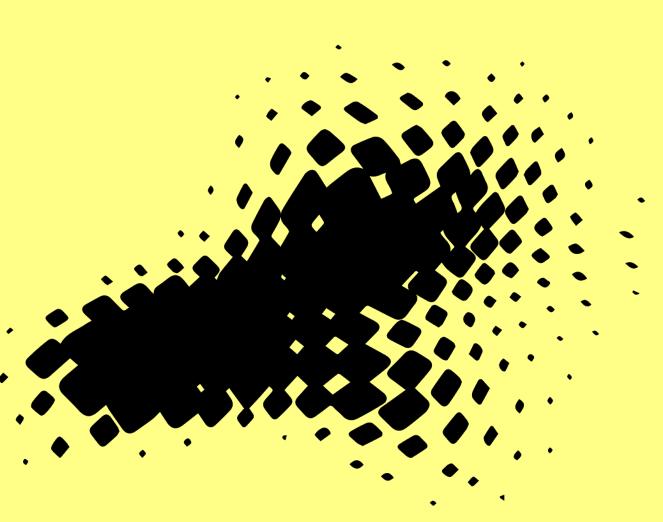
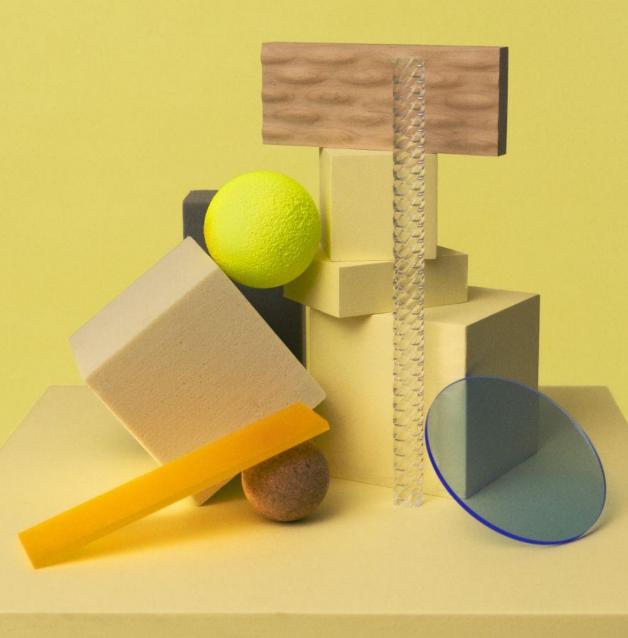
## Modularity and curricular collaboration

Modularity and micro-credentials in the continuous learning tray – an overview of current concepts and perspectives that support the presentation of what is available in continuous learning.



## **Background & objectives**

- The objective of this review is to provide a common understanding of modularity as the foundational idea of the continuous learning tray and as a way of structuring different entities. At the same time, we examine the principles of micro-credentials as part of the continuous learning process.
- A national definition for micro-credentials is coming, and it will be based on the recommendation issued by the Council of the European Union. Micro-credentials are popular in many regions, such as central Europe.



## Partial implementers: modularity and curricular collaboration

- **Eeva Liikanen**, Tampere University of Applied Sciences
- Hanna Nurmi, Tampere University
- Anna-Greta Nyström, Åbo Akademi University
- Petri Sjöblom, University of Turku
- Terhi Skaniakos, University of Jyväskylä
- **Sirpa Tuomi**, Jamk University of Applied Sciences
- Anneli Ylitalo, Turku University of Applied Sciences

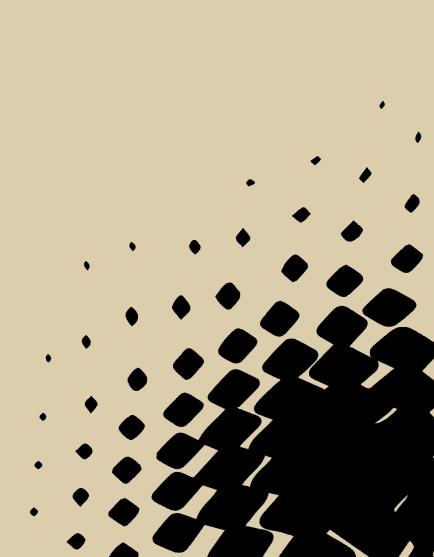


## Contents

- Overview
- Glossary
  - Modularity
  - Micro-credentials
  - Micro-credentials: from EU recommendation to national implementation
  - Examples from around the world
  - Example cases: horizontal and vertical stackability
- Curricular collaboration
- Challenges and questions identified

## Glossary

What do modularity and micro-credentials mean?



## Modularity in the draft OKSA glossary

Opetus- ja koulutussanasto (OKSA), luonnos kommentointia varten 18.11.2022

#### 246 **modulaarisuus**

määritelmä

periaate, jonka mukaan opinnot rakentuvat porrasteisesti moduuleista (2)

huomautus

Määritelmässä mainittu porrasteisuus (tai hierarkkisuus) viittaa siihen, että päästäkseen suorittamaan jotakin moduulia (2) opiskelijan on mahdollisesti suoritettava määrättyjä esitietoina vaadittavia moduuleita (2).

Suomen korkeakouluissa (2) yleinen tutkintojen "modulaarinen rakenne" on, että tutkinto koostuu opintopistemitoitetuista opintokokonaisuuksista (2), jotka koostuvat edelleen opintojaksoista.

https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf\_Draft of OKSA glossary for comments, 18 November 2022.

Opetus- ja koulutussanasto (OKSA), luonnos kommentointia varten 18.11.2022

#### 246 **modulaarisuus**

Modulaarisuudesta puhuttaessa voidaan painottaa:

- Tutkintojen koostumista osista ja sitä, että osille on kuvattu itsenäisesti tavoitteet ja sisältö.

- *Opiskelijan* valinnanmahdollisuuksia ja opintojen joustavuutta yksilön kannalta (esimerkiksi opintokokonaisuudessa (2) suoritettavat opintojaksot ovat valinnaisia; tutkinnossa suoritettavat opintokokonaisuudet (2) ovat valinnaisia; valinnanmahdollisuuksia on yli korkeakoulurajojen).

- Samojen kokonaisuuksien tarjoamista eri tarkoituksiin (esimerkiksi osana tutkintoja, avoimena korkeakoulutuksena ja täydennyskoulutuksena).

- Opintojen (esimerkiksi opintojaksojen) jakamista hyvin pieniin paloihin helpottamaan työssäkäyvien opiskelua.

- Esitietovaatimusten kuvaamista geneerisesti, ei oman korkeakoulun (2) opintojaksoina.

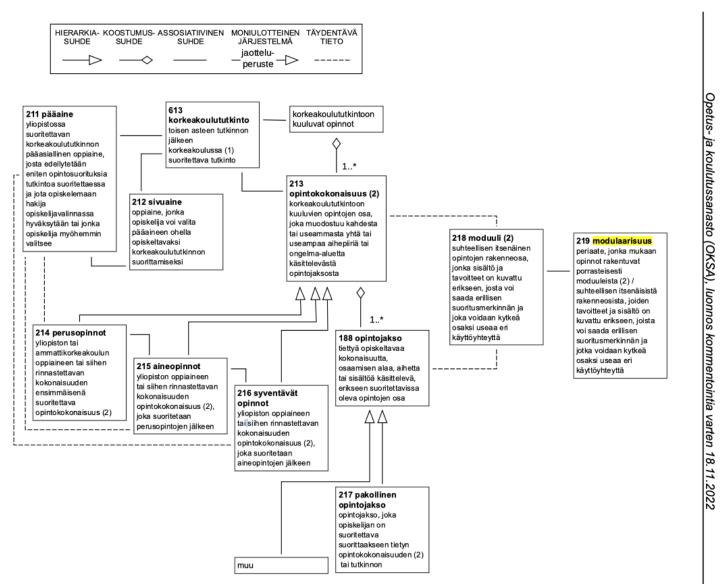
Myös *ammatillinen koulutus* voidaan järjestää modulaarisesti, vaikkakaan termiä moduuli tai modulaarisuus ei esiinny ammatillisen koulutuksen säädösteksteissä. Ks. *moduuli (2)*. Käsitteen tunnus: c1789

Luokka: <korkeakoulut>

Käsitekaavio: Opintokokonaisuus ja opintojakso

https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf\_Draft of OKSA glossary for comments, 18 November 2022.





219 modulaarisuus periaate, jonka mukaan opinnot rakentuvat porrasteisesti moduuleista (2) / suhteellisen itsenäisistä rakenneosista, joiden tavoitteet ja sisältö on kuvattu erikseen, joista voi saada erillisen suoritusmerkinnän ja jotka voidaan kytkeä osaksi useaa eri käyttöyhteyttä

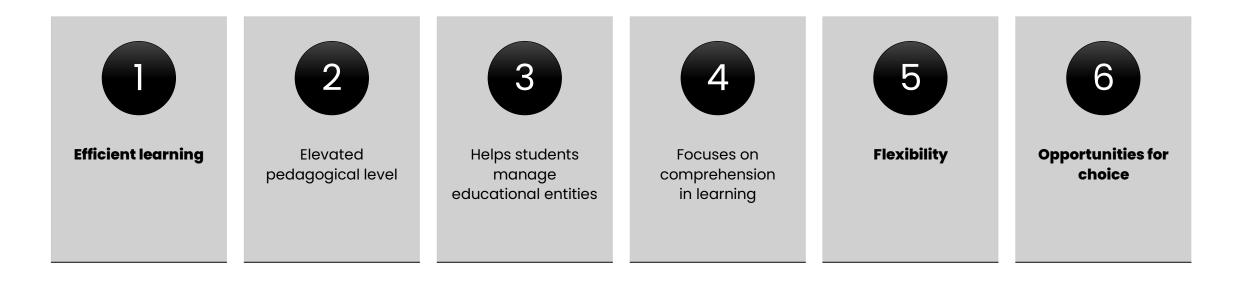
https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf\_Draft of OKSA glossary for comments, 18 November 2022.

## Modularity – literature review

- There is no clear definition for what a module is
- The principle of modularity is that modules are quite independent entities that are still logically linked to one another. They feature clearly stated objectives and contents.
- An entire curriculum is not always modular in nature
- Modules are suitable for rapidly changing industries

- Fields of science that utilise modular structures
  - Engineering and technology
  - Business
  - Languages
  - Psychology
  - Biotechnology
  - Natural sciences
  - Medicine
  - Environmental sciences
- Modularity has been studied the most in the United States

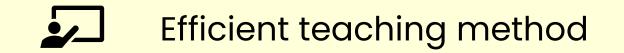
## **Benefits of modularity for students**



## **Benefits of modularity in teaching**



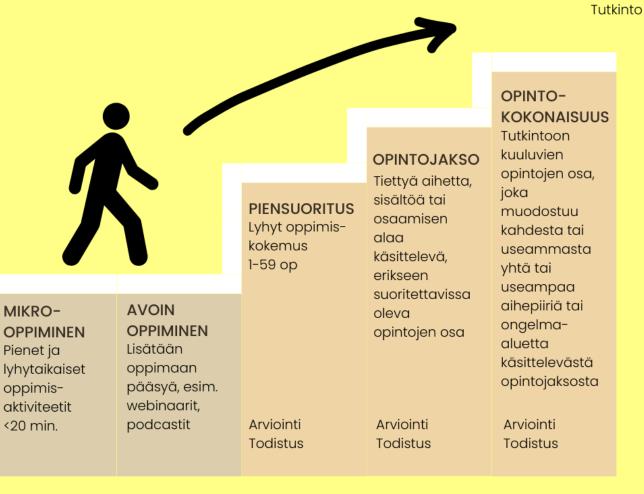
Facilitates collaboration between teachers



## Recommendations

- In the context of Finnish higher education institutions, the term 'modular structure' refers to a degree that consists of credit-based study modules, which in turn are composed of study units.
- Finnish higher education institutions could abandon the use of modules as a concept. In any case, it is important to ensure that all concepts are used consistently and in a mutually comprehensive manner.

## Jatkuva oppiminen

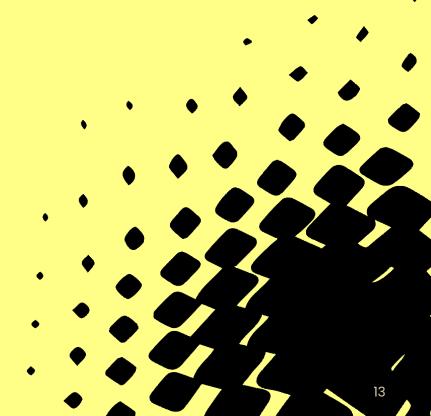


The figure below is one way of perceiving the path of continuous learning.

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Non-formal learning can take place in the form of, for example, micro-learning or open learning.

Micro-credentials are part of the formal learning process and, at their smallest, can amount to 1 study credit.



Nonformaali oppiminen

Formaali oppiminen

## **Micro-credentials in research**

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#### • In literature, micro-credentials are divided into different groups (see e.g. <u>Ngoc Ha et al., 2022</u>)

- Digital badge
- Sector/expert certificate displaying the learner's knowledge, competence and ability to perform a specific task
- MOOC (Massive Open Online Course)
- Short course (produced by a higher education institution)

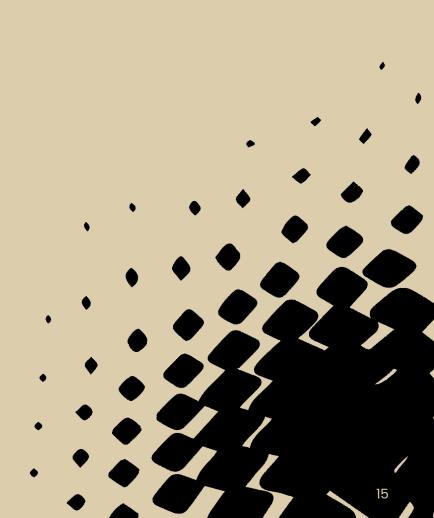
#### • No single definition exists for the concept, even though the definitions are similar in nature

- Definitions vary between different countries and regions (e.g. EU, UNESCO, OECD, geographical areas)
- Attitudes to micro-credentials are often divided into two groups

+ Micro-credentials help higher education institutions respond more effectively and rapidly to the needs and challenges of working life. They also enable equal access to education.

- Micro-credentials present additional employment-related requirements for learners and hasten the privatisation of education
- Literature has studied micro-credentials from the learner's perspective, for example
  - The benefits for learners are related to work and studies: expertise, professional development, mastery of work tasks, and a professional approach or technique, as well as strengthening knowledge and competence
  - The criticisms voiced by learners are related to poor course planning and contents, technical and temporal challenges, and course fees
  - Benefits related to employment and work include:
    - Development of professional qualifications
    - · Preparation for job searches and career choices
    - Networking
    - Understanding industry-specific practices

**Micro-credentials:** from EU recommendation to national implementation







## Recommendation of the Council of the European Union, 2022

#### **Objectives:**

#### https://data.consilium.europa.eu/doc/document/ST-9237-2022-INIT/fi/pdf

- A well-functioning culture of lifelong learning where everyone has the knowledge, skills and competence they need to succeed in society/the labour market/their personal life
- Everyone is provided the opportunity to access high-quality and appropriate training, upskilling and reskilling throughout their lives
- Learning is easily accessible and inclusive
- The recommendation aims to support the building of trust in micro-credentials across Europe among all involved parties

Micro-credentials can help verify the results of small, tailored learning experiences:

- Enable the targeted and flexible acquisition of knowledge, skills and competences -> more equipped to respond to new and evolving needs in society and the labour market
- Allow individuals to supplement the skills they need to succeed in a rapidly changing environment without replacing traditional qualifications and degrees
- When necessary, can be used to complement existing qualifications and provide added value without undermining the key role of fullscale programmes in formal and vocational education and training
- Their planning must take into account the different individual needs, skills and capabilities of all learners

### **Council Recommendation: micro-credentials**

- Lead to learning outcomes after a small amount of learning
- Learning outcomes have been assessed on the basis of open and clearly defined criteria
- Provide learners with specific knowledge, skills and competences to meet societal, personal, cultural or labour market needs
- Can be separate or combined with more extensive credentials
- Are based on quality assurance which, in turn, is based on standards agreed in the relevant competence area or sector
- Learners receive a credential that can be shared and transferred

#### **Recommendation of the Council of the European Union**

#### Providers of micro-credentials:

- educational institutions and organisations, labour market participants, employers and industry, civil society organisations, public employment services, regional and national authorities and other actors
- design, offer and award micro-credentials for formal, non-formal and informal learning. Does not affect regional and national legislation and conditions.

#### Learning environments:

- various physical, web-based, diverse, virtual and digital locations, conditions and cultures where people learn
- cover all situations where formal, non-formal and informal learning can take place

#### Formal learning:

- takes place in an organised and structured environment designed for learning
- usually leads to a qualification, typically in the form of a certificate

#### Non-formal learning:

- takes place outside formal education
- time spent on learning is planned in advance, and support is offered for the learning process

#### Informal learning:

· learning from everyday activities and experiences

#### **Recommendations for EU Member States:**

- With respect to national circumstances, public funding should be offered to all levels of education and training for the development and provision of educational activities leading to micro-credentials. At the same time, institutional independence is to be taken into account with a focus on promoting diversity and creativity.
- Adapt procedures for the recognition of prior learning and validation of non-formal and informal learning
- Add micro-credentials to the lists of available educational opportunities and, if necessary, develop policies for their recognition.
- Introduce micro-credentials to national qualification frameworks and systems

## **European principles**

★★★ Quality	<ul> <li>the application of internal and external quality assurance</li> <li>quality assurance processes must be appropriate, clearly documented, easily accessible, and respond to the needs and expectations of learners and stakeholders</li> </ul>
Transparency	<ul> <li>measurability, comparability, comprehensibility</li> <li>clearly defined learning outcomes, workloads, contents, levels and educational offerings</li> <li>can be included in reference frameworks for degrees when necessary</li> <li>making information on tenderers available to the public</li> <li>providing information on learning opportunities and making them easily exchangeable through platforms</li> </ul>
Relevance	<ul> <li>emphasising the design of separate, targeted learning achievements</li> <li>should be granted in a manner that allows for updating the learning opportunities that lead to them, according to the needs of learners</li> </ul>
Reliable assessment	<ul> <li>learning outcomes must be assessed using open criteria</li> </ul>
Accumulation (stackability)	<ul> <li>emphasising modular designs to allow for combinations of micro- credentials and the creation of larger entities</li> <li>receiving organisations decide on their stacking and accumulation practices;</li> <li>stacking does not automatically entitle a person to a qualification or degree</li> </ul>

## **European principles**

Validation of non-forma	Validation of non-formal/informal learning bround also provide the opportunity to attain		
P Recognition	<ul> <li>where possible, recognition should be enabled on the basis of normal recognition procedures</li> </ul>		
Portability	<ul> <li>the learner is the owner of the credential &gt; can store and share it to a desired party, also digitally &gt; both parties can understand its contents and verify its authenticity</li> </ul>		
Learner-centred	<ul> <li>the needs of learners</li> <li>learner feedback for continuous development</li> </ul>		
Q Certificate	for more information on credentials, see the next slide		
Information and guidant	<ul> <li>guidance services for continuous learning</li> <li>reaching broad groups of learners through inclusion and participation</li> <li>providing support for education and career choices</li> </ul>		

### Council Recommendation: mandatory information in microcredentials

- · identification of the learner
- title of the micro-credential
- country/countries/region(s) of the issuer
- awarding body/bodies
- date of issue
- learning outcomes
- notional workload needed to achieve the learning outcomes (in ECTS, wherever possible)

- EQF level of the learning experience leading to the micro-credential
- type of assessment
- form of participation in the learning activity
- type of quality assurance used to underpin the micro-credential
- non-mandatory: conditions for registration, supervision & identity verification during assessment, grade obtained, accrual options, additional information

## EHEA\* requirements for the information in microcredentials

https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf

- name of the learner
- name, date and certificate of authenticity of the micro-credential
- the level to which the credential belongs in the qualifications framework
- access requirements
- issuer
- educational information: learning outcomes, workload, assessment, quality assurance
- form of participation

# Micro-credentials in the objectives of the national strategy for continuous learning in higher education institutions

Maailman osaavimman ja sivistyneimmän kansan kotimaaksi (Becoming the most competent and civilised nation in the world, okm.fi) (2022, 25-26)

#### Objective 1: A clear path to developing and qualifying as an expert

- The aim is to create a concept and selection of "micro-credentials" in line with the EU recommendation.
- Micro-credentials can form a cumulative path to developing as an expert.
- In the first phase, continuing education that meets the needs of businesses will be developed together with working life with the help of flexible and agile micro-credentials.

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- Micro-credentials refer to credentials that provide targeted knowledge and skills and the (digital) recording of their learning outcomes.
- Micro-credentials can also be developed as part of degree education and utilised in open higher education.
- The aim is to achieve high-quality, reliable, recognised and valued micro-credentials that together form the path for developing as an expert.
- Micro-credentials:
  - Are owned by the learner and can be shared and transferred
  - Can be separate or combined with more extensive credentials
  - Are based on quality assurance which, in turn, is based on standards agreed in the relevant competence area or sector
  - Are pre-determined in scope and result in a standard certificate
- The Ministry of Education and Culture will launch a study and trial process on the definition and implementation of microcredentials, in cooperation with higher education institutions and stakeholders

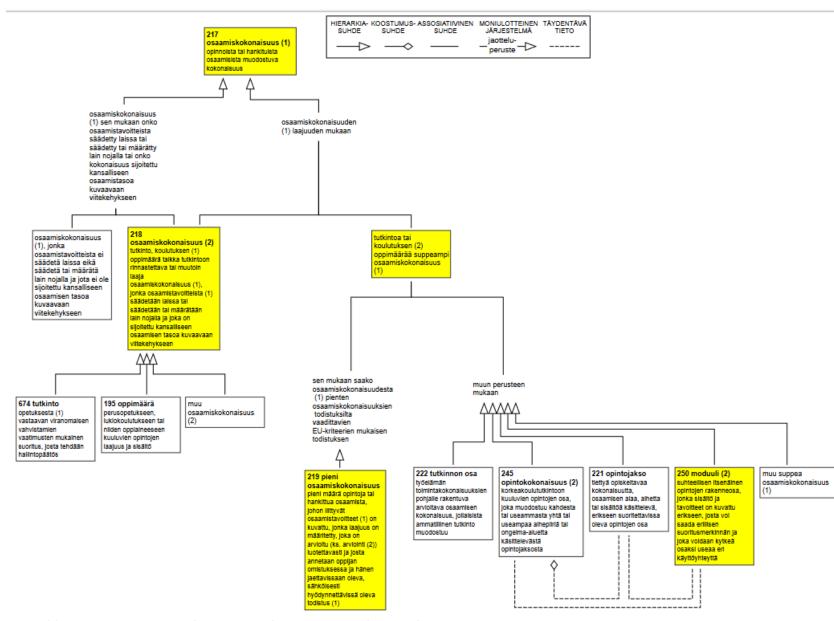
## Definition and implementation of micro-credentials launched by the Ministry of Education and Culture > OKSA glossary

https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf

- fi: pieni osaamiskokonaisuus, piensuoritus
- sve: micro merit
- eng: micro-credential
- = a small amount of studies or acquired competence
  - whose learning outcomes have been described,
  - · whose scope has been defined,
  - that has been reliably assessed, and
  - for which a certificate is issued that is owned by the learner and can be shared and digitally utilised

Based on

- Recommendation of the Council of the European Union 6/2022 <u>https://data.consilium.europa.eu/doc/document/ST-9237-2022-INIT/en/pdf</u>
  - o definition, criteria, certificate
- EHEA policy 3/2022
   <a href="https://microcredentials.eu/wp-content/uploads/sites/20/2022/03/Micro-credentials\_Framework\_final-1.pdf">https://microcredentials.eu/wp-content/uploads/sites/20/2022/03/Micro-credentials\_Framework\_final-1.pdf</a>
  - ECTS, scope 1−59 credits
  - o learning outcomes defined in the national framework
  - o assessment
  - o quality



https://sanastokeskus.fi/tiedostot/luonnokset/OKSA/OKSA\_kommenttiluonnos\_2022.pdf

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#### **Perspectives on different levels**

## DIGIVISIO

- International perspective:
  - A shared understanding of micro-credentials enables cooperation between European higher education institutions and the modular provision of joint micro-credentials.

#### • National perspective:

• Diversifies and renews the development of working life-based competence in continuous learning

#### • Higher education institutions:

- · A shared view of micro-credentials and their utilisation in the provision of continuous learning
- · Collaboration in the modularity and provision of stackable micro-credentials
- Curricular work strongly involves strengthening the provision of micro-credentials in a working life-oriented manner

#### • Learners involved in continuous learning:

- Expands the opportunities of learners in working life to develop their competence in an international context as well.
- A flexible and rapid opportunity to develop one's own competence with the help of micro-credentials
- The opportunity to accumulate larger credentials from micro-credentials and develop new types of competence
- · The ability to verify one's competence with a digital certificate, when necessary
- · A path to expanding and deepening one's professional competence

#### • Working life, stakeholders:

- Rapid educational offerings that develop working life, "just-in-time" learning
- Flexible participation
- Strengthening and renewing the collaboration between working life and higher education institutions
- · Developing the competence of individuals and communities in the work community

Perspective		
International	Common Framework for Micro-credentials in the EHEA 3/-22 Recommendation of the Council of the European Union, 14 June 2022	Opening up the provision of micro-credentials internationally to supplement the competence of those in working life
National	OKSA definition https://sanastokeskus.fi/tiedostot/luonnokset/OKS A/OKSA_kommenttiluonnos_2022.pdf	Clarifies the shared view of continuous learning as a whole in terms of credentials/entities that are smaller in scope cf. degrees
Higher education institution collaboration	Shared understanding of credentials, study modules and modules	Collaboratively produced micro-credentials that expand or deepen a learner's competence
Curriculum	Creating curricula that are based on study modules whose contents can be utilised in the provision of continuous learning	Placing emphasis on the possibility of offering micro-attainments/micro-credentials to continuous learners
Continuous learning	Degree programme study modules, study units, open higher education offerings, specialisation studies, study modules completed as continuing education, fee- based continuing education	Developing competence through micro- credentials
Concepts and scope	fi: piensuoritus, pieni osaamiskokonaisuus sv: micro merit en: micro-credential EHEA's recommended scope: 1-59 ECTS cr	Uncredited or under-1-credit attainments can be offered for e.g. self-study, open study, micro- learning. Can be related to competence badges.

## Micro-learning and micro-credentials

Source: Digivisio 2030 – Digipedagogiikan studio Mikro-oppimisen arviointi (*Digivision 2030 – Digital Pedagogy Studio, Micro-learning Evaluation*), 12 December 2022

- The learner also has the opportunity to develop their competence by focusing on smaller content packages.
  - If a micro-credential is worth at least 1 study credit, micro-learning can be even smaller in scope.
  - Employers do not focus on the number of credits earned by the learner, but rather their competence.
- Micro-learning is e-learning that focuses on small sections.
- The learner has the opportunity to choose and study at their own pace.
- Micro-learning is a flexible way of learning a specific topic.
- The study material can include blogs, wikis, podcasts, queries, or games.
- Mobile micro-learning: learners can study alongside everyday activities. The learning process is not tied to a specific location, but requires a mobile device.
- Assessment can be carried out in connection with the learning, for example through gamification.
- Micro-learning can also be accumulated and recognised > competence badges
- A badge is proof that you have learned something, not that you have listened to a podcast, for example.
- Competence badges vs. the EU's recommendation on micro-credentials:
  - in competence badges: the name of the badge, the learning outcomes, the assessment criteria and the evidence required for the competence description
  - quality assurance
  - learners can choose to share the badge in digitally
  - badges can be accumulated: a larger badge can be formed from small badges

#### Recommendations

- In accordance with the OKSA glossary, the preferred term is 'micro-credential'.
  - micro-merit, micro-certificate, micro-degree, micro-competence, micro-qualification, micro-performance, micro-(degree) course...

previously, many differing and confusing terms have been used

- it is not a qualification or degree
- 'competence' refers to a specific skill, but not all micro-credentials aim for it
- a micro-credential can be more than a course
- a micro-credential is not a replacement for a traditional degree, and completing multiple micro-credentials will not entitle a learner to a degree
- Application of the Council Recommendation:
  - Although micro-credentials have become increasingly popular, there is no common European definition or standard. This limits the
    comprehensibility and introduction of micro-credentials and thus weakens their ability to increase the flexibility of learning and career
    paths.
- Use 'learner' instead of 'student', as the person completing the micro-credential may not be enrolled at any educational institution.

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# Examples from around the world

## Private actors and micro-credentials

- Micro-credentials have been implemented globally for years, especially by private actors.
- Some private actors have opened up their contents, in accordance with the principle of open learning, and provided learners with limited access to them. If a person wants to earn a certificate and gain full access to the contents of the course or module, they must usually pay a fee.
- The target groups of these actors include both employed people and degree students.
  - The learner may be able to include the attainments in their degree using different practices for identifying and recognising their competence.

(November 2022)

## Private actors, platform examples

 Program, ExpertTrack, Microcredential FutureLearn Pricing: €64/course, €23.99/month or free (limited content, does not include a certificate) Coursera • Specializations, Professional Certificates, MasterTracks Professional Certificates, MicroBachelors, MicroMasters, etc. edX • Example: The Science of Happiness (UC, Berkeley), 11 weeks, 4–5 hours per week • Pricing: €170/course or free version (does not include a certificate) Udacity Nanodegree • Pricing: €359/month or 3 months/€987 Kadenze • Program (2–4 courses), Micro-courses • Example: 4 courses \$600; micro-course 4h \$30

• Paths (8 different working life themes)

• Pricing: €30/course

LinkedIn Learning

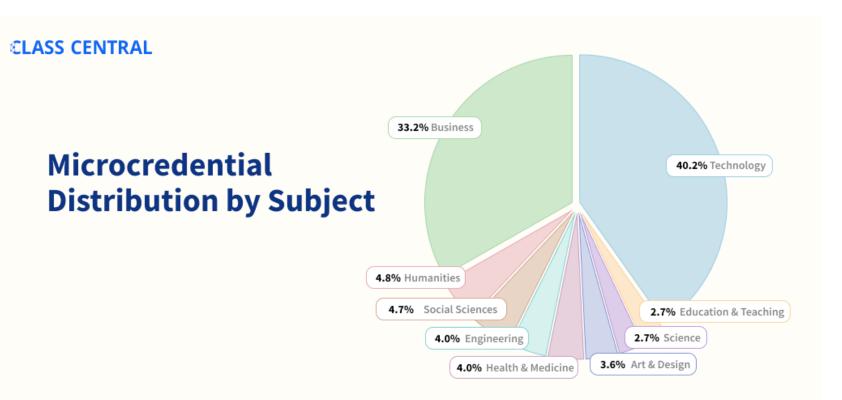
### International examples of higher education offerings (November 2022)

An organisation can employ a suitable strategy for offering micro-credentials to learners.

- Micro-credentials tailored to the needs of businesses
  - Example: <u>University of Birmingham</u>
- Micro-credentials provided fully online
  - Example: University of Glasgow
- Micro-credentials provided thematically, based on research profiles
  - Example: <u>Rutgers Stackable Business Innovation Program</u>
  - Example: Studies in entrepreneurship and marketing for chemists or pharmacists

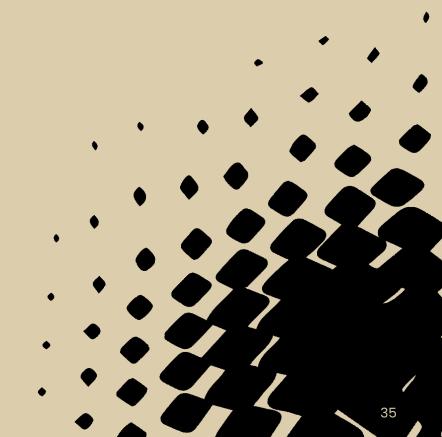
Globally, the selection of micro-credentials focuses primarily on business and technology.

Source: Shah, D., 14 September 2022 <u>https://www.classcentral.com/rep</u> <u>ort/list-of-mooc-based-</u> <u>microcredentials/</u>





## **Example cases**



## Stackable micro-credentials

The learner can create a competence portfolio that matches their style. Micro-credentials can be stacked in three different ways.

#### **Vertical stacking**

The most common option for learning a specific topic.

Example: Business Analytics level 1, level 2, and level 3.

#### **Horizontal stacking**

Learning different topics.

Example: Marketing, leadership, project management.

#### Hybrid stacking

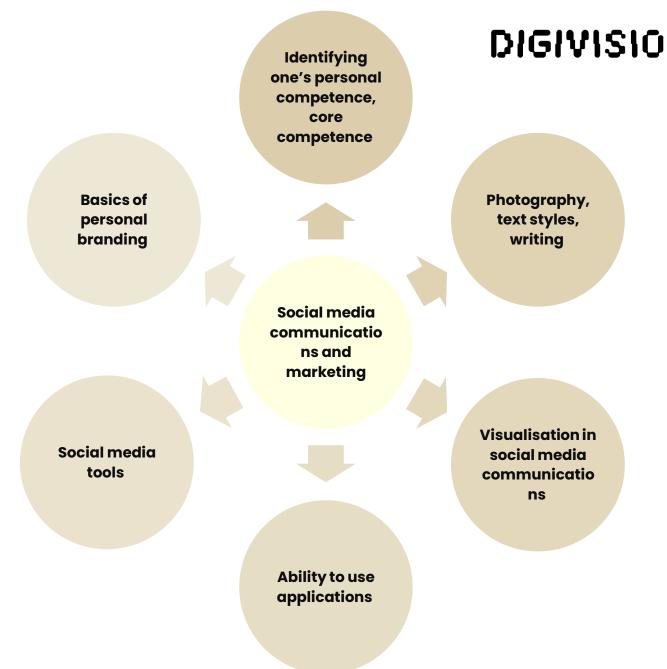
Combines vertical and horizontal stacking. The learner studies several topics and progresses further in each.

Example: Business Analytics level 1 and level 2, and Project Management level 1 and level 2.

### Module 1: Horizontal stacking, i.e. parallel contents

#### Identified challenges:

- Contents produced by different higher education institutions – identifying and coordinating the module's content?
- Possible overlaps on what basis will the module's size or selection be determined or limited?



NB: these are not actual examples

### Module 2: Vertical stacking, i.e. deepening contents

Must be completed in a specific order

#### Identified challenges:

- How can the learner determine the most suitable or appropriate "starting level"?
- What is considered sufficient previous competence?
- Describing the learning outcomes at a general enough level
- If the courses are provided by different higher education institutions, how will the module be coordinated?
- Requires advance planning and curricular collaboration, i.e. concentrated, conscious effort.

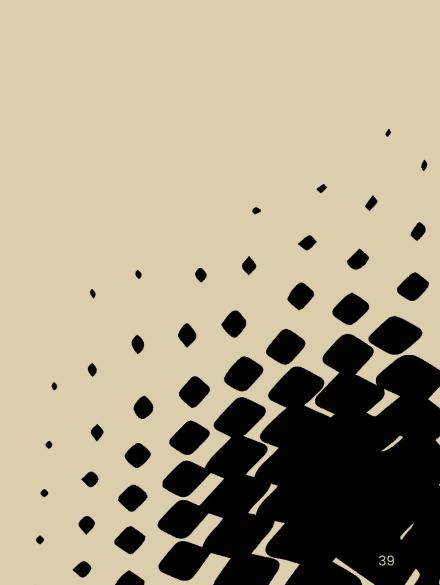
## DIGIVISIO

URBAN PLANNING AND CONSTRUCTION PATH	<b>BUSINESS PATH</b>	
4. Lifecycle Assessment in Construction, 1 cr	4. Responsible and Ethical Leadership, 1 cr	
3. The Circular Economy in Planning and Construction, 1 cr	3. Responsibility-related Communications and Stakeholder Relations, 1 cr	
2. The Circular Economy as a Systemic Operating Method in Urban Planning, 1 cr	2. Responsibility in Business Activities, 1 cr	
1. Introduction: Sustainability and Responsibility as		

Phenomena, and Key Concepts, 2 cr

# Curricular collaboration

Curricular collaboration refers to the collaboration between higher education institutions in the planning and implementation of teaching activities.



## Recommendations for curricular collaboration between higher education institutions 1/2

- Higher education institutions must jointly define the concepts and terminology related to their curricular collaboration or agree on the concepts and terms they will use.
  - The concepts and terminology can also be defined at the national level.
- Higher education institutions should describe their curricula using jointly agreed concepts so that every institution can understand each other's curricula, regardless of any variations between fields or other such differences.
  - National guidelines on curricular descriptions can be issued if necessary.

## **Recommendations for curricular collaboration** between higher education institutions 2/2

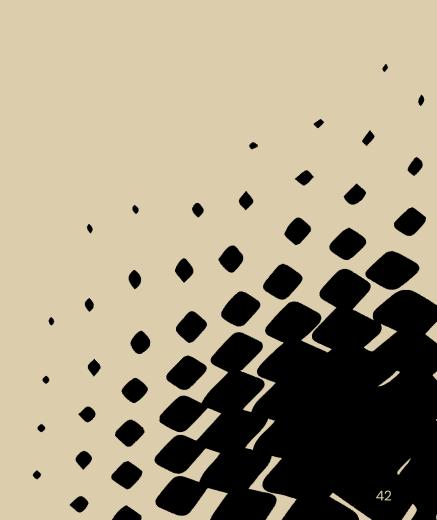
- Curricular collaboration should be based on agreements between higher education institutions which specify e.g. the actors involved in the collaboration, its objectives and measures, as well as the practices related to them.
  - If necessary, a model of the agreement can be issued at the national level.
  - A jointly agreed selection of educational offerings will be compiled for the national tray maintained by the Digivision 2030

project. The project will also be responsible for providing guidance and informing participants on its use.

- Higher education institutions must reserve sufficient time and personnel for their curricular collaboration activities.
  - Higher education institutions must discuss whose working time will be spent on curricular collaboration and what resources should be allocated for it.
  - Curricular(/educational) collaboration should be included in the funding model for higher education institutions with a higher return percentage. 41

# Challenges and questions identified

Observations made by the working group and studio.



## Questions related to the tray

Higher education institutions and educational administration have many questions related to the selection of study offerings (in addition to the ones described above):

- How can they determine what to include in the tray? What motivates higher education institutions to plan study units and themes?
- Collaboration and study offerings must be coordinated. How will it be done?
- Is the goal to have each module be produced by one higher education institution? Or will they be created collaboratively with the help of advance planning?
  - Can the contents be "centrally" compiled into modules (without prior planning or permission from the institution)?
- The tray requires more uniform ways and concepts for describing contents and learning outcomes, as well as implementation and assessment methods.
  - Who will produce the list, definitions and descriptions of the required information?
  - How will the information in different systems relate to the information needed for the tray. Where will the information be "extracted" from for the tray and paths?
- A person is meant to select suitable courses from the tray to develop their competence. On what basis will the person choose these suitable courses? How is the appropriate starting level determined in vertical stacking?
- Transferring information
  - How is the transfer of information from higher education institution systems to the tray conducted in practice? What information is needed that does not yet exist in the systems?
  - Does every performance need to be entered in some register maintained by a higher education institution? How would the performances end up there?
- Identifying and recognising prior learning
  - Enormously difficult for higher education institutions. Analysing credit transfers and equivalences is really demanding, as every institution processes tens of thousands of study credits each year.
  - What other ways are there to identify and recognise these, apart from the official recognition of prior learning process? Who would perform this work?

## Next phase: cross-institutional studies

Questions and observations:

- The relationship of curricular collaboration with the curricular collaboration needed in the development of crossinstitutional studies
  - Common descriptions and concepts continue to serve as a basis. The curricular work processes of higher education institutions take place at different times and lengths. Cross-institutional studies and educational collaboration require a good foundation and time for joint development. How will this be supported and coordinated?
- Will higher education institutions retain their autonomy in deciding what cross-instutional studies may be included and accredited in degree studies (compulsory studies) and what offerings they will provide access to?
- Which agreements form the basis for cross-institutional studies at the national level? These should be known before we begin creating offerings that will expand the scope of cross-institutional studies. At the moment, each educational collaboration-oriented initiative requires a separate agreement.
- A funding model must also be agreed upon well in advance. In the future, the scaling of teaching resources will require higher education institutions to come up with a more detailed and thorough calculation model and method. What can they achieve with their resources, and how should they prioritise their objectives?

## Thank you!