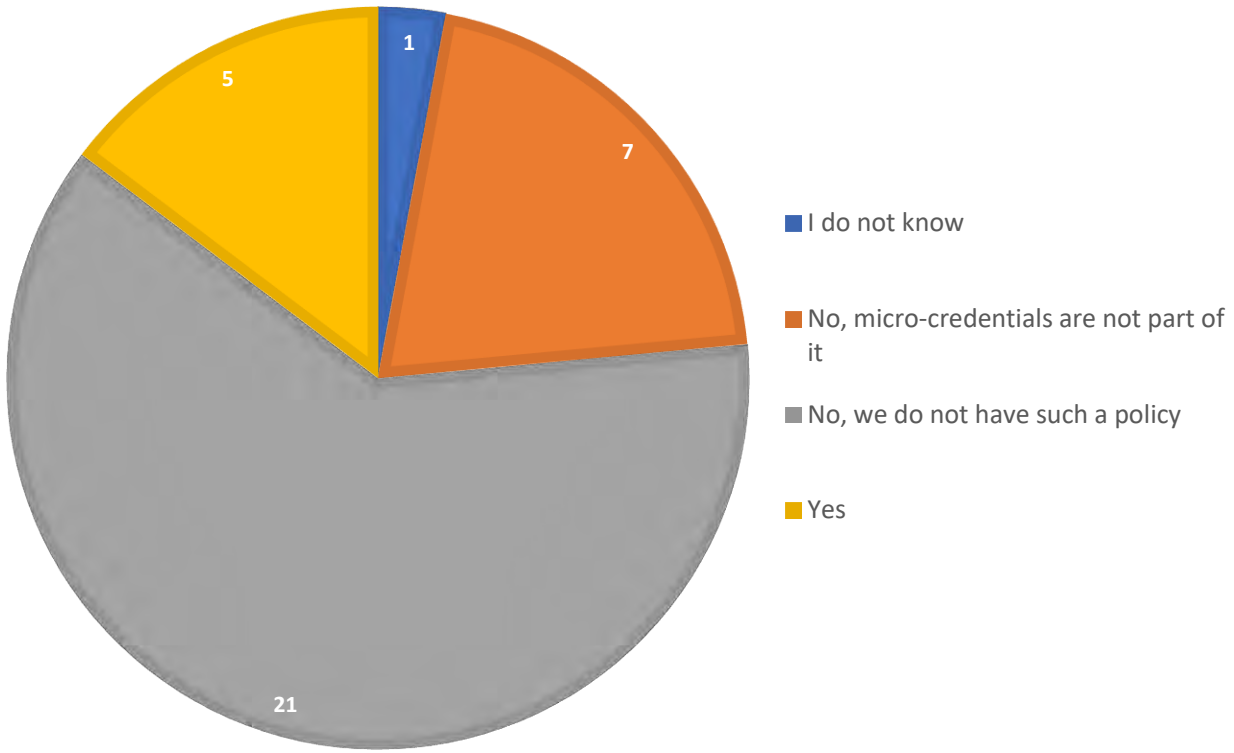
Micro-credentials and digitalisation policies



- NO policy on digitalisation:
  - 21 countries
- Yes policy but MCs are not part of it
  - 7 countries
- Yes MCs are part of this policy
  - 5 countries

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Section 2
Applying Bologna tools to micro-credentials

- Quality Assurance
- Recognition
- Qualification Frameworks & ECTS

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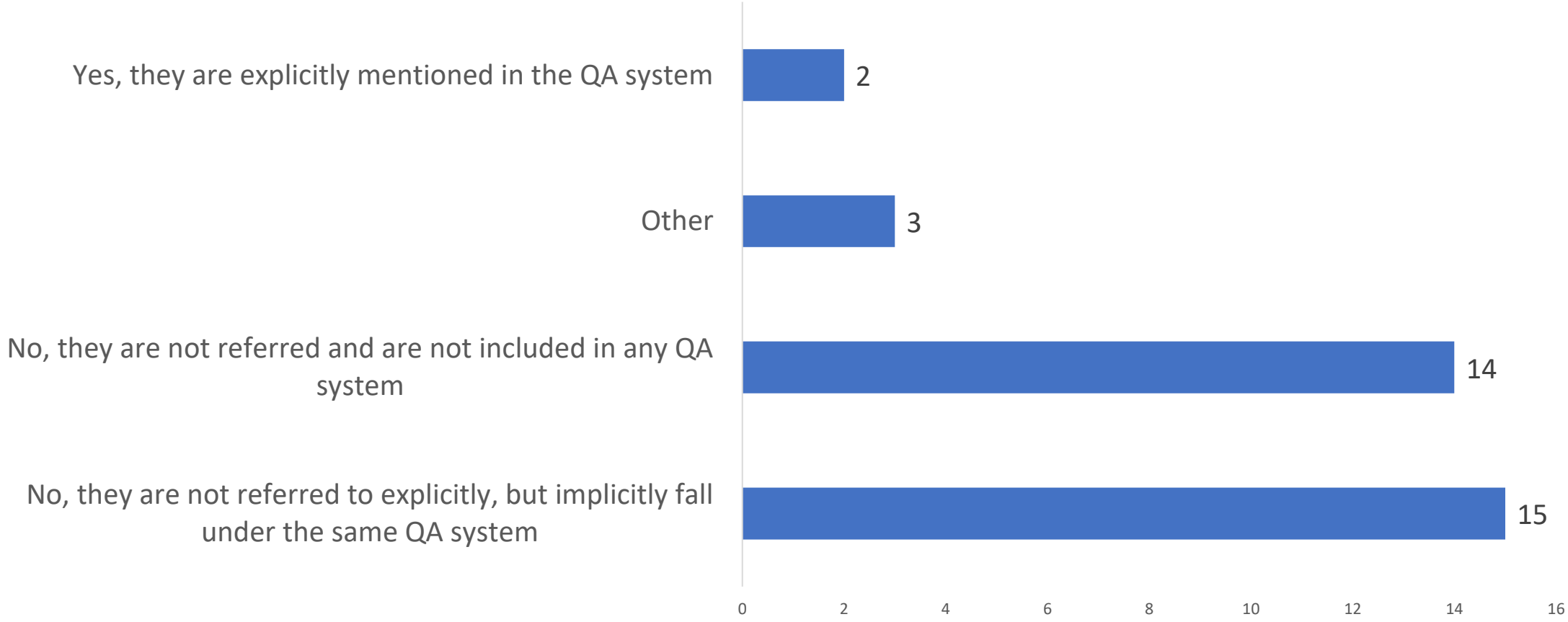
Micro-credentials included in the national QA



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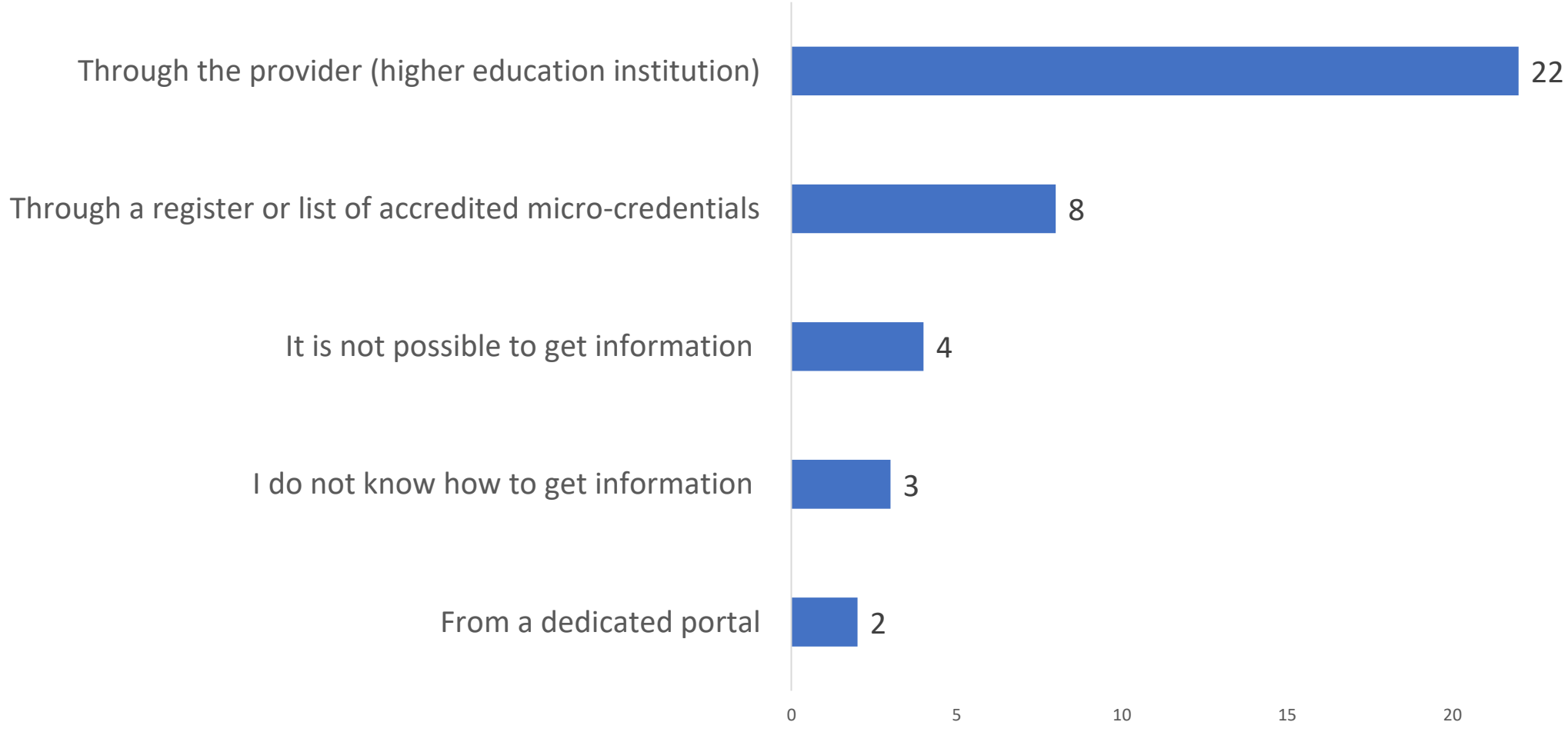
Sources of information on the QA status of the awarded credential



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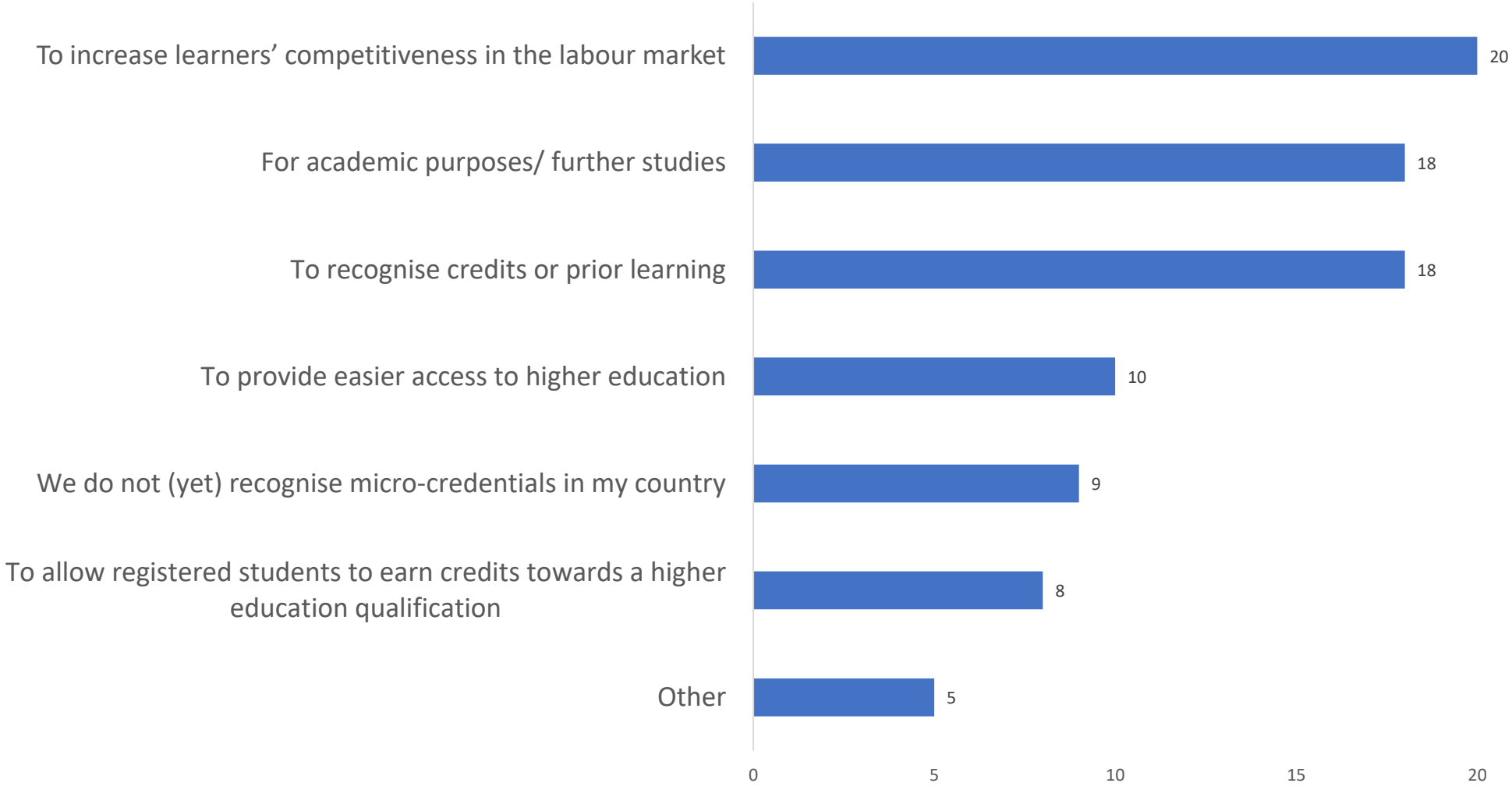
Purpose to recognise micro-credentials



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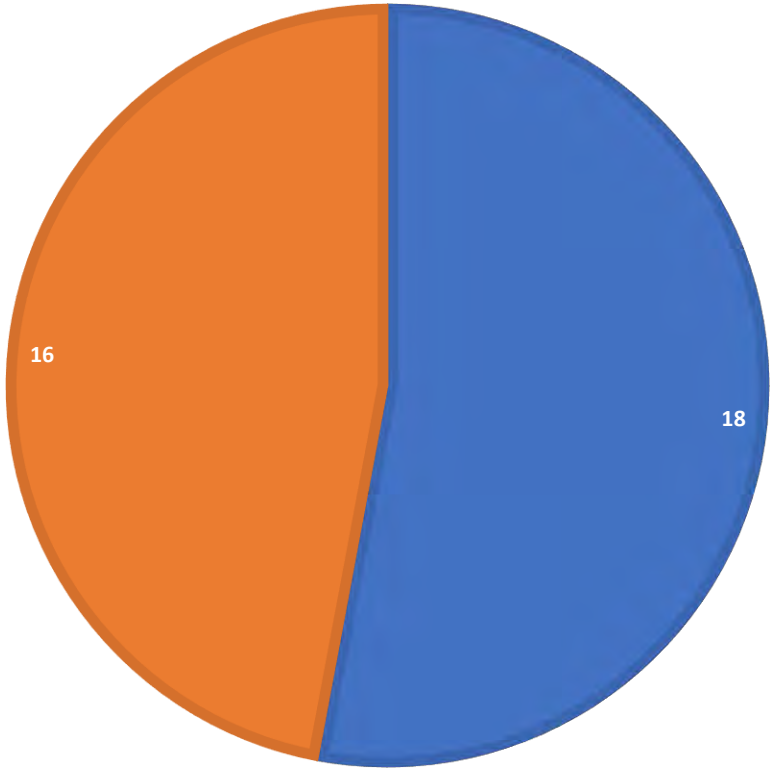
Recognition of micro-credentials offered by non-HE providers



- **Only from HEIs**: 18 countries
- **From HEIs and other providers**: 16 countries

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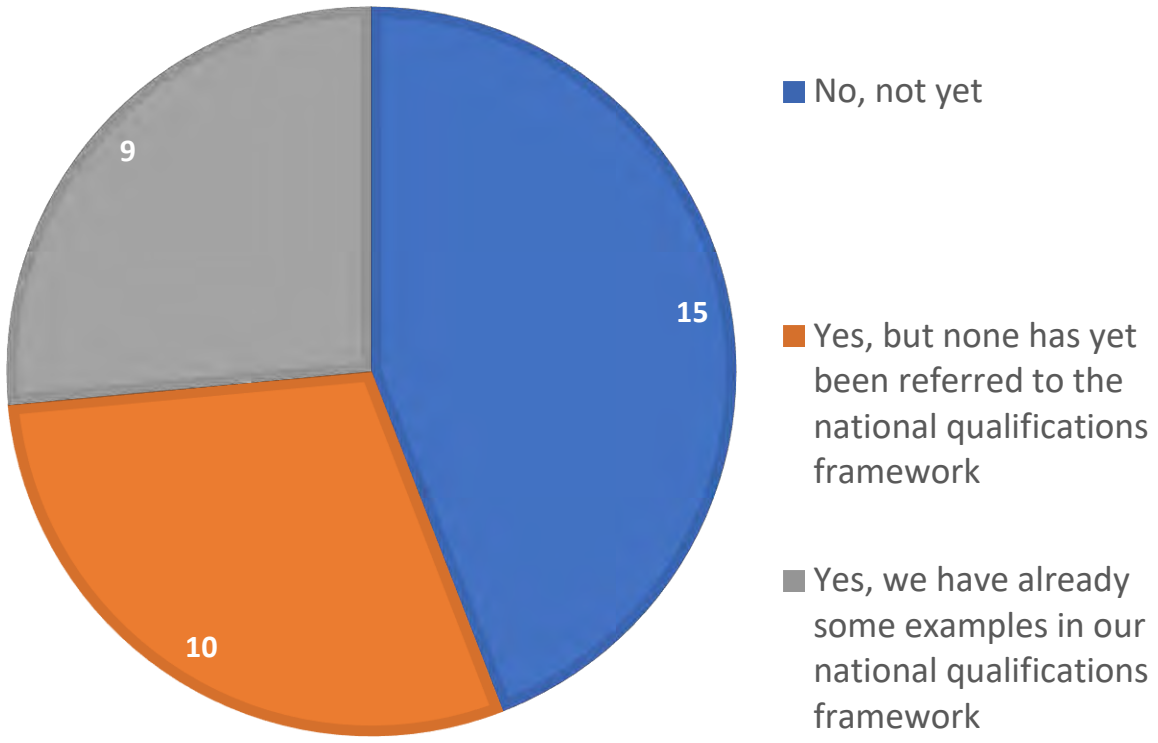
National framework open to micro-credentials



- **Open to MCs**: 10 countries
  - At any level
  - 5, 6 and 7
  - 6
  - MCs awarded by HEIs can be referred to QF
  - Full degree referred to QF
  - Single module within a full degree (HEIs) can be referred to QF
- **Some examples of MCs referred to QF**: 9 countries
- **Not yet**: 15 countries

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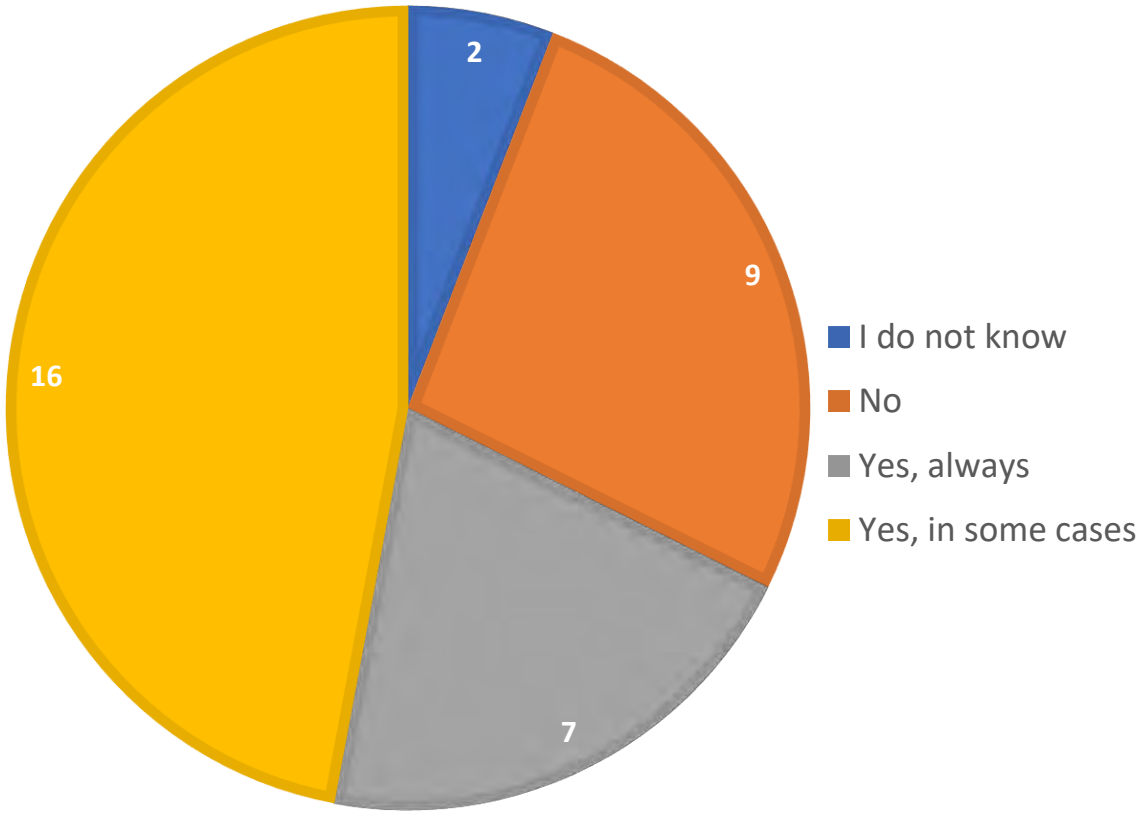
Micro-credential expressed in ECTS



- **MCs expressed in ECTS in some cases**
  - 2-4-6 ECTS
  - 4-6 ECTS
  - Usually less than 10 ECTS
  - 3-20 ECTS (module/single course within a full degree)
  - 3-25 ECTS
  - 20-50 ECTS
  - 1-60 ECTS
  - Maximum 30 ECTS
  - Awarded by HEIs 13-30 ECTS (less frequently 0-6 ECTS. Continuing education 10 ECTS
- **MCs always expressed in ECTS**
  - 1 to 5 ECTS;
  - 3 to 6 ECTS;
  - from 3 to 36 ECTS;
  - 7.5 credits, 15 and 30 credits (for single courses within a full study programme in HE);
  - 20-30 ECTS;
  - 2-70 ECTS;
  - from less than 180 to less than 30 ECTS.

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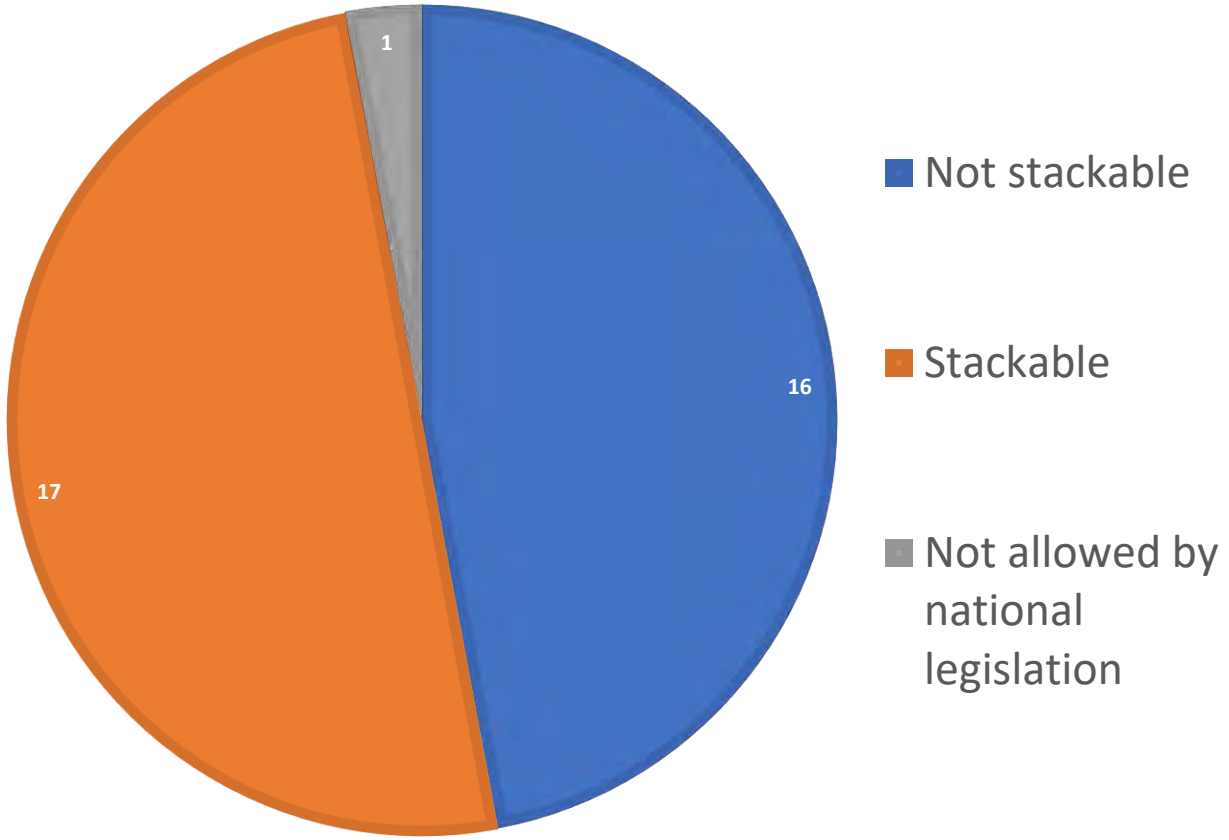
Stackability of micro-credentials



- **Learners can accumulate MCs**: 17 countries
  - Most countries (8) recognise MCs in a full degree programme;
- **Learners cannot accumulate MCs**: 16 countries
- **Not allowed by national legislation**: 1 country

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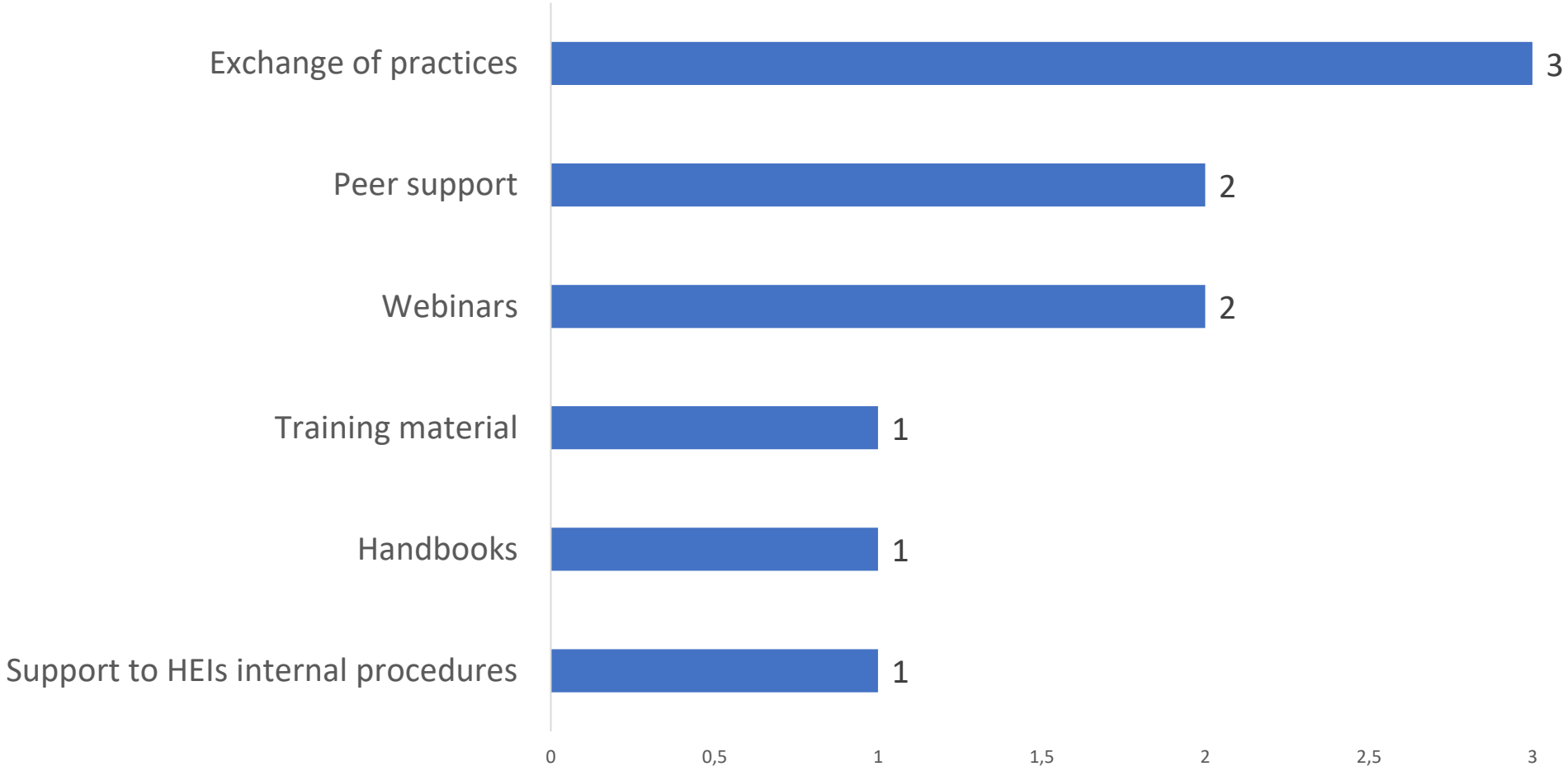
Type of support required



Section 3
Challenges regarding the application of Bologna tools to micro-credentials

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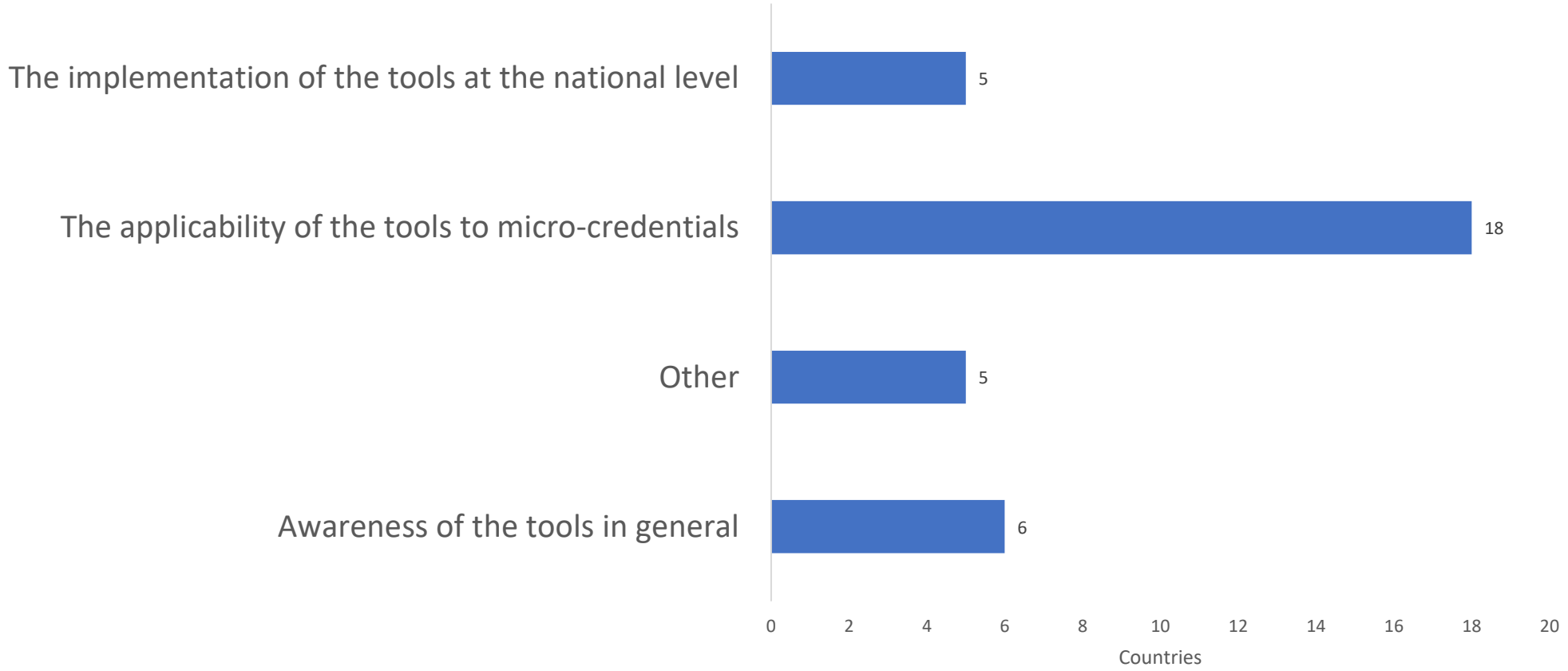
Biggest challenges to apply Bologna Key Commitments to micro-credentials



MICROBOL recommendations:

- Based on survey results & discussions in the working groups
- Joint publication of 34 recommendations on QA, recognition & QF & ECTS
- Target: EHEA countries and stakeholder organisations, but also European Commission -> Consultation
- Download: https://microcredentials.eu/wp-content/uploads/sites/20/2021/07/MICROBOL-Recommendations-1.pdf

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MICROBOL recommendations:

Transversal themes:

1. An opportunity to rethink higher education's role in lifelong learning
2. Awareness of and common agreement on what a micro-credential is
3. A common format
4. Legislation
5. Digitalisation

Peer exchange and support, involvement of all actors, guidelines

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MICROBOL recommendations:

Bologna Key Commitments:

- Quality Assurance
  1. Internal and external QA
  2. Learner involvement in QA
  3. Transparency of information
  4. Register and catalogues of providers and micro-credentials
- Recognition
  1. Coverage/link with Lisbon Recognition Convention
  2. Recognition of prior learning
- Qualification Frameworks & ECTS
  1. QF & ECTS
  2. ECTS

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For more information on the microbol project:

www.microcredentials.eu/

Or contact us:

microbolproject@gmail.com

Flexibility and micro-credentials in the Flemish Higher Education System

Liesbeth Hens, Policy Advisor
liesbeth.hens@ond.vlaanderen.be

Flemish Ministry of Education and Training

Flexibility and micro-credentials in the Flemish Higher Education System

Overview:

- Information on the current situation in Flanders
  - Micro-credentials in HE
  - Legal framework
- Challenges and future plans

Definition / reference Framework

A micro-credential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by higher education institutions or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A micro-credential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Micro-credentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG.

Micro-credentials: misconceptions

- Microcredentials = micro*credits*
- Limited to lifelong learning (so only ‘post’ types of education)
- Limited to ‘new’ forms of learning e.g. MOOCs and other types of e-learning
- Something completely new

Situation in Flanders

No official notice of micro-credentials in decrees,

but in reality,

We have 4 types of micro-credentials in place:

- Regular HE programmes
- Post-graduates
- LLL offer
- Micro-degrees

All HE Programmes are a combination of micro-credentials

- Since 2004-2005: flexible organisation of HE
  - → No full time/part time
  - → All HE programmes consist of courses of at least 3 ECTS
  - → With each learning outcomes/competences, assessment, ..
  - → Adapted funding, enrolment fees, study grants, …

** Remark: in the Flemish context competenc(i)es and learning outcomes are often used interchangeably…*

All HE Programmes are a combination of micro-credentials

- Certification by a credit certificate (creditbewijs) or diploma

  Definition (legal): *an acknowledgement that, after an evaluation, a student has proven to master the competences* of a particular course unit. This acknowledgement is recorded in a document or is established by means of an electronic registration.*

- Used:

  → Short, specific training

  → exemption of parts of another study programme when shifting to another programme → RPL

Example Recognition of Prior Qualifications

Programme Ba in Economical Sciences at a HEI

Course	ECTS	Result
Accounting 1	6	Credit cert.
Economic English	3	Credit cert.
Mathematics	5	No
…		
Total	60	20

Programme Ba in Business Management at a HEI

Course	ECTS	
Basic accounting	5	exempted
Business English	3	exempted
Statistics	4	not
…		
Total	46	

Basis of recognition = defined learning outcomes, QF level & ECTS credits

Example Recognition of Prior Qualifications

- Procedure developed by the HE Associations
- Assessment of an applicant's competences based on a portfolio + one or more of the following methods: reflection file, competence-based interview or capability test
- Possible result:
  - → "Certificate of Competency"
  - → Can be used to get exemptions of courses (see above)

Postgraduate education

- Offer of at least 20 ECTS
- Focus on:
  - → Further professional development
  - → After a bachelor or master degree
    - × Specialisation
    - × Widening competences
- No governmental funding, no legislation, no obligatory QA

LLL offer

- HEI are free to organise LLL courses
  - → Lecture series
  - → Specific courses
  - → Dissemination of research
  - → Professional training, less then 20 ECTS
  - → …
- No governmental funding, no legislation, no obligatory QA

Micro-degrees

- Combination of courses of regular programmes
  - → Combination of credit certificates
  - → Same funding and regulation as the regular programmes
- Combination of courses or parts of non regular programmes
  - → No ‘official’ certification
  - → ? Funding ? Legislation ? QA

Overview..

definition	HE courses	postgraduates	LLL offer	Micro-degrees
Small volume	x	x	x	x
recognition	x	+/-	?	+/-
Learning outcomes	x	x	?	x
specific knowledge, skills or competences	x	x	x	x
ECTS	x	x	?	x
QA	x	?	?	+/-

Advantages of this legal framework

- Opportunities to increase the potential use of the existing learning offer, encompassing all types of learning (related to HE), i.e. beyond lifelong learning, MOOCs etc.
  - → Enhances flexibility (although this has its limits…)
  - → Openness towards
    - × more diverse learners - but also beneficial for 'regular students': working together with mature students, students from different backgrounds,
    - × more diverse ways of learning (e.g. also non-formal, online)

Advantages of this legal framework

- For different stakeholders
  - → HEI's: fits with existing practices e.g. ECTS, especially the concept of "credit transfer" (portability / stackability) as we know it from international student mobility
  - → End users: increased ownership
  - → Potential employers: increased trust

Downsides of this legal framework

- Not all initiatives are fully compliant with the definition
- No common vision of the HE sector
- To much diversity?
  - → Employers
  - → Students
  - → Data
- Hard to include new initiatives in the HE system

Challenges

- Flemish Education Council:
  - → Develop a common framework
  - → Don’t make more legislation then necessary
  - → Include micro-credentials in known QA procedures
  - → Define “short”
  - → Adequate funding, infrastructure and staff
  - → Participation and ownership learners
  - → Make sure micro-credentials are complementary with the existing system

Policy initiative

- RFF funding: Higher Education Advancement Fund

Three action lines:

  - The development of a Flemish training portfolio that is future-proof, agile and flexible;
  - Further develop lifelong learning in higher education;
  - Focussing on the sustainable implementation of digital forms of education

- Each action line consist of short term (2-3 y) concrete implementation action in HEIs and a more long term reform, based upon an in depth dialogue with HEIs.

Higher Education Advancement Fund action 2

Further develop lifelong learning in higher education:

1. call for an agile offer of lifelong learning

- → The development or adaptation of an educational offer that is specifically aimed at those who wish to retrain/reorient or reskill: both for initial programmes (graduate, bachelor and master programmes) but also post-initial programmes and micro-credentials;
- → the strengthening of the cooperation with industry/labour market. s;
- → The implementation of new, innovative training paths that specifically focus on vulnerable groups that currently have too little connection with higher education, such as jobseekers, non-native speakers or newcomers with a higher education diploma that is not (fully) recognised.

Higher Education Advancement Fund action line 2

Further develop lifelong learning in higher education:

2. Vision development on lifelong learning for the Flemish HE sector.

- Development of a widely supported and shared vision on lifelong learning in higher education.

  The current higher education law includes possible solutions, but does not contain specific guidelines on organising and stimulating activities within the framework of lifelong learning.

  Within this action, the government, together with the higher education institutions, social partners and involved actors will develop a vision on lifelong learning in higher education.

Flanders
State of
the Art

Contact/
more information

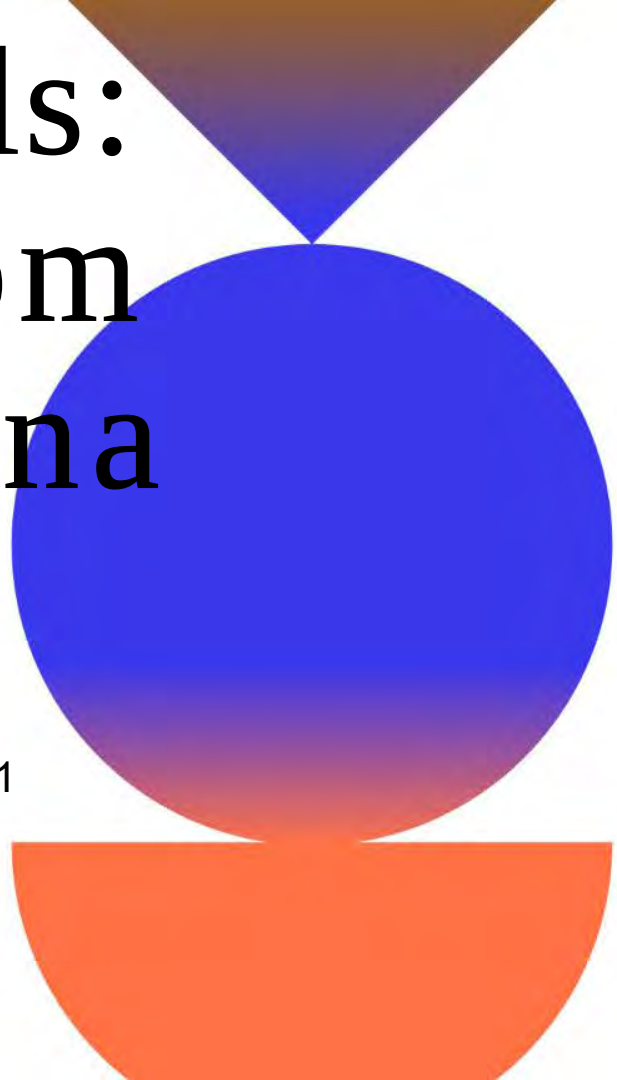
Liesbeth Hens, Policy Advisor
liesbeth.hens@ond.vlaanderen.be

Flemish Ministry of Education and Training

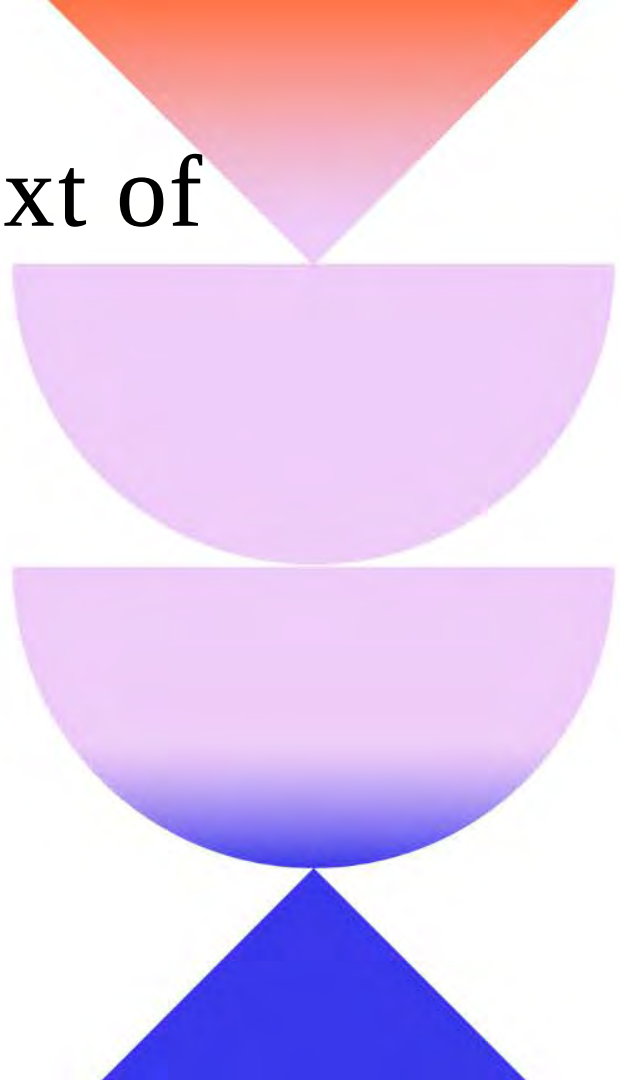
una
europa

Microcredentials: perspectives from KU Leuven & Una Europa

OpenU High-level Authorities' Meeting – 13 October 2021



The added value of universities in the context of microcredentials



Quality Assurance

Universities already have QA procedures in place for regular programmes in line with the European Standards and Guidelines, which can equally a
to learning experiences leading to microcred

Challenges:

- Existing QA procedures will apply automatically to short learning experiences which are embedded in the regular educational offer (e.g. credit contracts) but not to other additional trajectories.
- Existing QA procedures might be too rigid and complex for short learning experiences.

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European Credit Transfer System

Universities are already used to working with the European Credit Transfer System. This system offers a reliable, recognized and transparent mechanism which can also pro a pathway to stackability and portability of microcredentia

Challenges:

- National legislation can be a barrier. E.g. in Flanders ECTS can only be awarded to a course which comprises at least 3 study points.
- On the other hand it might be worth to set a lower limit (e.g. 0,5 or 1 study point) to avoid proliferation of countless short formats leading to microcredentials.

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Focus on academic offer

Universities can offer added value to the “market” of microcredentials, by offering short learning experiences:

- focusing on academic skills and critical reflection,
- learning content based on (inter)disciplina
  insights

Challenge:

How to align the offer of higher education institutions with this of other providers?
Need for a common language.

Opportunities:

- Microcredentials as an instrument for improving access to higher education, to provide service to society.
- Universities can offer microcredentials for level 6 (bachelor), 7 (master) and 8 (PhD) in the European Qualification Framework

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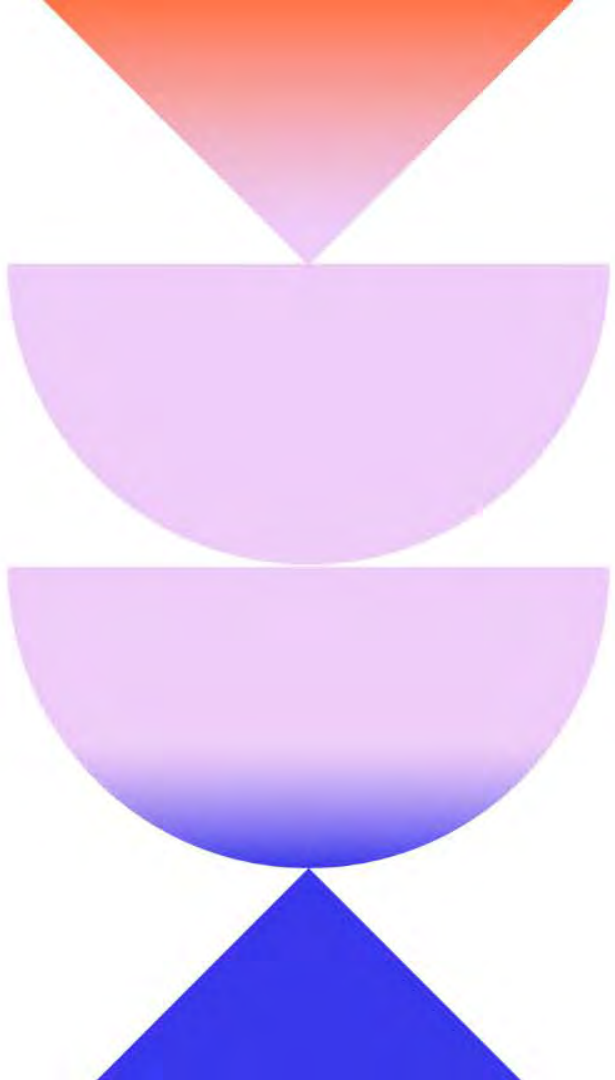
KU Leuven & microcredentials



Current offer of short learning experiences @ KU Leuven:

- Postgraduate Studies
- Credit contracts and Academies
- MOOCs
- Honours programmes
- Certified Continuing education
- Continuing education with proof of attendance

?

Policy for online and blended mobility

Microcredentials

- Target group: demand for microcredentials?
- Future funding mechanisms vs. existing business models?
- Consequence for the regular educational offer?
- …

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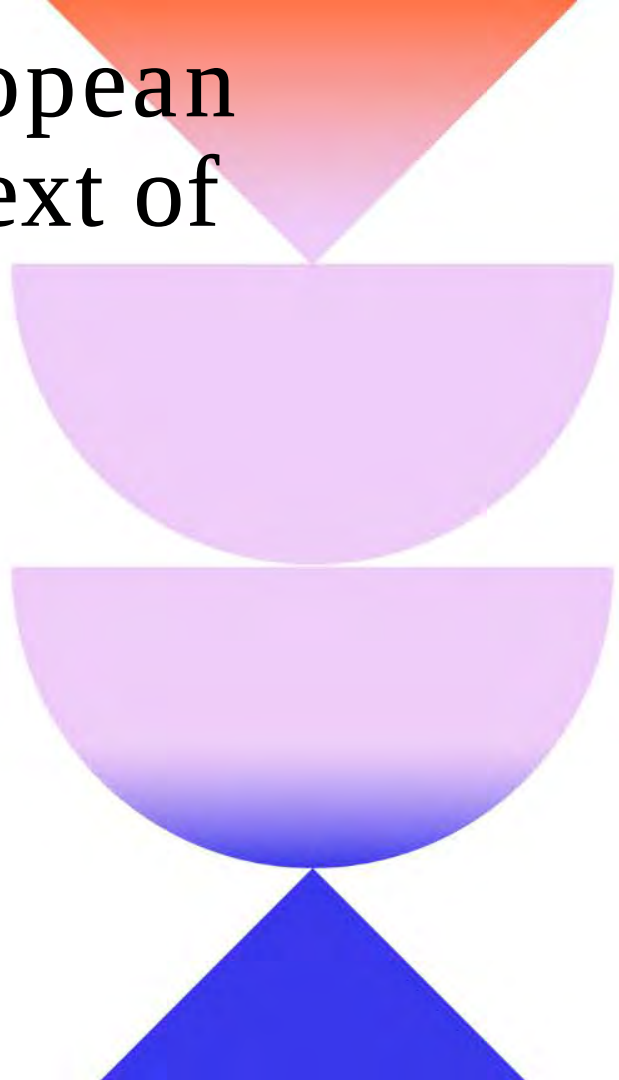
The added value of European Universities in the context of microcredentials



Key roles for European Universities

CO-DEVELOPERS OF A TRANSPARENT FRAMEWORK AT EUROPEAN LEVEL

- identification of (legal) barriers
- harmonisation of different national practices and movements (e.g. regarding qualification frameworks)

MEDIATORS

- Bringing the European dimension to discussions on national levels.
- Bringing together and bridging different national perspectives

FRONTRUNNERS

- Piloting IT infrastructure
- Development of new international learning paths

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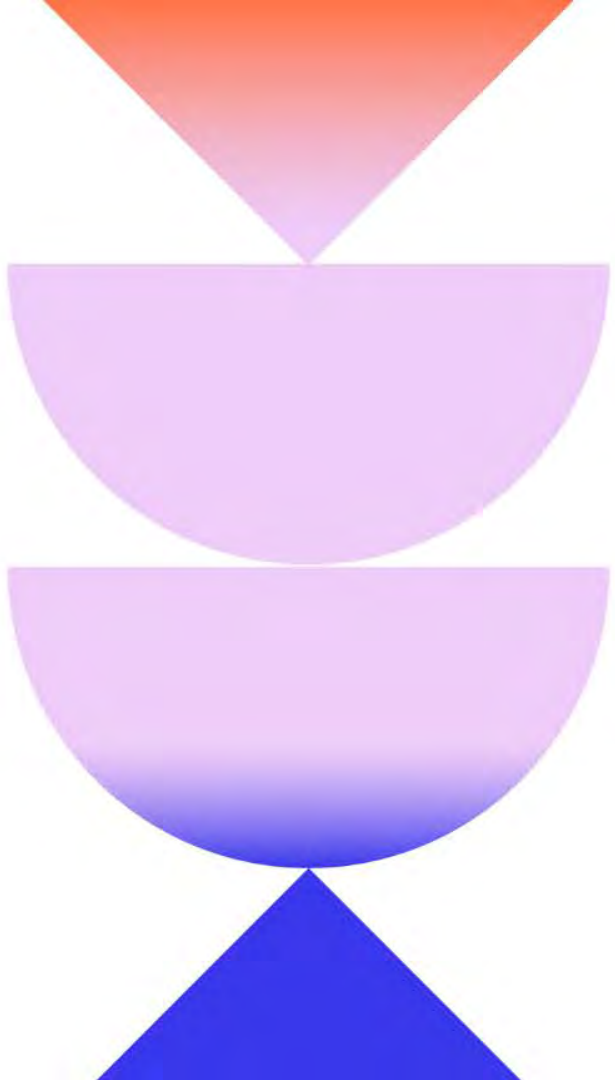
Una Europa & microcredentials



Una Europa joint microcredentials are offered as **proof** of succesfully completing a short learning experience with the following characteristics:

- International and multilingual
- Connecting local communities
- Interdisciplinary, combining the complementary strengths and expertise of eight universities

Example 1: Micromodule in Sustainability

- Collection of MOOCs and led by differer universities
- Learners cho path
- Internatior
- Involveme
- Target gr broader (

Example 2: Training on Sustainability for Local Public Services

- Joint online lectures in English by experts from the different partner universities
- Local working groups in mother tongue
- Joint final discussion in the international group
- Target group: professionals

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Current implementation issues

- **Quality assurance** for modules/training outside of regular offer
- Online and blended format: **which platform(s)** to use?
- How and where will learners **register**?
- Need for **further development of the blockchain project** in the context of microcredentials.
- How do the learning outcomes align with **national qualification frameworks**?

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Some final considerations

- Learners point of view
- Terminology and confusion on μ (one millionth)
- Credentials – certificates – credits – degrees
- Added value:
  - Recognition goes hand in hand with QA
  - Stackability (probably) requires credits or certification

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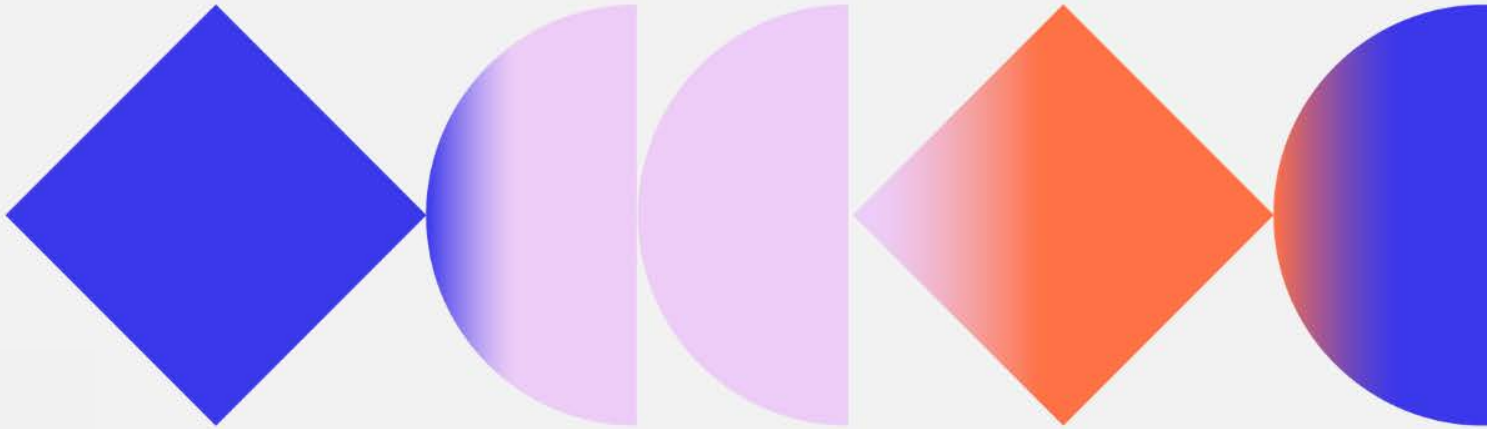

Micro-credentials

Micro-credentials in a Lifelong Learning context

Micro-credentials & LLL

- Table of contents

  - Trends in the Labour Market in Belgium/Flanders
  - Trends in Life Long Learning in Belgium/Flanders
  - The role of Micro-credentials in a lifelong learning context

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TRENDS LABOUR MARKET

Lifelong Learning as a solution for the ‘war on people’

Trends labour market

Lifelong learning a means for professionalisation

- War for talent => war for people

ARBEIDSMARKT

Huishoudhulp nodig? Dat wordt wachten

Heel wat huishoudhulpen stromen door naar een andere, betere job. Heel wat klanten van dienstenchequebedrijven moeten lang wachten.

Karsten Lemmens
Maandag 20 september 2021 om 3.25 uur

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Trends labour market

Lifelong learning as means for professionalisation

- War for talent => war for people

Toenemende krapte op arbeidsmarkt brengt herstel in gevaar

Een lasatelier in Tienen. Lasser is een knelp

Jobcrisis vervangt coronacrisis

Politiek rijpt het besef dat alleen maatwerk de krapte op de arbeidsmarkt kan verhelpen. Of België slaagt of faalt, zal vooral in Franstalig België bepaald worden. Maar daar loopt de spanning hoog op.

Jan-Frederik Abbeloos

Woensdag 8 september 2021 om 3.25 uur

DeMorgen.

IN HET NIEUWS | MENINGEN | POLITIEK | BETER LEVEN | TV & CULTUUR | VOOR U UITGELEGD

Analyse Arbeidsmarkt

‘De lat voor sollicitanten ligt tegenwoordig tien centimeter onder de grond’: werkgevers hebben de grootste [illegible]ersoneel te vinden

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Trends labour market

Lifelong learning a means for professionalisation

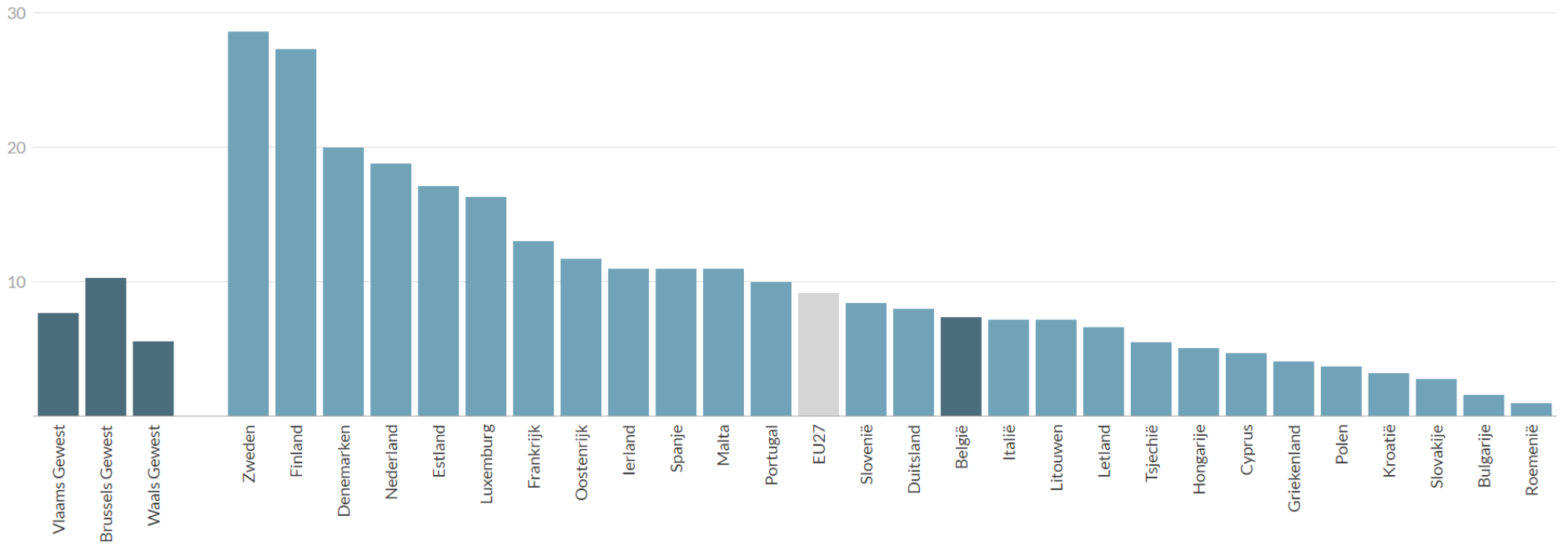
- War for talent => war for people

TRENDS LIFELONG LEARNING

Lifelong Learning as a means for personal and professional development

Trends in lifelong learning

Opleidingsdeelname tijdens afgelopen 4 weken van de bevolking van 25 tot 64 jaar
Belgische gewesten en EU-landen, 2020, in %



Noot: de gegevens in de figuur zijn schattingen gebaseerd op een enquête. Bijgevolg moet rekening gehouden worden met een onzekerheidsmarge. EU27: Europese Unie zonder Verenigd Koninkrijk. Zie: 'Meer info over definities en bronnen'.
Bron: EAK Statbel (Algemene Directie Statistiek - Statistics Belgium), LFS Eurostat, bewerking Steunpunt Werk en Statistiek Vlaanderen

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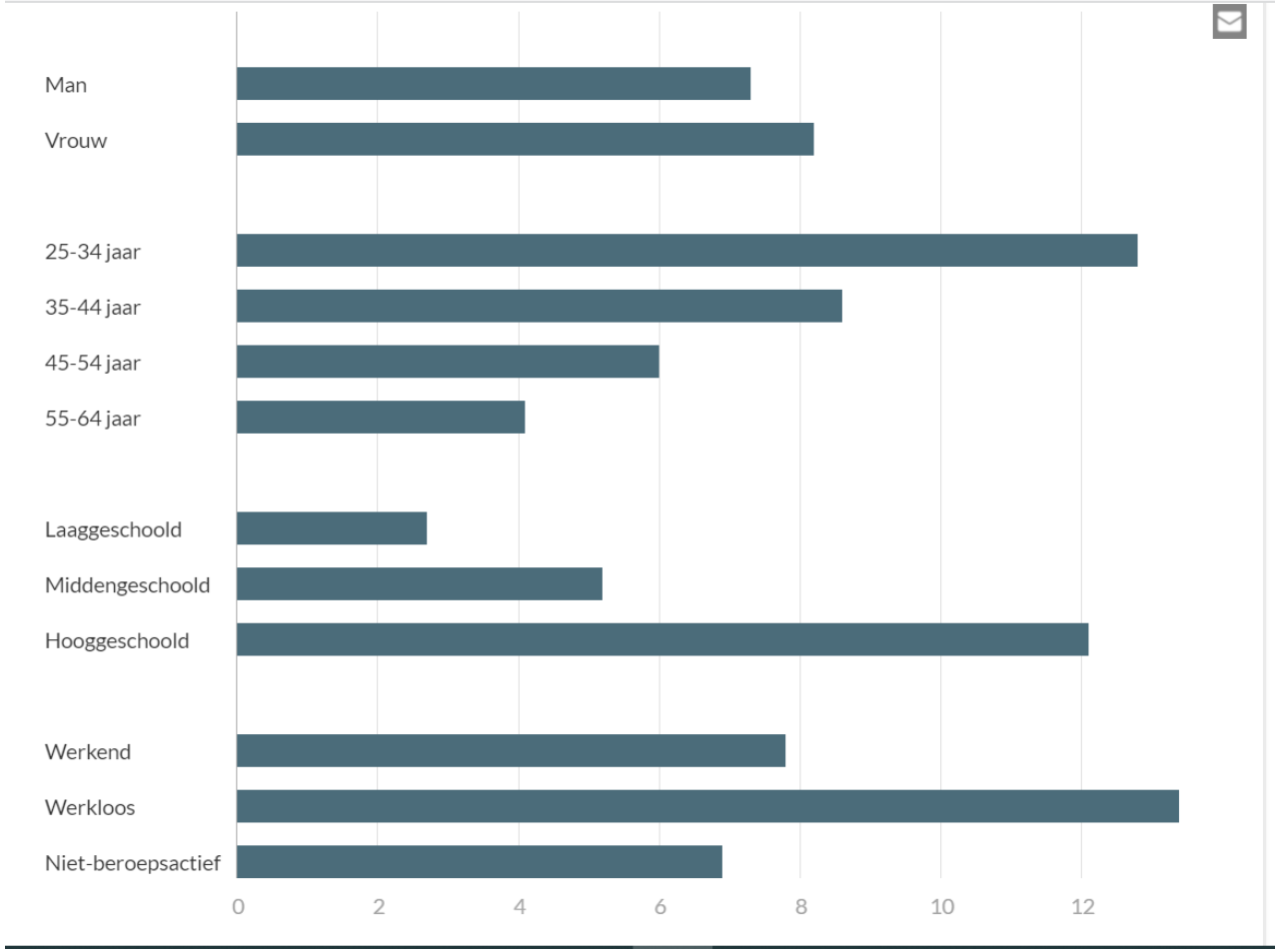
Trends in lifelong learning

- On average more women than men
- The younger, the more eager to participate in lifelong learning
- The higher skilled participate more in lifelong learning than semi- and short-skilled people
- Unemployment is a driver for lifelong learning (encouraged by government).
- People in the workforce tend to use lifelong learning (formal learning) for further professional advancement (re-skilling, up-skilling)



Trends labour market

Lifelong learning a means for professionalisation

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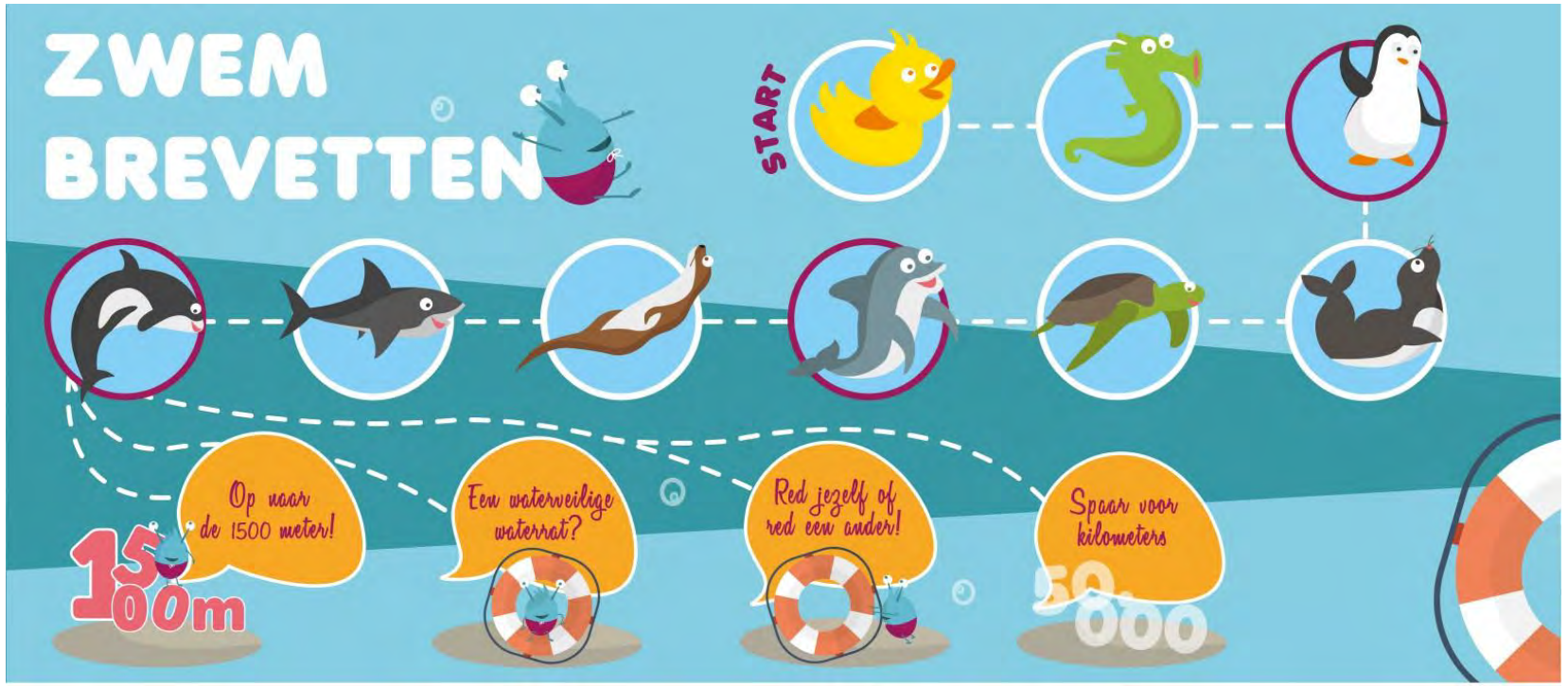
Trends labour market

Lifelong learning a means for succes



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MICRO-CREDENTIALS IN A LIFELONG LEARNING CONTEXT

Micro-credentials as means for succes

What is a micro-credential? (European Commission)

Box 2: Definition

A micro-credential is a proof of the learning outcomes that a learner has acquired following a short learning experience. These learning outcomes have been assessed against transparent standards.

The proof is contained in a certified document that lists the name of the holder, the achieved learning outcomes, the assessment method, the awarding body and, where applicable, the qualifications framework level and the credits gained. Micro-credentials are owned by the learner, can be shared, are portable and may be combined into larger credentials or qualifications. They are underpinned by quality assurance following agreed standards.

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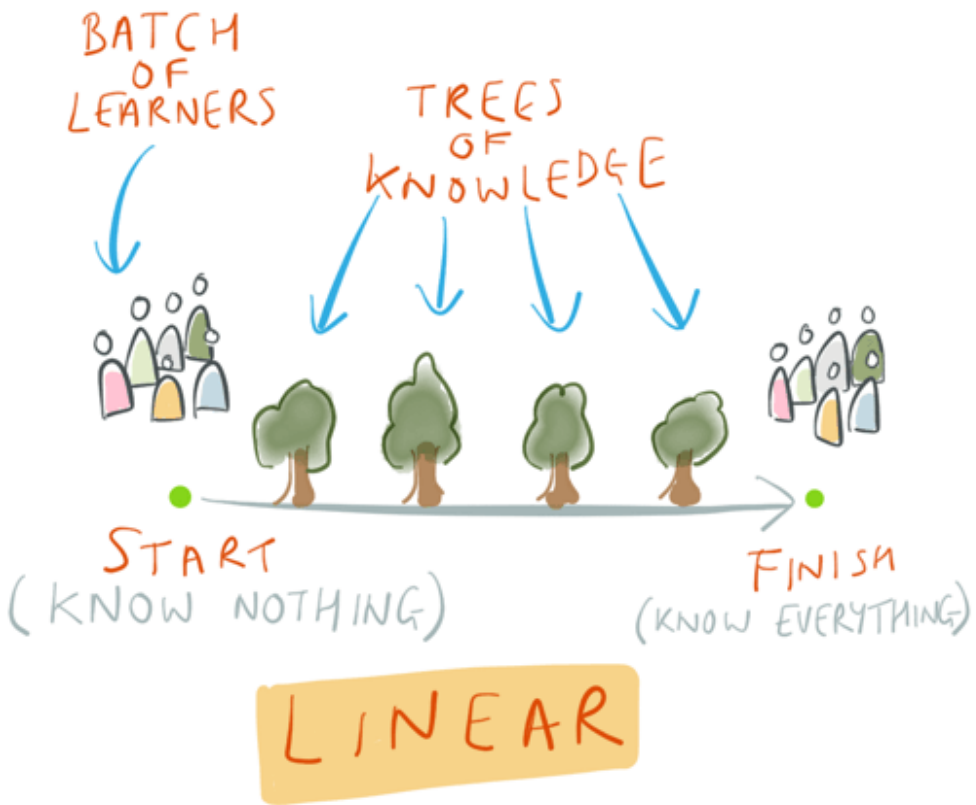

VS.

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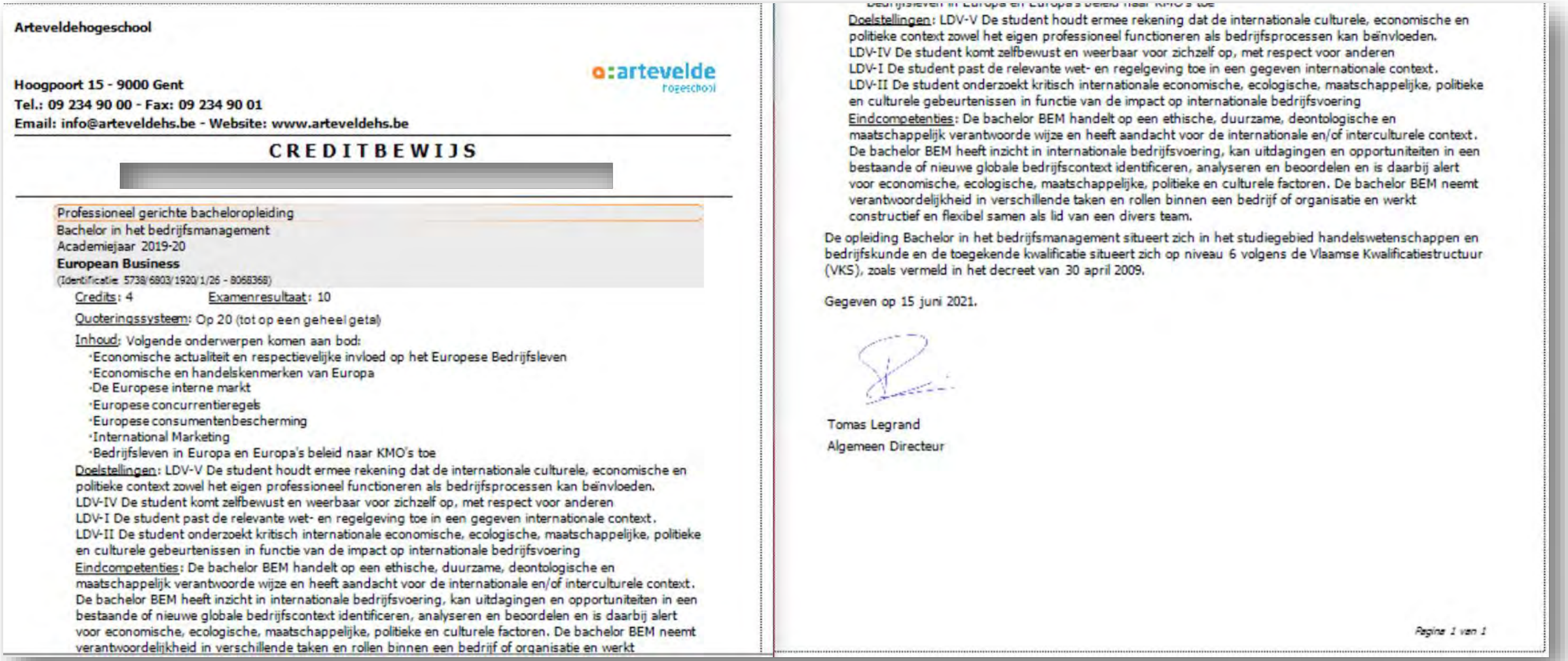

Arteveldehogeschool

Hoogpoort 15 - 9000 Gent
Tel.: 09 234 90 00 - Fax: 09 234 90 01
Email: info@arteveldehs.be - Website: www.arteveldehs.be

CREDITBEWIJS

[redacted]

Professioneel gerichte bacheloropleiding
Bachelor in het bedrijfsmanagement
Academiejaar 2019-20
European Business
(Identificatie: 5738/6803/1920/1/26 - 8068368)

Credits: 4 Examenresultaat: 10

Quoteringssysteem: Op 20 (tot op een geheel getal)

Inhoud: Volgende onderwerpen komen aan bod:
- Economische actualiteit en respectievelijke invloed op het Europese Bedrijfsleven
- Economische en handelskenmerken van Europa
- De Europese interne markt
- Europese concurrentieregels
- Europese consumentenbescherming
- International Marketing
- Bedrijfsleven in Europa en Europa's beleid naar KMO's toe

Doelstellingen: LDV-V De student houdt ermee rekening dat de internationale culturele, economische en politieke context zowel het eigen professioneel functioneren als bedrijfsprocessen kan beïnvloeden.
LDV-IV De student komt zelfbewust en weerbaar voor zichzelf op, met respect voor anderen
LDV-I De student past de relevante wet- en regelgeving toe in een gegeven internationale context.
LDV-II De student onderzoekt kritisch internationale economische, ecologische, maatschappelijke, politieke en culturele gebeurtenissen in functie van de impact op internationale bedrijfsvoering
Eindcompetenties: De bachelor BEM handelt op een ethische, duurzame, deontologische en maatschappelijk verantwoorde wijze en heeft aandacht voor de internationale en/of interculturele context. De bachelor BEM heeft inzicht in internationale bedrijfsvoering, kan uitdagingen en opportuniteiten in een bestaande of nieuwe globale bedrijfscontext identificeren, analyseren en beoordelen en is daarbij alert voor economische, ecologische, maatschappelijke, politieke en culturele factoren. De bachelor BEM neemt verantwoordelijkheid in verschillende taken en rollen binnen een bedrijf of organisatie en werkt

Bedrijfsleven in Europa en Europa's beleid naar KMO's toe
Doelstellingen: LDV-V De student houdt ermee rekening dat de internationale culturele, economische en politieke context zowel het eigen professioneel functioneren als bedrijfsprocessen kan beïnvloeden.
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constructief en flexibel samen als lid van een divers team.

De opleiding Bachelor in het bedrijfsmanagement situeert zich in het studiegebied handelswetenschappen en bedrijfskunde en de toegekende kwalificatie situeert zich op niveau 6 volgens de Vlaamse Kwalificatiestructuur (VKS), zoals vermeld in het decreet van 30 april 2009.

Gegeven op 15 juni 2021.

Tomas Legrand
Algemeen Directeur

Pagina 1 van 1

Micro-credentials in a lifelong learning context

Microsoft Certified: Azure Security Engineer...
Microsoft

Microsoft Certified: Azure Developer Associate
Microsoft

Microsoft 365 Certified: Teamwork...
Microsoft

Microsoft Certified Trainer 2019-2020
Microsoft

licrosoft 365 Certified: Enterprise...
Microsoft

AZ-301 Microsoft Azure Architect Design
Microsoft

Microsoft Certified: Azure Solutions Architect Expert
Microsoft

MS-100 Microsoft 365 Identity and Services
Microsoft

MS-101 Microsoft 365 Mobility and Security
Microsoft

AZ-300 Microsoft Azure Architect Technologies
Microsoft

Microsoft Certified: Azure Administrator Associate
Microsoft

Microsoft Certified Trainer 2018-2019
Microsoft

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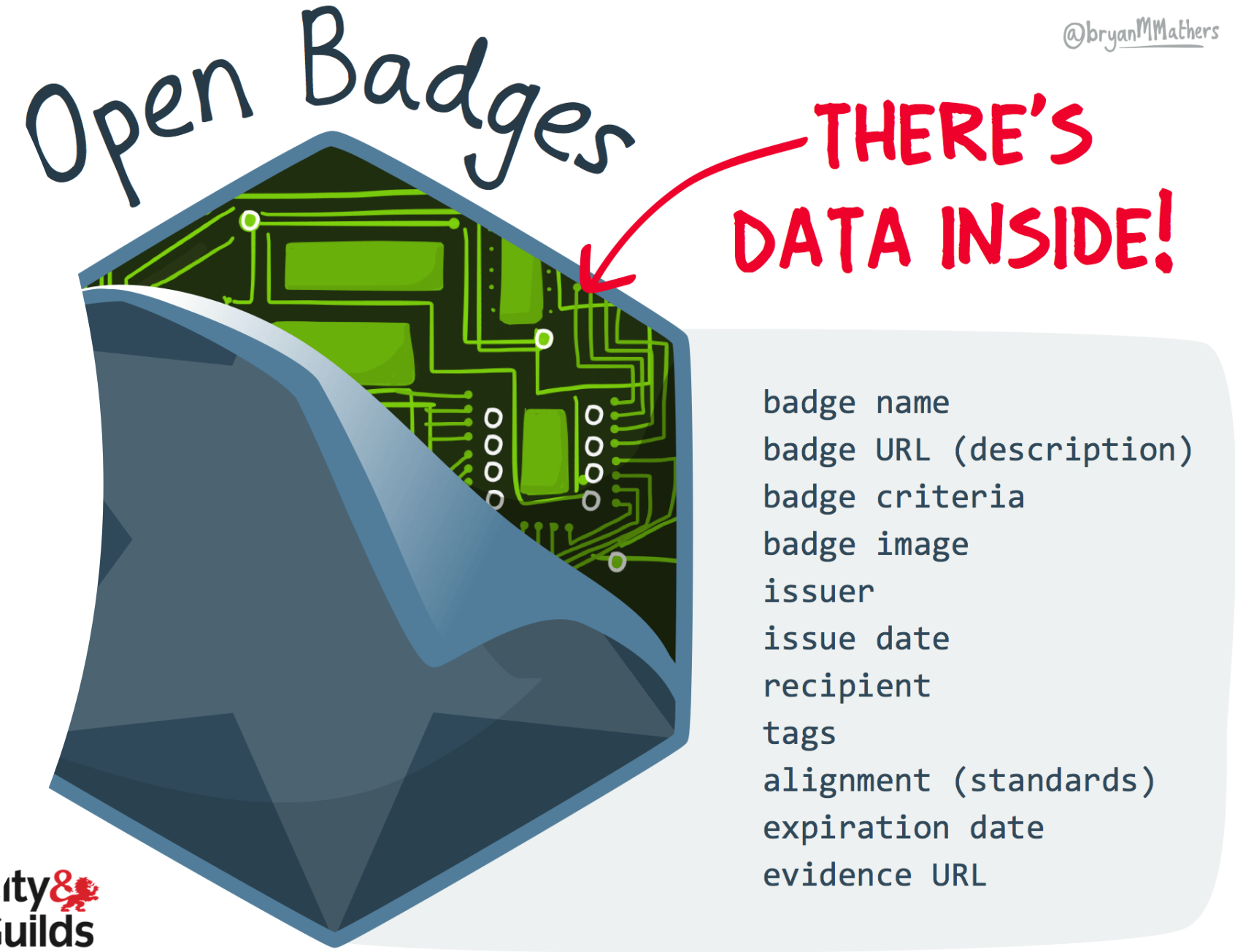
- Making competencies tangible
- Stackable via Open Pathways
- Recognition of different levels of learning
- Digital vehicle -> IMS standards
- Possibility to add evidence
- Very concrete and *granular*
- Online wallet, owned by the learner
- Shareable
- Verifiable



De verpleegkundige als coach en leider en critical companion op verdiepend/verbredend niveau

Offered By
Arteveldehogeschool pba VPK

Issued on **Oct 22, 2018**

Als verpleegkundige als coach, leider en critical companion ga je met leerdoelen aan de slag die gericht zijn op een (doorgedreven) integratie van de elementaire componenten. Hier kunnen aanvullende of meer specifieke kennis, vaardigheden en attitudes aangeleerd worden die verbonden zijn aan meer complexe contexten. Doorgaans vinden we dit niveau terug in de tweede en derde opleidingsschijf, dit is echter geen noodzaak.

Verified
Last verified by Badgr on **Mar 25, 2021**

Re-verify Badge

EARNING CRITERIA
Recipients must complete the earning criteria to earn this Badge

OLR 6 De creatieve, ondernemende, innoverende verpleegkundige

- De student ontwikkelt creatieve ideeën en innovatieve oplossingen in een context met een lage complexiteit en hoge mate van zelfstandigheid en zet deze om in daden.
- De student levert een prototype van een creatief en innovatief product af in een context met een lage complexiteit en hoge mate van zelfstandigheid.
- De student neemt op zelfstandige wijze initiatief en verantwoordelijkheid op voor de inbreng en inspanning bij het ontwikkelen van een prototype van een creatief product.
- De student toont durf en verlegt op zelfstandige wijze persoonlijke en professionele grenzen bij verpleegkundige uitdagingen in een context met lage complexiteit.
- De student volhardt op zelfstandige wijze in doelgerichte actie en energie tijdens het ontwikkelen van een prototype van een creatief en innovatief product voor een verpleegkundige uitdaging met een lage complexiteit.

OLR 8 De verpleegkundige als coach & leider en critical companion

- De student coacht vanuit een inspirerende en waarderende houding onder begeleiding van een individu of een team in een formele en informele context met hoge complexiteit.
- De student stuurt en stimuleert op zelfstandige wijze een individu of een team in een formele en informele context ten einde collectieve resultaten te bereiken binnen een gemiddeld complexe context.
- De student voert op zelfstandige wijze kritische dialoog met collega zorgverleners in een laag complexe context.
- De student stimuleert op zelfstandige wijze professionele en persoonlijke groei binnen een context met een lage complexiteit.

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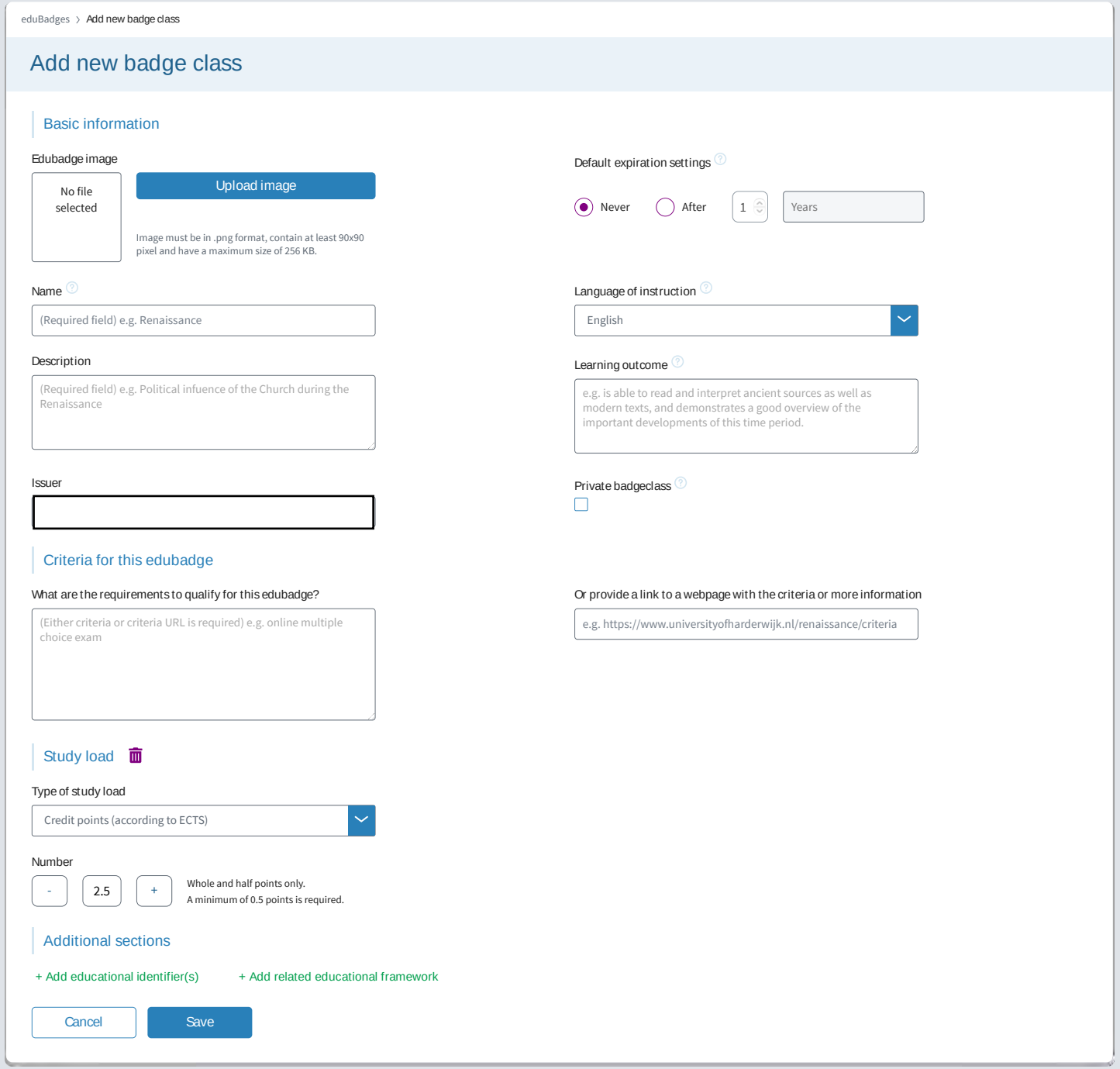
eduBadges › Add new badge class
Add new badge class
Basic information
Edubadge image
No file selected
Upload image
Image must be in .png format, contain at least 90x90 pixel and have a maximum size of 256 KB.
Name
(Required field) e.g. Renaissance
Description
(Required field) e.g. Political infuence of the Church during the Renaissance
Issuer
Default expiration settings
Never
After
1
Years
Language of instruction
English
Learning outcome
e.g. is able to read and interpret ancient sources as well as modern texts, and demonstrates a good overview of the important developments of this time period.
Private badgeclass
Criteria for this edubadge
What are the requirements to qualify for this edubadge?
(Either criteria or criteria URL is required) e.g. online multiple choice exam
Or provide a link to a webpage with the criteria or more information
e.g. https://www.universityofharderwijk.nl/renaissance/criteria
Study load
Type of study load
Credit points (according to ECTS)
Number
-
2.5
+
Whole and half points only.
A minimum of 0.5 points is required.
Additional sections
+ Add educational identifier(s)
+ Add related educational framework
Cancel
Save
Terms of Use
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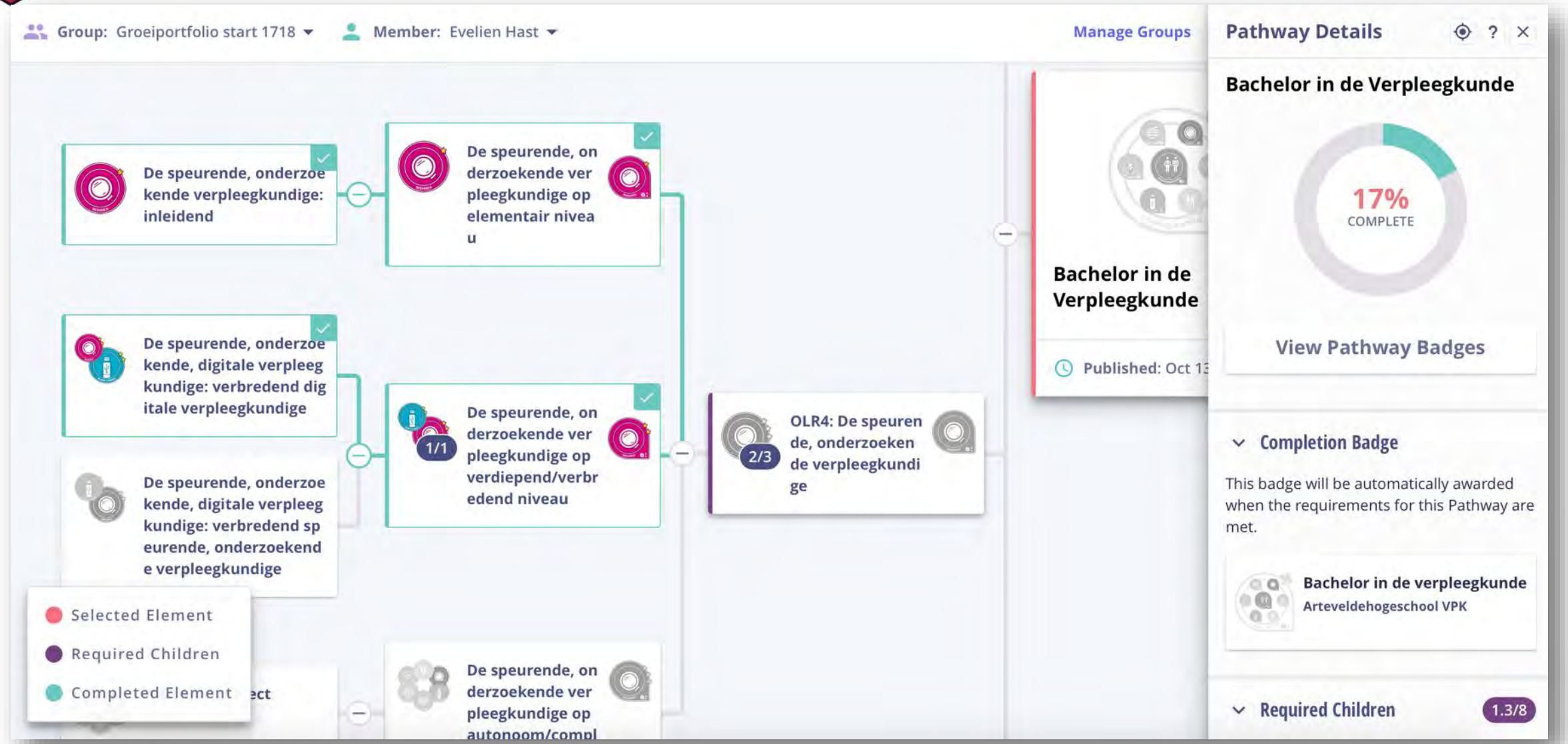
Group: Groeiportfolio start 1718
Member: Evelien Hast
Manage Groups
De speurende, onderzoekende verpleegkundige: inleidend
De speurende, onderzoekende verpleegkundige op elementair niveau
De speurende, onderzoekende, digitale verpleegkundige: verbredend digitale verpleegkundige
De speurende, onderzoekende verpleegkundige op verdiepend/verbredend niveau
1/1
De speurende, onderzoekende, digitale verpleegkundige: verbredend speurende, onderzoekende verpleegkundige
OLR4: De speurende, onderzoekende verpleegkundige
2/3
Bachelor in de Verpleegkunde
Published: Oct 13
Selected Element
Required Children
Completed Element
De speurende, onderzoekende verpleegkundige op autonoom/compl
Pathway Details
Bachelor in de Verpleegkunde
17%
COMPLETE
View Pathway Badges
Completion Badge
This badge will be automatically awarded when the requirements for this Pathway are met.
Bachelor in de verpleegkunde
Arteveldehogeschool VPK
Required Children
1.3/8

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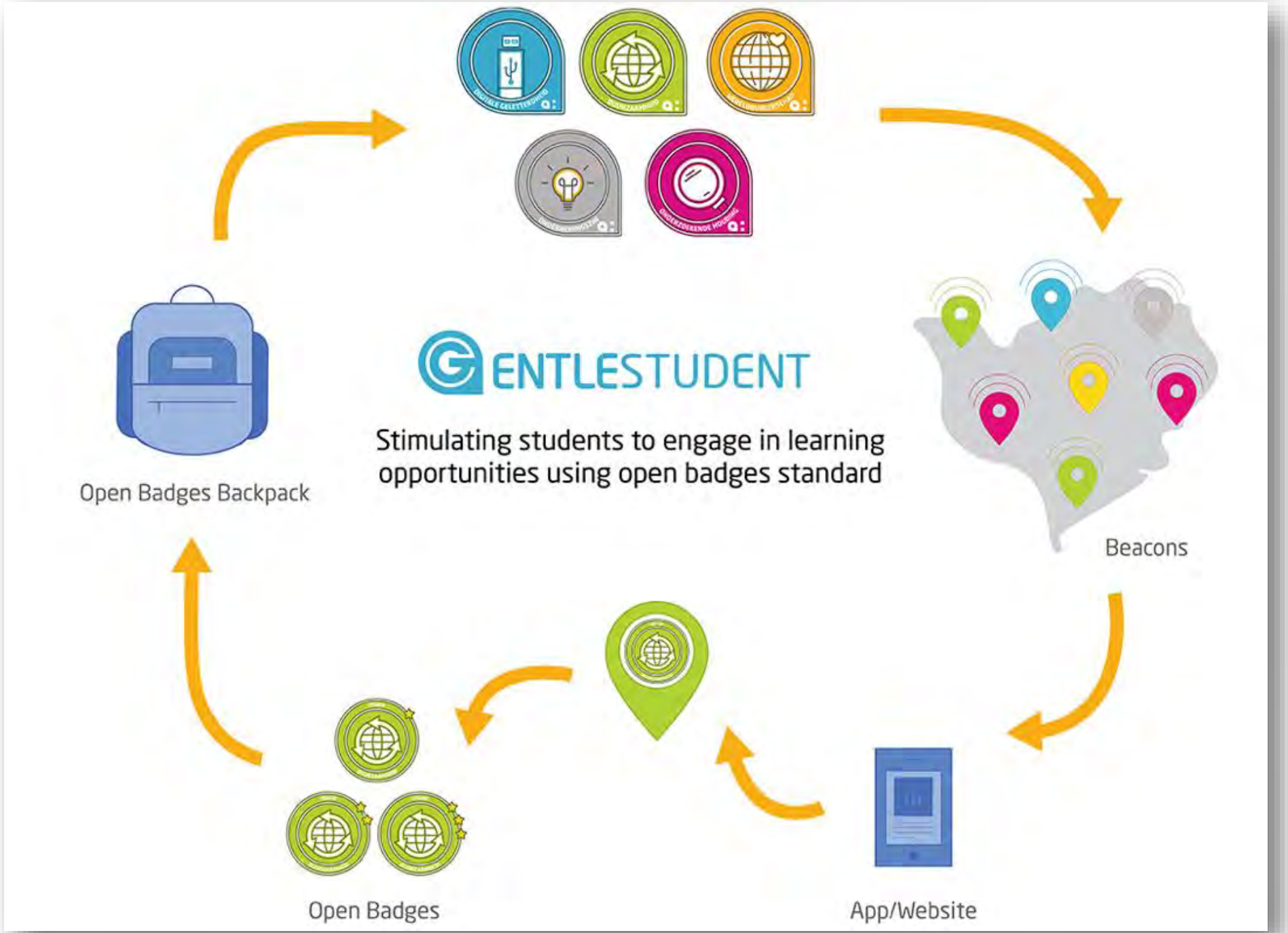

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https://info.badgr.com

edubadges

Use for Demo purposes only, this is a fork of https://edubadges.nl/ to explore the use of Edubadges in Belgium.

Never stop learning

Edubadges are digital certificates which show that the owner has acquired certain skills or knowledge. Edubadges can be issued for both accredited education and extracurriculair activities.

What would you like to do?

By invite only

Award

Award your students with edubadges, the micro credentials of the future.

Open the issuer portal

The issuer portal is by invite only. If you want to enter, but don't have access, please contact your institution admin.

Beta

Browse

At this moment ? edubadges have been awarded by the institutions.

Open the catalog

The catalog shows all the badgeclasses of all institutions using edubadges.

Collect

A backpack is the pace to receive and collect edubadges.

Open your backpack

An eduID is needed to create and use your backpack. Creating an eduID takes less than 30 seconds

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About edubadges

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Our challenges

- Shared understanding among HEI
- Perception by the labour market
- Shared and common infrastructure
  - Integrations
    - with Student Information Systems
    - with Learning Management Systems
- …

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DEPARTMENT OF EDUCATIONAL POLICY
INTERNATIONAL RELATIONS OFFICE

MICRO-CREDENTIALS AT GHENT UNIVERSITY AND IN ENLIGHT EUROPEAN UNIVERSITY

Frederik De Decker, Head International Relations Office, Ghent University

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THE SITUATION IN FLANDERS FOR HIGHER EDUCATION

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RECAP: MICROBOL DEFINITION

“A micro-credential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by HEIs or recognized by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A micro-credential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Micro-credentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG”

(“European project MICROBOL. Micro-credentials linked to the Bologna Key Commitments”, August 2020, p. 7).

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microbol

RECAP: SITUATION IN FLANDERS (BE) FOR HE

- *"Offered by higher education institutions"*: Credit certificates
- "*Recognised by higher education institutions*":
  - Formal learning (HE) "Recognition of Prior Qualifications" (incl. these credit certificates) ("EVK")
  - Non-formal/informal learning "Recognition of Prior Competences" ("EVC")

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MICRO-CREDENTIALS AT GHENT UNIVERSITY

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MICRO-CREDENTIALS AT GHENT UNIVERSITY

- Much of what we offer can be considered as MC's (→ "Credit certificates")
- Focus on new Ghent University policy re. Lifelong Learning that has an explicit focus on microcredentials
  - 5 Academies, covering all disciplines of the university
  - Nova Academy = cooperation between:
    - Ghent University
    - Vrije Universiteit Brussel
    - University of Antwerp

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:Nova:Academy:

Home / Programmes

Programmes

Overview of the postgraduate courses, continuing education courses and summer schools offered by the University of Antwerp, Ghent University and the Vrije Universiteit Brussel.

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:Nova:Academy:

Economie, business en Management

Start op 08.02.2022

Micro-credential 'Decision Support Systems for sustainability'

Lees meer

VUB VRIJE UNIVERSITEIT BRUSSEL

Kunst en cultuur

Start op 27.09.2021

Kunst in Context

Lees meer

UNIVERSITEIT GENT

GHENT UNIVERSITY

CHANGES INTRODUCED FOR LLL-OFFER

- Included in Internal Quality assurance *(note: in Flanders we have institutional accreditiation)*
- Defined learning outcomes
- Use of ECTS-credits (incl. assessment)
- Link to QF-level

  →Qualify as micro-credentials

! Extra boost by means of Advancement Fund !

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BROADER APPROACH AT GHENT UNIVERSITY

- Opportunities to increase the potential use of the existing learning offer
- Encompassing all types of learning (related to HE), i.e. beyond lifelong learning, MOOCs etc.
- To further enhance:
  - flexibility (although this has its limits…)
  - openness towards
    - more diverse learners - but also beneficial for ‘regular students’: working together with mature students, students from different backgrounds,
    - more diverse ways of learning (e.g. also non-formal, online/blended,…)

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USE OF BADGES (COMPLEMENTARY TO MC'S)

- Ghent University is setting up a system to support and validate students' (local, international) societal engagement through "Badges" (= based upon an the Badger standard)
- Not a micro-credential (no need for QA, credits,…) (would create extra obstacles)
- But can lower threshold to apply for "Certificates of Competency" (= type of micro-credential)

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MICRO-CREDENTIALS WITHIN EUROPEAN UNIVERSITIES NETWORK ENLIGHT

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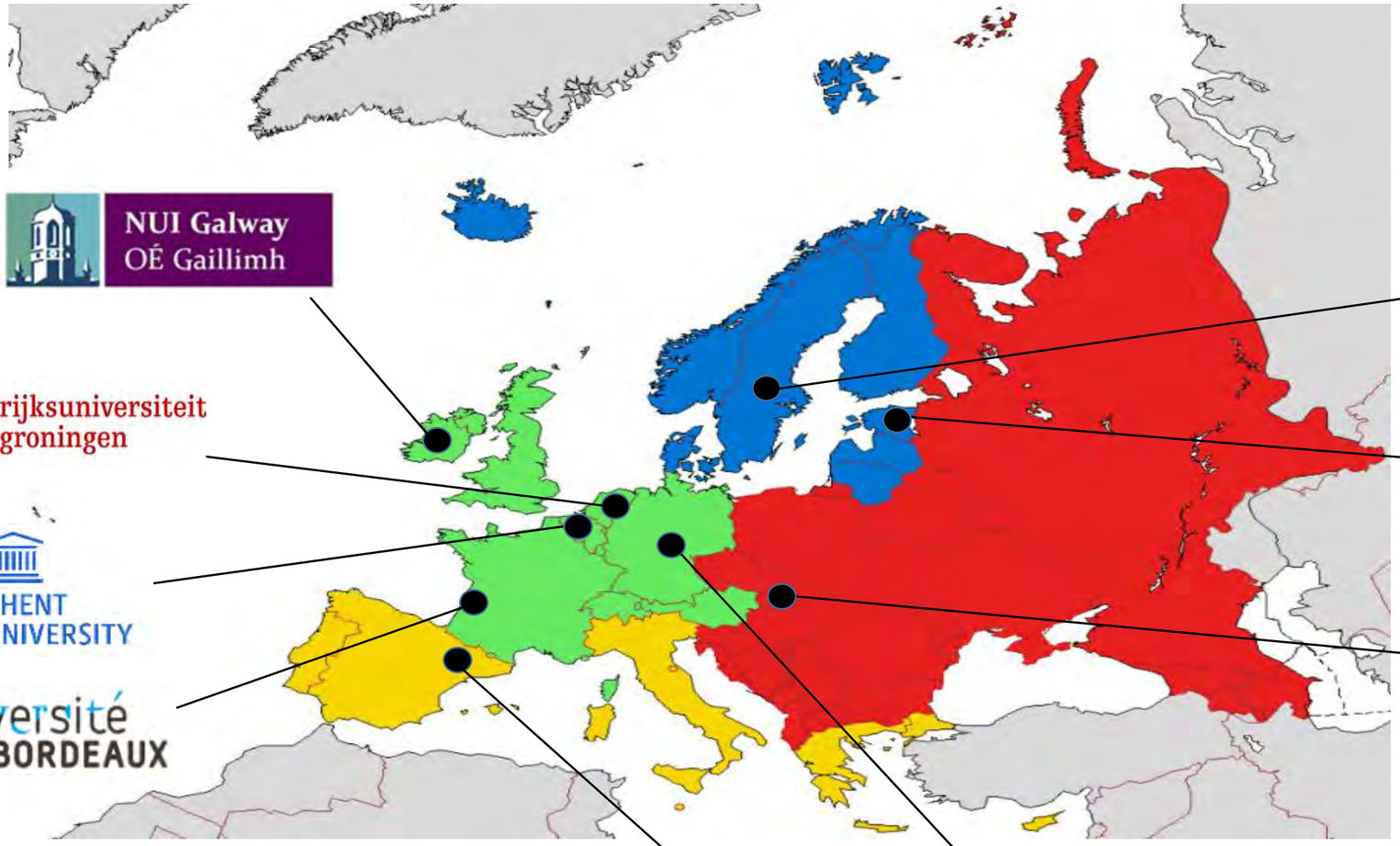
EUROPEAN UNIVERSITIES NETWORK ENLIGHT



ENLIGHT

NUI Galway
OÉ Gaillimh

rijksuniversiteit
groningen

GHENT
UNIVERSITY

université
de BORDEAUX

UPPSALA
UNIVERSITET

TARTU ÜLIKOOL
1632
UNIVERSITAS TARTUENSIS

UNIVERSITAS COMENIANA BRATISLAVENSIS
MCMXIX

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eman ta zabal zazu
Universidad del País Vasco
Euskal Herriko Unibertsitatea

GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

Co-funded by the
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of the European Union

MICRO-CREDENTIALS WITHIN ENLIGHT

- MC's for courses focused on the achievement of generic competences (in areas such as multilingualism, global engagement,…)
- MC's for initiatives in 5 Flagship areas:

Health and well-being

Digital revolution and Impact of digitalization

Climate action

Energy transition and Circular economy

Equity

GHENT UNIVERSITY

Educational Change in Times of Rapid Technological Innovation

ENLIVE (ENLIGHT Network Language and Intercultural Virtual Exchange)

Online Seminar Food Supply Chain Management

Deep Learning in Forestry

Equity and Equality in Education and Medicine

Global Engagement module

Interdisciplinary Study of the Climate Neutral City

Use advantages of our legal framework

- Origin: ENLIGHT Flagship area *Energy Use and Circular Economy*
- Lead institution: Ghent University (Faculty of Bioscience Engineering)
- Partners: all eight ENLIGHT partners
- Status: in design, first iteration in Spring 2022

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LOOKING FORWARD

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POTENTIAL FOR THE FUTURE

- Investigate links with already existing formats and projects e.g.
  - Europass Digital Credentials for Learning,
  - European Student Card Initiative (= integration of Erasmus Without Paper, EMREX and the European Student Card → focus on student data portability)

  Aim → give ownership of the microcredential to the end-user
- Use the potential of all the attention for micro-credentials in European Universities → huge leverage

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CONTACT

Frederik De Decker, Head of IRO

‘Het Pand’, Onderbergen 1, BE-9000 Ghent, Belgium

E-mail: Frederik.DeDecker@UGent.be

Tel.: +32 9 264 70 11

@FrederikDD

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Freie Universität Berlin

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

WAYS OF CONCRETE SUPPORT FOR MICRO-CREDENTIALS

WP2 IMPLEMENTATION CLUSTER

Johannes Posel
Stabsstelle CIO, Freie Universität Berlin

OpenU High-level Authorities' Meeting October 13th 2021

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

Freie Universität Berlin

AGENDA

- Open U@FU
- Overview of functionalities and components
- Next steps – moving forward

OPEN U@FU

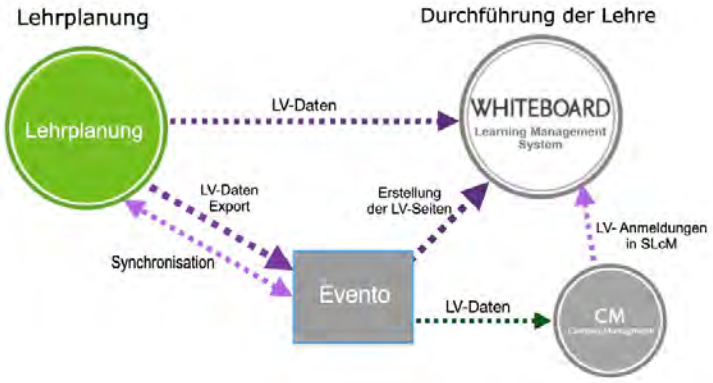
- Freie Universität Berlin is part of WP2 since the beginning, believing in the benefit of Open U and willing to step in despite challenges (esp. re the time constraints)

- Open U@FU is mainly carried out
  - for the WP2 by Henrik Steller, with advisement by Prof. Margarita Esponda-Argüero and backing by Steffen Hofmann and our ZEDAT central IT Service Center
  - for the WP3 by René Perfölz, with backing from Karoline von Köckritz and our CeDiS eLearning competence center
  - for overall coordination and „sweeping“ by Johannes Posel, under the auspices of Vice President Prof. Verena Blechinger-Talcott

OVERVIEW OF FUNCTIONALITIES AND COMPONENTS

- FU is mainly a SAP shop (Student Lifecycle Management), but there are exceptions:
- ➢ Room scheduling is mainly Evento by Crealogix SA
- ➢ Enrollment/matriculation is HIS
- ➢ Semester planning is carried out by each department, sometimes in an archaic way
- Additionally, our main LMS is Blackboard

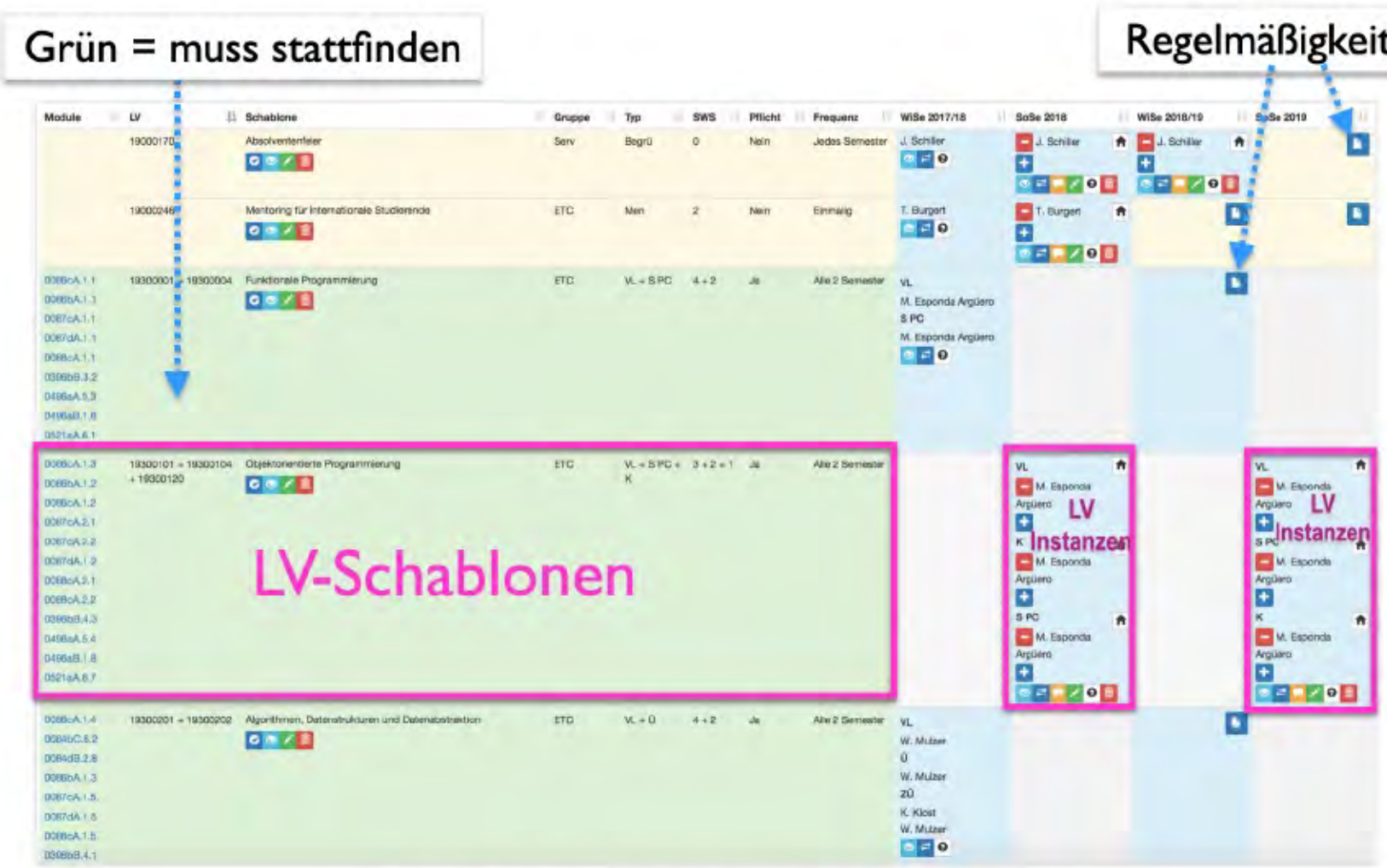
- Responding to user feedback, the Department of Mathematics and Computing Science developed „MyCampus“, a collection of tools interacting both with each other and with the „central“ systems to provide i.a.
- ➢ • a course catalogue with comments and a “site browser”
- ➢ • the pre-enrolment towards courses and the possibility of preferential choices
- ➢ • application for courses and examinations
- ➢ • student enrolment lists
- ➢ • performance records/transcripts/course assessments/ credits
- ➢ • collaborative project spaces crossing courses



HIGHLIGHTS OF „MYCAMPUS“

- Curriculum planning and administration
  - Planning supports spanning over several semesters, including monitoring deadlines
  - Integrity of the curriculum can be immediately assessed, including non-overlapping of courses
  - Focusses on ease of use for all target groups, including multilingual UI (95% de & eng descriptions)
  - Administration of study regulations, including recognition/accreditation of foreign course assessments/credits as well as individual study plans
  - Issuing of course assessments/credits
  - Tracking of teaching load requirements

- Implementation of the curriculum
  - a course catalogue with comments and a “site browser”
  - collaborative spaces per course, already populated and including calendars
  - project spaces crossing courses
  - Course or event enrolment for students both on site or external, factoring in student preferential choice and capacity restrictions

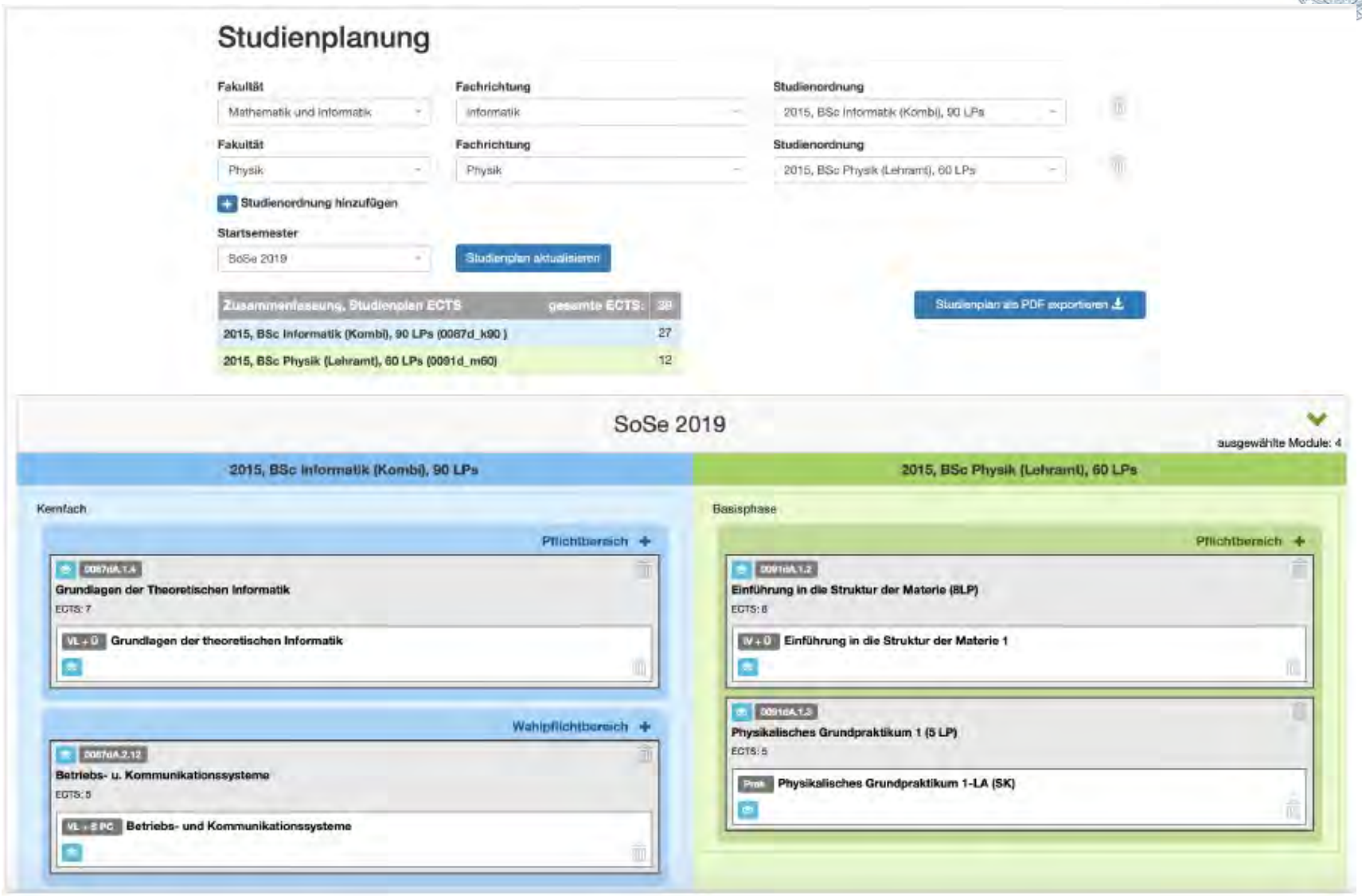


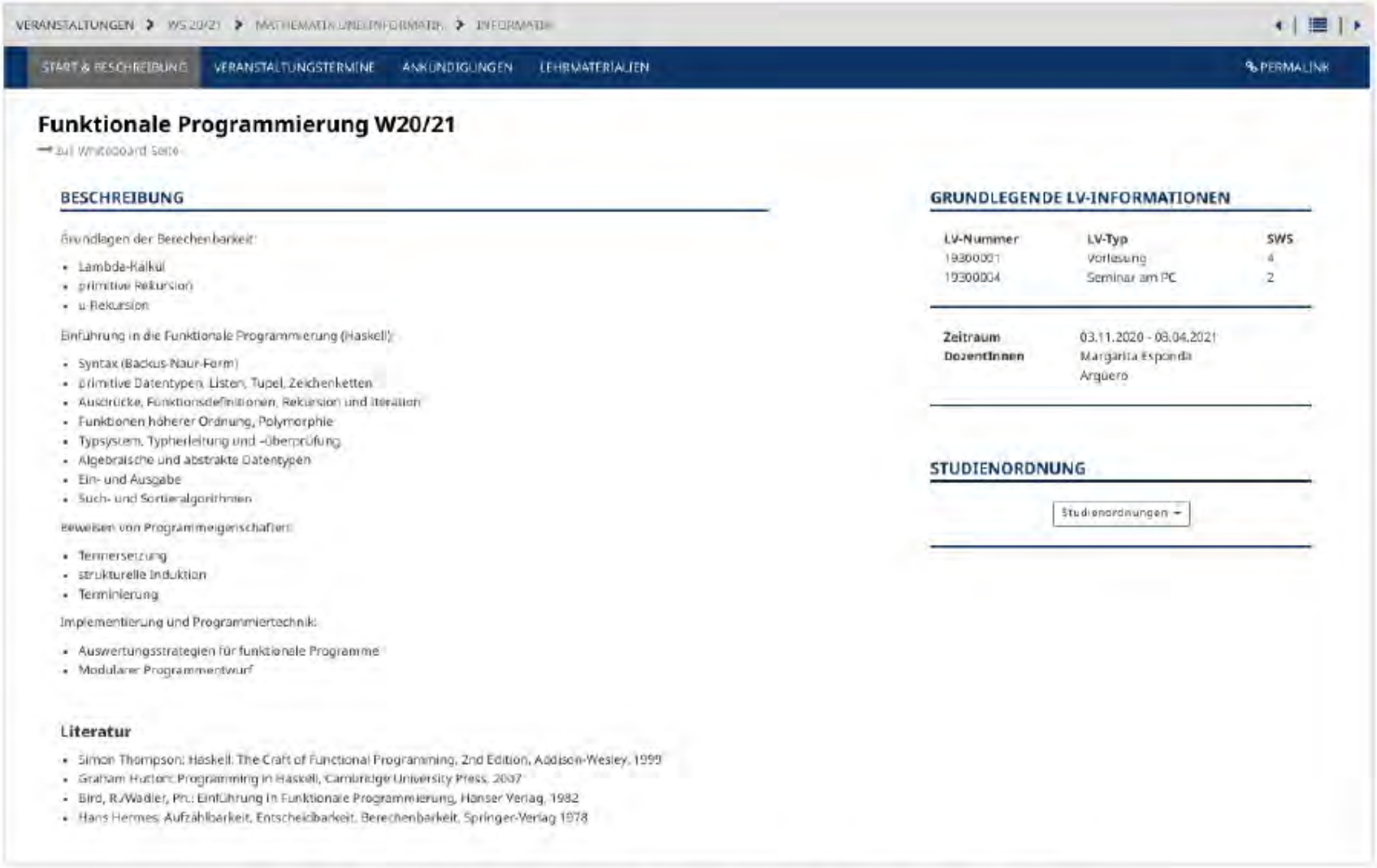
Teilansicht der Langfristplanung des Informatik-Instituts

Muss mit fester Frequenz angeboten werden Muss regelmäßig angeboten werden Suchen

Module							Instanzen		
Submodule	LV	Modulname / Submodulname	Typ	SWS	Pflicht	Frequenz	WiSe 2020/21	SoSe 2021	WiSe 2021/22
0086cA.1.1 LP: 9 SWS: 4 + 2		Funktionale Programmierung							
0086cA.1.1.1	19300001	Funktionale Programmierung	VL	4	Ja	Alle 2 Semester	M. Esponda Argüero Primär		N. N. Primär
0086cA.1.1.2	19300004	Übung zu Funktionale Programmierung	S PC	2	Ja	Alle 2 Semester	M. Esponda Argüero Primär		N. N. Primär
0086cA.1.2 LP: 6 SWS: 3 + 2		Objektorientierte Programmierung für Stud. mit Programmierkenntnissen							
0086cA.1.2.1	19300101	Objektorientierte Programmierung	VL	3	Ja	Alle 2 Semester		M. Block-Berlitz D. Göhring	
0086cA.1.2.2	19300104	Übung zu Objektorientierte Programmierung	S PC	2	Ja	Alle 2 Semester		D. Göhring	
0086cA.1.3 LP: 6 SWS: 1 + 3 + 2		Objektorientierte Programmierung für Stud. ohne Programmierkenntnisse							
0086cA.1.3.2	19300101	Objektorientierte Programmierung	VL	3	Ja	Alle 2 Semester		M. Block-Berlitz D. Göhring Primär	
0086cA.1.3.3	19300104	Übung zu Objektorientierte Programmierung	S PC	2	Ja	Alle 2 Semester		D. Göhring Primär	
0086cA.1.3.1	19300120	Vorkurs zu Objektorientierte Programmierung	K	1	Ja	Alle 2 Semester		D. Göhring Primär	
0086cA.1.4 LP: 6 SWS: 4 + 2		Algorithmen, Datenstrukturen und Datenabstraktion							
0086cA.1.4.1	19300201	Algorithmen, Datenstrukturen und Datenabstraktion	VL	4	Ja	Alle 2 Semester	G. Rothe Primär		G. Rothe Primär
0086cA.1.4.2	19300202	Übung zu Algorithmen, Datenstrukturen und Datenabstraktion	Ü	2	Ja	Alle 2 Semester	G. Rothe Primär		G. Rothe Primär
0086cA.1.5 LP: 9 SWS: 4 + 2		Nichtsequentielle und verteilte Programmierung							

Beispiel des Lehrangebots des Bachelor-Studiengangs Informatik (Grün = Pflichtmodul)


Studienplanung
Fakultät
Mathematik und Informatik
Fachrichtung
Informatik
Studienordnung
2015, BSc Informatik (Kombi), 90 LPs
Fakultät
Physik
Fachrichtung
Physik
Studienordnung
2015, BSc Physik (Lehramt), 60 LPs
Studienordnung hinzufügen
Startsemester
SoSe 2019
Studienplan aktualisieren
Zusammensetzung, Studienplan ECTS
gesamte ECTS: 39
2015, BSc Informatik (Kombi), 90 LPs (0087d_k90) 27
2015, BSc Physik (Lehramt), 60 LPs (0091d_m60) 12
Studienplan als PDF exportieren
SoSe 2019
ausgewählte Module: 4
2015, BSc Informatik (Kombi), 90 LPs
2015, BSc Physik (Lehramt), 60 LPs
Kernfach
Pflichtbereich
Grundlagen der Theoretischen Informatik
ECTS: 7
VL + Ü
Grundlagen der theoretischen Informatik
Wahlpflichtbereich
Betriebs- u. Kommunikationssysteme
ECTS: 5
VL + 2 PC
Betriebs- und Kommunikationssysteme
Basisphase
Pflichtbereich
Einführung in die Struktur der Materie (SLP)
ECTS: 8
IV + Ü
Einführung in die Struktur der Materie 1
Physikalisches Grundpraktikum 1 (5 LP)
ECTS: 5
Prak
Physikalisches Grundpraktikum 1-LA (SK)



VERANSTALTUNGEN > WS 20/21 > MATHEMATIK UND INFORMATIK > INFORMATIK

START & BESCHREIBUNG | VERANSTALTUNGSTERMINE | ANKÜNDIGUNGEN | LEHRMATERIALIEN | PERMALINK

Funktionale Programmierung W20/21

zur Whiteboard Seite

BESCHREIBUNG

Grundlagen der Berechenbarkeit:

- Lambda-Kalkül
- primitive Rekursion
- µ-Rekursion

Einführung in die Funktionale Programmierung (Haskell):

- Syntax (Backus-Naur-Form)
- primitive Datentypen, Listen, Tupel, Zeichenketten
- Ausdrücke, Funktionsdefinitionen, Rekursion und Iteration
- Funktionen höherer Ordnung, Polymorphie
- Typsystem, Typherleitung und -überprüfung
- Algebraische und abstrakte Datentypen
- Ein- und Ausgabe
- Such- und Sortieralgorithmen

Beweisen von Programmeigenschaften:

- Termersetzung
- strukturelle Induktion
- Terminierung

Implementierung und Programmiertechnik:

- Auswertungsstrategien für funktionale Programme
- Modularer Programmentwurf

Literatur

- Simon Thompson: Haskell: The Craft of Functional Programming, 2nd Edition, Addison-Wesley, 1999
- Graham Hutton: Programming in Haskell, Cambridge University Press, 2007
- Bird, R./Wadler, Ph.: Einführung in Funktionale Programmierung, Hanser Verlag, 1982
- Hans Hermes: Aufzählbarkeit, Entscheidbarkeit, Berechenbarkeit, Springer-Verlag 1978

GRUNDLEGENDE LV-INFORMATIONEN

LV-Nummer	LV-Typ	SWS
19300001	Vorlesung	4
19300004	Seminar am PC	2

Zeitraum	03.11.2020 - 08.04.2021
DozentInnen	Margarita Esponda Argüero

STUDIENORDNUNG

Studienordnungen

Beispiel einer von Whiteboard automatisch erstellten öffentlichen LV-Seite.

KURSANMELDUNG | KURSE TAUSCHEN | KURSVERWALTUNG | TEILNEHMERVERWALTUNG | EINSTELLUNGEN | LINK | HILFE

Kursanmeldungen

Während des Anmeldezeitraums können hier Kurspräferenzen vergeben werden. Erste bis fünfte Präferenz, wobei die erste Präferenz der höchsten Priorität entspricht. Bitte bestätigen Sie ihre Angaben anschließend mit dem 'Speichern'-Button.

Nach Ende des Anmeldezeitraums werden die Kurse automatisch zugeteilt. Anschließend können zugeteilte Kurse hier eingesehen werden.

Alle Lehrveranstaltungen

Präferenz (1 = höchste Priorität, 5 = niedrigste Priorität)	Name der Veranstaltung	Tutor	Fach	Semester	Datum, Zeit und Ort	Maxiamle Teilnehmerzahl
		Alle	Alle			
Keine Präferenz	Tutorium bei Lisa 2	Lisa Müller	BGB I - Tutorien W19/20	WS 19/20	Montag 15:00 - 17:00	14
1. Präferenz	Tutorium bei Iulia 2	Iulia Müller	BGB I - Tutorien W19/20	WS 19/20	Montag 16:00 - 18:00 T9/053 Seminarraum	14
Keine Präferenz	Tutorium bei Iulia 1	Iulia Müller	BGB I - Tutorien W19/20	WS 19/20	Montag 18:00 - 20:00 T9/053 Seminarraum	14
✓ Keine Präferenz 2. Präferenz 3. Präferenz 4. Präferenz 5. Präferenz	Tutorium bei Tom 1	Tom Müller	BGB I - Tutorien W19/20	WS 19/20	Dienstag 10:00 - 12:00	14
	Tutorium bei Iulia 3	Iulia Müller	BGB I - Tutorien W19/20	WS 19/20	Dienstag 16:00 - 18:00 T9/046 Seminarraum	14
Keine Präferenz	Tutorium bei	Maarten Müller	BGB I - Tutorien W19/20	WS 19/20	Dienstag 16:00 - 18:00	14
Keine Präferenz					- 18:00	14

Sie haben Änderungen vorgenommen. Möchten Sie diese speichern? Speichern

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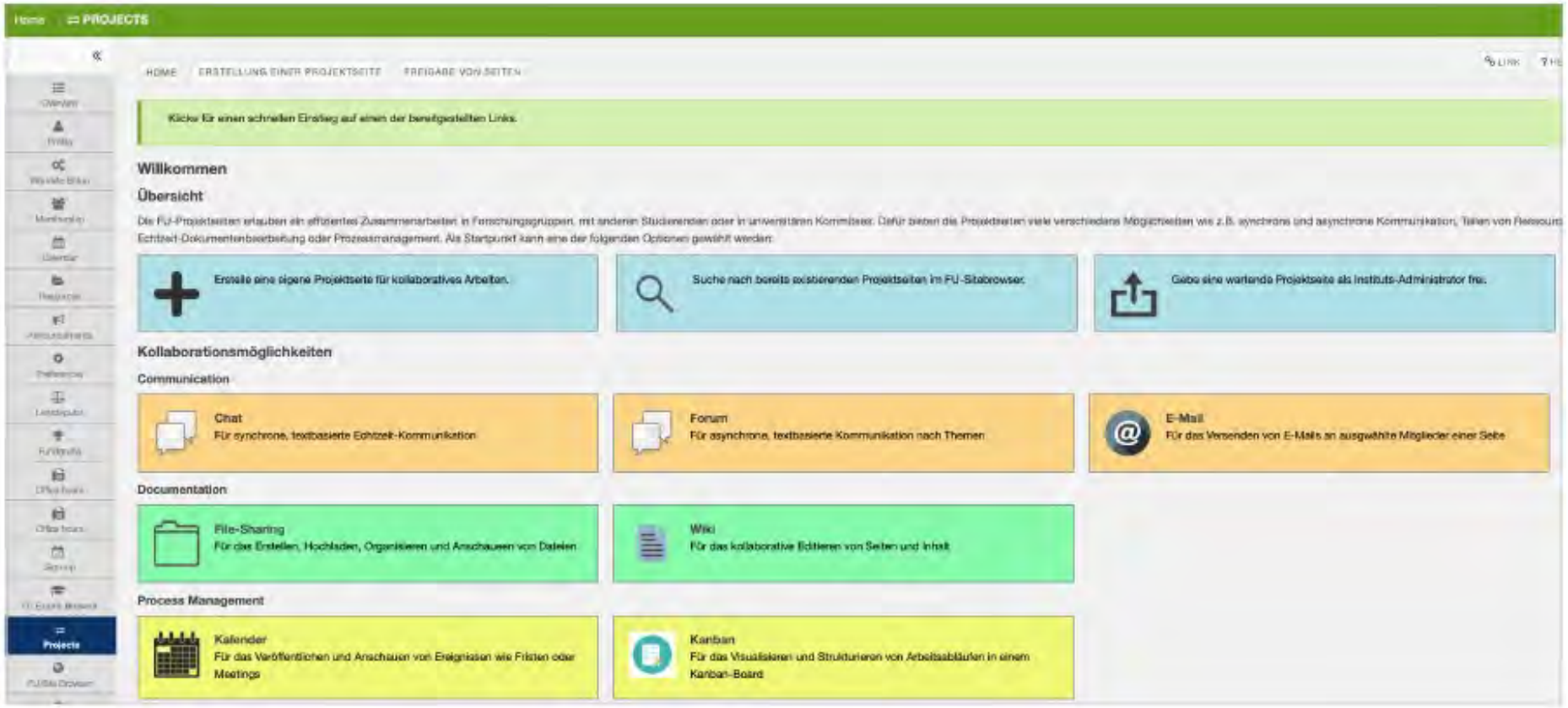

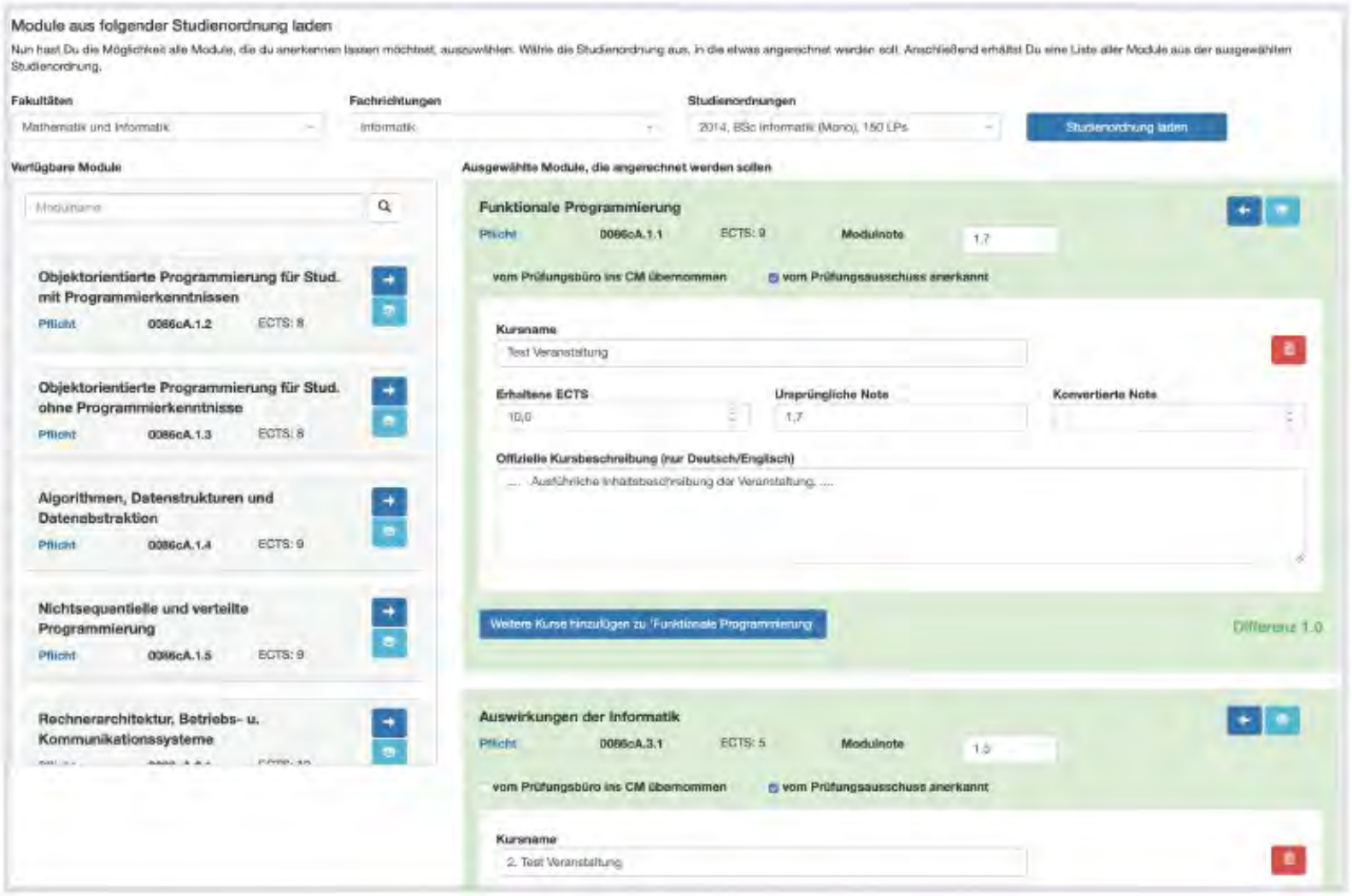
Module aus folgender Studienordnung laden
Nun hast Du die Möglichkeit alle Module, die du anerkennen lassen möchtest, auszuwählen. Wähle die Studienordnung aus, in die etwas angerechnet werden soll. Anschließend erhältst Du eine Liste aller Module aus der ausgewählten Studienordnung.
Fakultäten
Mathematik und Informatik
Fachrichtungen
Informatik
Studienordnungen
2014, BSc Informatik (Mono), 150 LPs
Studienordnung laden
Verfügbare Module
Ausgewählte Module, die angerechnet werden sollen
Objektorientierte Programmierung für Stud. mit Programmierkenntnissen
Pflicht 0086cA.1.2 ECTS: 8
Objektorientierte Programmierung für Stud. ohne Programmierkenntnisse
Pflicht 0086cA.1.3 ECTS: 8
Algorithmen, Datenstrukturen und Datenabstraktion
Pflicht 0086cA.1.4 ECTS: 9
Nichtsequentielle und verteilte Programmierung
Pflicht 0086cA.1.5 ECTS: 9
Rechnerarchitektur, Betriebs- u. Kommunikationssysteme
Funktionale Programmierung
Pflicht 0086cA.1.1 ECTS: 9 Modulnote 1,7
vom Prüfungsbüro ins CM übernommen
vom Prüfungsausschuss anerkannt
Kursname
Test Veranstaltung
Erhaltene ECTS
10,0
Ursprüngliche Note
1,7
Konvertierte Note
Offizielle Kursbeschreibung (nur Deutsch/Englisch)
... Ausführliche Inhaltsbeschreibung der Veranstaltung. ...
Weitere Kurse hinzufügen zu 'Funktionale Programmierung'
Differenz 1.0
Auswirkungen der Informatik
Pflicht 0086cA.3.1 ECTS: 5 Modulnote 1,3
vom Prüfungsbüro ins CM übernommen
vom Prüfungsausschuss anerkannt
Kursname
2. Test Veranstaltung

Online Anerkennung/Anrechnung von Studienleistungen

Der Student bereitet einen Online-Vorschlag vor und speichert diesen im LPS

bereits 340 STOs

Prüfungsausschuss

- überprüft
- korrigiert bzw. akzeptiert
- **genehmigt** den Vorschlag

Das Prüfungsbüro übernimmt die Daten im CM

Lehrplanung

Statistiken für das Internationale Büro der FU sind dann möglich

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OVERVIEW OF FUNCTIONALITIES AND COMPONENTS (II)

- MyCampus is also used to offer and administrate the “ProInformatik” early studies program, geared at high school graduates before their first semester but open for prospective students alike, featuring enrollment, course scheduling, queues for modules and user management including fee tracking.

- MyCampus is used to manage course catalogues and course enrollment for the Berlin Mathematical School, the Graduate School of the Berlin Math+ Excellence Cluster, and thus supports “federated” access via Shibboleth AAI (currently in the German NRENs AAI).

- Software and tools are based on the Sakai LMS project by the Apereo Foundation, geared towards Higher Education and Research Institutions, being available under an open source license and designed with modular aspects in mind

- Interfaces for import and export allow the flow of data both towards a user-friendly representation via HTML, for example for the site browser aggregating the commented course catalogue, as well as XML-based for automated use or re-use in other systems. We also had export to our campus mobile app Cassis.

OPEN U

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

Freie Universität Berlin

OpenU High-level Authorities' Meeting October 13th 2021

NEXT STEPS – MOVING FORWARD

- We believe the first “technical” step to take is to get a test bed system up and running, in order to support WP3s experimentations at least for their “second round”.
- In parallel, we need to map the needs gathered to a list of features, weighted in short term and mid term availability.
- There is obviously a lof of technical requirements to solve, and we are not spared of the administrative “voodoo”/paper trails either, but we are committed!

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

Freie Universität Berlin

LOOKING FORWARD TO CONTRIBUTING TO OUR COMMON GOAL

THANK YOU!

Questions or feedback? Get in touch:
openu@daad.de

Thank you!

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Flemish Ministry of Education and Training

OPEN U