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“MICRO-GEAR: MICRO-CREDENTIALS FOR HIGHER
EDUCATION SYSTEMS OF GEORGIA AND ARMENIA:
SOUTH CAUCASUS LIGHTHOUSE PROJECT”

MICRO-GEAR
Project #101127144

Guidelines on Micro-credentials:

Armenia and Georgia

WP2: D2.2 Guidelines on Micro-credentials

2025



Document Information

Deliverable title:	Guidelines on Micro-credentials
Author:	National Center for Educational Quality Enhancement (NCEQE)
Confirmation:	Approved by the MICRO-GEAR Project Management Board
Deliverable number:	D4
Work package:	WP2
Lead partner:	NCEQE – 4
Due date of deliverable:	31 December, 2025
Dissemination Level	Public
Reviewed by	All partners

V-1	September, 2025	National Center for Educational Quality Enhancement (NCEQE)	Initial version designed and circulated for review in NCEQE and Micro-Gear
V-2	10 Oct. 2025	National Center for Professional Educational Quality Assurance, Foundation (ANQA)	Developing initial Structure of the documents
V-3	November, 2025	Discussion with Armenian partners	Micro-GEAR Project Working Meeting
V-4	November, 2025	Discussion with Georgian Partners	Working Meeting
V-5	Oct-Nov, 2025	Online discussion among Consortium members	Consortium management meeting
V-6	18 Dec. 2025	NCEQE	National final version Delivered
V-7	23 Dec. 2025	ANQA	National final Version delivered
V8	?? Dec, 2025	EU / all partners	Final Approval

This project has been funded with support from the EC.

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Executive Summary

This executive summary synthesizes the fundamental principles outlined in the national guidelines developed for the higher education systems of Georgia and Armenia under the "MICRO-GEAR" project. The primary objective of these comprehensive frameworks is to provide higher education institutions with a robust and standardized roadmap for development, issuance, and recognition of micro-credentials. By aligning with European standards and the European Higher Education Area (EHEA) principles, these guidelines aim to enhance institutional flexibility and ensure that academic offerings are precisely calibrated to meet the evolving demands of the global labour market.

At the core of this unified framework is the definition of a micro-credential as a verified record of learning outcomes achieved through a short-term, focused educational experience. To ensure academic integrity, every micro-credential must adhere to rigorous quality assurance criteria, utilize the European Credit Transfer and Accumulation System (ECTS) for workload quantification, and maintain full compatibility with respective National Qualifications Frameworks. Furthermore, the development process necessitates the inclusion of standardized metadata, which ensures transparency regarding learning levels, specific outcomes, and the rigorous assessment criteria applied to each credential.

A central thesis of the guidelines is that micro-credentials must be governed by quality assurance mechanisms equivalent to those of traditional degree programs. This entails a high degree of institutional accountability, where higher education institutions are responsible for the academic validity of their offerings, supported by external oversight from national quality assurance agencies in accordance with the ESG 2015 standards. A critical component of the development phase involves proactive collaboration with industrial and social partners to guarantee that the learning outcomes remain practically relevant and responsive to current skill gaps.

The guidelines place a strategic priority on the portability and cumulative value of micro-credentials, often referred to as "stackability." By establishing clear mechanisms for recognition, the framework ensures that micro-credentials can be seamlessly transferred between academic institutions and recognized by employers both nationally and internationally. This approach empowers learners to integrate these credentials into larger formal qualifications, such as Bachelor's or Master's degrees, thereby fostering diversified and flexible learning pathways.



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To uphold the highest standards of security and transparency, the guidelines advocate for the institutionalization of advanced digital tools. The use of digital badges provides a data-rich representation of learner achievements, while the implementation of blockchain infrastructure guarantees the immutability and authenticity of awarded credentials. This collaborative initiative between Georgia and Armenia effectively positions the South Caucasus as a regional leader in educational innovation, fostering a culture of lifelong learning and significantly enhancing the global competitiveness of its graduates.



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A GUIDELINE TO DESIGN, ISSUE AND RECOGNIZE THE MICRO-CREDENTIALS

ARMENIA

“MICRO-GEAR: MICRO-CREDENTIALS FOR HIGHER
EDUCATION SYSTEMS OF GEORGIA AND ARMENIA:
SOUTH CAUCASUS LIGHTHOUSE PROJECT”
Project #101127144

YEREVAN, 2025



Sub-document Information

Deliverable title:	Guidelines on Micro-credentials
Author:	National Center for Professional Education Quality Assurance, Foundation (ANQA – 13)
Confirmation:	Approved by the MICRO-GEAR Project Management Board
Deliverable number:	D4
Work package:	2
Lead partner:	NCEQE – 4
Due date of deliverable:	31 December, 2025
Dissemination Level	12 December, 2025
Reviewed by	All partners

Version	Date	Modified by	Modification reasons
V-1	10.10.2025	National Center for Professional Educational Quality Assurance, Foundation	Developing initial Structure of the documents
V-2	November- 2025	Discussion with Armenian partners	Micro-GEAR Project Working Meeting
V-3	December, 2025	Online discussion among Armenian partners	Working Meeting
V-4	23.12.25	National Center for Professional Educational Quality Assurance, Foundation	Final Version delivered

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ABOUT THE GUIDELINE

1.1 Background and Rationale

This guideline sets the framework for introducing micro-credentials (MCs) within Armenia's higher education and lifelong learning systems. It is grounded in the Law on Higher Education and Science (2025), the 2030 Education Development State Program, the 2021–2026 Government Program, and the White Paper *Advancing Micro-Credentials in Armenia* (2025).

MCs offer flexible, modular, and skills-based learning opportunities that respond to changing labour-market needs and support lifelong learning. They allow individuals to acquire targeted competences, document learning achievements through verifiable credentials, and pursue personalized learning pathways.

The guideline draws on European policy developments and international best practices to ensure that Armenian MCs are transparent, high-quality, and compatible with regional and global systems. It provides a common framework for designing, delivering, assessing, issuing, and recognizing MCs across formal and non-formal education providers.

Purpose and Scope: The purpose of this guideline is to ensure consistent understanding and implementation of MCs in Armenia. It outlines the standards and procedures necessary for MCs to be trusted by learners, employers, and educational institutions. The scope includes short learning experiences leading to certified outcomes, whether integrated into higher education programs or offered as standalone continuing-education modules.

By applying this guideline, stakeholders support the development of a credible and interoperable MC ecosystem that enhances lifelong learning, employability, and alignment with European practices.

1.2 Alignment with National Education Priorities

The introduction and institutionalization of MCs (MCs) in Armenia directly support the Armenia's national objectives in education, labour-market development and innovation agendas. The Government of Armenia has articulated, through the Law on Higher Education and Science (2025) and the 2030 Education Development State Program, a strong commitment to modernizing education, expanding lifelong learning, and enhancing labour market responsiveness.

The Law on Higher Education and Science (2025) and the 2030 Education Development State Program emphasize flexible learning pathways, lifelong learning, and stronger alignment between education and workforce needs. MCs provide a practical mechanism for realizing these priorities and translating these policy ambitions into operational reforms.

MCs contribute to these priorities by:



1. **Expanding lifelong learning** through short, flexible learning opportunities for diverse groups, including adults and working professionals.
2. **Strengthening labour-market relevance** by enabling providers to respond quickly to emerging skill needs and by involving employers in defining learning outcomes.
3. **Advancing digital transformation** through online and blended delivery and the use of digital credentials.
4. **Promoting inclusion and regional access** by lowering entry barriers and offering flexible learning pathways.
5. **Supporting European integration** through alignment with ANQF, EQF, and EHEA principles.
6. **Enhancing institutional capacity** by encouraging outcome-based design, modular curricula, and improved internal QA processes.

These functions position MCs as a practical tool for implementing national education reforms and strengthening the link between learning and employment. As well as, they build a resilient, agile, and responsive education system, fostering collaboration across public, private, and non-formal sectors.

1.3 Relation to International and Regional Developments

The development of micro-credentials (MCs) in Armenia aligns with ongoing European and regional initiatives aimed at promoting flexible learning, skills development, and mobility. Armenian approach is situated within a broader international and regional movement toward flexible, transparent, and competency-based learning systems. These developments — shaped by European policy initiatives, regional cooperation frameworks, and global innovations in credentialing — provide both a strategic reference point and a collaborative opportunity for Armenia. The alignment of Armenia’s MC framework with these international trends ensures that the national system remains compatible, portable, and recognized within and beyond the European Higher Education Area (EHEA).

Key European instruments and developments influencing Armenia’s framework include:

- UNESCO’s Global Convention on the Recognition of Qualifications (2019) EU Council Recommendation on MCs for Lifelong Learning and Employability (2022/C 243/02) European Qualifications Framework (EQF) and EHEA Qualifications Framework (QF-EHEA)
- European Standards and Guidelines for Quality Assurance (ESG 2015) Europass and Open Badge 2.0 frameworks
- The ETF’s South Caucasus Lighthouse Project
- EHEA and Bologna Process Commitments.

By referencing these frameworks, the guideline ensures that Armenian MCs are understood, trusted, and comparable within the broader European education and labour-market context.



1.4 Roles: Target Audience and Stakeholders

MCs (MCs) represent a national ecosystem reform, requiring coordination among public authorities, higher-education institutions, employers, quality-assurance bodies, and learners. Effective implementation in Armenia depends on clearly defining who is involved, what each actor is responsible for, and how cooperation is organized to ensure coherence, transparency, and sustainability.

Armenia's system therefore adopts a multi-level governance model, in which responsibilities are distributed across policy, institutional, sectoral, and learner levels.

Primary stakeholders include:

1. Public Authorities and National Regulators:

- Ministry of Education, Science, Culture and Sports (MOESCS),
- National Centre for Professional Education Quality Assurance, Foundation (ANQA),
- National Information Centre for Academic Recognition and Mobility (ArmEnic).

2. Higher education institutions (public and private)

3. Vocational and lifelong learning providers

4. Employers and sectoral councils

5. Learners as co-designers and beneficiaries of flexible, skill-oriented learning.

1.5 Structure of the Guideline

This Guideline is organized as a practical, end-to-end playbook for Armenian institutions and stakeholders to design, issue, quality-assure, and recognize MCs (MCs). Its structure mirrors international good practice (ETF/EU) and Armenia's regulatory framework so that each chapter can be used independently (as a how-to) and together (as a national operating model)

It also cross-references the ETF Guide's core pillars—quality, transparency/portability, relevance, assessment, pathways, recognition—to ensure alignment with European approaches. This document provides a national framework covering definitions, standards, procedures, and quality assurance for MCs, and offers templates for implementation.

How to use this Guideline

The document is organized into 10 chapters followed by annexes. Each chapter addresses a critical aspect of the MC framework, with practical guidance, examples, and where appropriate, tables for clarity. Readers can navigate to specific sections relevant to their role:

- **Policy makers (MOESCS, ANQA, ArmEnic):** will find guidance on regulatory framework, scope, and policy measures, using Chapters 2, 5, 7, 8 to set rules, QA expectations,



recognition, and registries; annex templates standardize minimum information and evidence requirements.

- **HEIs/VET providers:** are guided on designing and delivering MCs, internal quality processes, and supporting learners, using Chapters 3, 4, 6 for definitions, minimum elements, LO/ECTS design, assessment, digital badging;
- **Employers/sector councils:** can refer to recognition and relevance of MCs, and how to engage with providers to ensure labor market alignment; using Chapters 5, 6, 8 to co-design outcomes, validate relevance, and formalize recognition/use in HR.
- **Learners and advisors:** see Chapters 3, 8, 9 for what MCs mean, how they stack, and what support/recognition to expect.

Throughout the guideline, key terms are defined, stakeholder responsibilities are clarified, and alignment to national priorities and European principles is highlighted. Examples and templates are given (see Annexes) to illustrate recommended practices, such as a sample MC certificate format and a standard template for describing an MC's metadata. All recommendations emphasize values of transparency, quality, learner-centeredness, inclusiveness, portability, and digital recognition. Ultimately, this guideline aims to facilitate the development of a robust MC ecosystem in Armenia that enhances lifelong learning opportunities and the recognition of skills and competencies in both education and employment contexts.

CHAPTER II: APPROACH TO THE MCS REGULATORY FRAMEWORK IN ARMENIA

2.1 Purpose of the Framework

The MCs Regulatory Framework for Armenia established a coherent national mechanism for the design, implementation, quality assurance, and recognition of MCs (MCs) within the lifelong-learning ecosystem.

Its purpose is to make short, targeted learning achievements visible, portable, and quality-assured, so that they contribute to individual employability, institutional innovation, and national competitiveness.

The framework seeks to:

1. **Enable flexible learning pathways** – allowing individuals to acquire, document, and stack learning outcomes from higher, vocational, and non-formal education toward full qualifications.



2. **Institutionalize recognition of small learning units** – ensuring that learning acquired in different contexts can be validated against the Armenian National Qualifications Framework (ANQF).
3. **Promote labour-market responsiveness** – supporting rapid skills development in priority sectors such as ICT, green technologies, creative industries, and engineering.
4. **Strengthen Armenia’s integration into the European Higher Education Area (EHEA)** – ensuring comparability, quality, and cross-border recognition of Armenian MCs.
5. **Facilitate digital transformation** – through trusted, interoperable digital credentialing systems linked to Europass, Open Badge 2.0, and the European Digital Credentials for Learning (EDC) framework.

The framework provides a bridge between learning and work, empowering citizens with portable evidence of competencies and supporting institutions to diversify provision while maintaining quality and trust.

2.2 Legal Context

The framework is grounded by the Law on Higher Education and Science of the Republic of Armenia (2025), which introduces competency-based and outcomes-driven education principles, grants higher-education institutions greater curricular autonomy, and promotes lifelong learning and digital transformation.

Article provisions related to small units of learning, credit accumulation and transfer, and recognition of non-formal education form the legal basis for MC integration.

Complementary national policy instruments include:

- Armenia’s 2030 Education Development State Program, emphasizing flexible pathways, innovation, and lifelong learning.
- Digital Transformation Strategy (2021–2030), mandating interoperability of education data and credentialing systems.
- National Qualifications Framework (ANQF) and its alignment with the European Qualifications Framework (EQF) and QF-EHEA.
- White Paper on Advancing MCs in Armenia (2025), which is defined within the frameworks of MICRO GEAR Erasmus + project and outlines the vision and key policy directions.
- Roadmap for MC Implementation (2025–2030), defined within the frameworks of MICRO GEAR Erasmus + project, outlining phased implementation steps.

The legal framework thus establishes shared governance, where MOESCS provides strategic oversight while autonomous institutions and quality-assurance body ensure operational integrity.



2.3 Strategic Objectives for MCs

The Armenian framework is guided by six interrelated strategic objectives, ensuring that MCs serve both national education priorities and international commitments.

Objective	Key Outcomes	Policy/International Alignment
1. To promote lifelong learning	Establish modular pathways for reskilling and upskilling; Integrate formal, non-formal, and informal learning.	Education Development State Program until 2030; ETF Lifelong Learning Pillar.
2. To align education with labour-market needs	Co-create programs with employers and sector councils; Foster short courses addressing emerging sectors.	White Paper (2025); RA Digital Transformation Strategy.
3. To ensure transparency and portability	Adopt standardized metadata and registry structures following EU recommendations.	EU Council Recommendation (2022/C 243/02); EQF transparency tools.
4. To integrate MCs into the ANQF	Reference each MC to an NQF level, define ECTS workload and learning outcomes per QF-EHEA descriptors.	ANQF–EQF alignment; Bologna Process MICROBOL principles.
5. To advance digital and data interoperability	Create a secure digital platform for issuance, verification, and learner ownership of MCs.	EDC; Europass 2.0; Open Badge 2.0 standards.
6. To engage stakeholders	Regularly include stakeholders in policy developments.	
7. To guarantee quality, trust, and recognition	Embed ESG-aligned QA; link recognition procedures to ANQA and ArmEnic systems.	ESG (2015); Lisbon Recognition Convention; QUATRA TPG A.

Together these objectives anchor the Armenian MC system in **quality, relevance, transparency, and innovation**, ensuring its long-term sustainability.

2.4 Coordination and Governance Mechanisms

The introduction of MCs into Armenia’s higher education and lifelong learning ecosystem requires a clear, multi-tiered, and collaborative governance architecture. Effective coordination ensures that MCs are consistent, high quality, relevant, and interoperable across institutions and sectors.

This section defines the structures, processes, and responsibilities necessary for harmonized national implementation.



MCs intersect with multiple domains — higher education, vocational training, labour-market policy, digital governance, and international recognition.

Therefore, governance must ensure:

- Coherence of policy and legislation
- Consistency of QA and recognition practices
- Stable and transparent implementation mechanisms
- Stakeholder alignment and cooperation
- International compatibility and comparability

The coordination and governance of MCs in Armenia must operate within the existing legal and institutional framework defined by the Law on Higher Education and Science (2025) and current national governance structures.

Since Armenian legislation does not envision a separate “MCs committee,” the governance model for MCs relies on existing statutory bodies, institutional mandates, and established decision-making processes. Armenia’s governance model is built on shared responsibility between MOESCS, ANQA, ArmENIC, educational institutions, employers, and digital infrastructure bodies.

Institutional Actors: Roles and Responsibilities: The regulatory framework designates clear roles for different institutions in developing and issuing MCs:

Actor	Core Responsibilities within the MC Framework
MOESCS	Establishes policy, approves standards, maintains the National MC Registry, and ensures inter-ministerial coordination.
ANQA	Develops QA criteria and procedures for MCs; accredits or reviews providers; publishes evaluation reports.
ArmEnic	Ensures recognition of MCs nationally and internationally; maintains linkage with the Lisbon Recognition Convention.
HEIs and VET Providers	Design, deliver, and assess MCs; implement internal QA; ensure learner support and reporting.
Employers and Sector Councils	Define sectoral skill priorities, co-design learning outcomes, and validate relevance.
Learners and Civil-Society stakeholders	Participate in feedback loops and continuous improvement processes.

Operational Governance



Level	Key Actors	Functions
Policy Level	MOESCS	Strategic direction, legislation, funding, cross-ministerial coordination.
QA and Recognition Level	ANQA, ArmEnic	External QA, recognition, international alignment.
Institutional Level	HEIs, VETs, Continuing-Education Centres	Program design, internal QA, learner assessment, issuance of credentials.
Labour-Market Level	Employers, Sector Councils, Chambers of Commerce	Validation of relevance, co-development of outcomes, recognition in HR frameworks.
Learner Level	Students, adult learners, professionals	Participation, feedback, and use of digital credentials for mobility and employment.

Digital Infrastructure and Data Governance

Digital Infrastructure means to have:

- A national digital registry hosting verified MC data (title, provider, NQF level, ECTS, learning outcomes, QA status, and verification key).
- Blockchain-enabled authentication and integration with Europass/Open Badge 2.0 for cross-border portability.
- A learner-centric digital wallet providing ownership and control over credentials.
- Annual data-driven evaluation reports summarizing uptake, recognition rates, and QA outcomes to inform continuous improvement.

The Armenian MC Regulatory Framework establishes a coherent ecosystem linking legislation, governance, quality assurance, and digital innovation. It balances state coordination with institutional autonomy, embeds European standards, and enables rapid yet credible responses to labour-market change. By doing so, it transforms Armenia’s higher-education and lifelong-learning landscape into an agile, transparent, and internationally interoperable system.



CHAPTER III: SCOPE OF THE FRAMEWORK

3.1 Definition of MCs

Armenia has adopted a definition of MCs that is fully compatible with international frameworks while being tailored to national needs. MCs in Armenia are introduced and governed within the conceptual and legal framework established by the Law on Higher Education and Science (2025). The law refers to the national concept of “micro credential” (միկրո-դրակավորում), which forms the legal basis for the development, delivery, and recognition of MCs. According to it, **“A Micro credential is a profession-oriented short-term educational program or a flexible combination of modules implemented within a formal educational program, aimed at developing specific professional competencies and knowledge that are relevant to the labour market and can be used independently or serve as complementary professional qualifications for updating existing qualifications. A micro credential is considered a completed and independent short-term educational program, if it is included in the list of professions approved by the Government of the Republic of Armenia, as well as if its implementation is defined within the framework of the relevant educational program”.**

MCs are outcome-based, assessed, documented, and designed to support flexible learning and upskilling.

Key Characteristics of MCs in Armenia are:

Characteristic	Based on Law	Based on International Standards	Final Integrated Approach
Short duration	✓	✓	Modular and targeted
Learning outcomes-based	✓	✓	Clearly defined and measurable
Assessed	✓	✓	Uses valid and reliable assessment
Documented	✓	✓	Certificate or digital badge with required metadata
Labour-market relevance	✓	✓	Mandatory requirement
Quality assured	✓	✓	Aligned with internal and external QA
Standalone or stackable	✓	✓	May contribute to qualifications



Characteristic	Based on Law	Based on International Standards	Final Integrated Approach
Recognizable	Partially	Fully	Supports academic and labour recognition
Digital and portable	Not specified	✓	Added through EU-compatible metadata

3.2 Guiding Principles for MCs in Armenia

The national framework for MCs in Armenia is grounded in the principles established by the Law on Higher Education and Science, the structure of the Armenian National Qualifications Framework (ANQF), and international best practices in the design, quality assurance, and recognition of short learning programs.

These guiding principles ensure that MCs are trusted, transparent, portable, quality-assured, and aligned with national educational and labour-market priorities.

- 1. Transparency:** is essential for building trust between learners, education providers, employers, and recognition bodies. MCs must include complete, standardized, and accessible information about their purpose, learning outcomes, workload, level, assessment, and issuing institution. Standardized documentation and metadata ensure trust and support recognition by learners, employers, and educational institutions.
- 2. Quality:** all MCs must meet the quality assurance requirements established by Armenian legislation, institutional internal QA systems, and external evaluation procedures. Quality must be evident in the design, delivery, assessment, and certification of each MC. Quality assurance ensures that Armenian MCs are credible, internationally comparable, and trustworthy.
- 3. Flexibility:** MCs must support flexible learning pathways, allowing providers to offer short, modular, and adaptable programs in various modes (face-to-face, online, blended). Flexibility ensures access for diverse learner groups, including adults, working professionals, and vulnerable populations.
- 4. Portability:** MCs must be usable across different educational institutions and labour-market contexts, nationally and internationally. Alignment with the Armenian National Qualifications Framework (ANQF) and European standards enables stacking of MCs into larger qualifications and supports cross-border recognition.
- 5. Learner-Centered Approach:** MCs must be designed around clearly defined learning outcomes and offer accessible, supportive, and inclusive learning experiences tailored to individual needs. They should promote lifelong learning and enable learners to build personalized pathways for further study or employment.
- 6. Labour-Market Relevance:** MCs must reflect current and emerging skills needs in the economy. Close cooperation with employers, sector bodies, and industry representatives



ensures that the content is practical, up-to-date, and aligned with real labour-market demands.

- 7. Stackability:** MCs must be designed to be combinable and accumulative, allowing learners to progressively build larger learning achievements over time. Clearly defined learning outcomes, credit values, and levels enable MCs to be stacked into larger units, partial qualifications, or full qualifications, where relevant. Stackability supports coherent learning pathways, progression opportunities, and sustained engagement in education and training.

3.3 Justification and Rationale for Introducing MCs in Armenia

MCs address national educational and labour-market priorities by offering a flexible, responsive approach to skills development. Their introduction supports:

- Implementation of education reforms
- Alignment with labour-market needs
- Expansion of lifelong learning opportunities
- Innovation in HE and VET provision
- Improved recognition and mobility
- Strengthened cooperation between education providers and employers

MCs provide a practical mechanism for supporting upskilling, reskilling, and flexible learning pathways within Armenia's evolving educational and economic context.

CHAPTER IV: MINIMUM INFORMATION REQUIREMENTS FOR MCS

One of the foundational principles of MCs is **transparency** – each MC must convey clear and standard information so that learners, employers, and institutions immediately understand its value and scope. Armenia's guidelines adopt the European standard elements for describing a MC, as recommended by the EU Council Recommendation (2022). Every MC issued under this framework must include certain minimum information elements (typically on the certificate or in an accompanying supplement), ensuring consistency and trust in what the credential represents. To ensure transparency, quality, national and international recognition, and harmonized implementation across all Armenian education and training providers, each MC must contain a standardized set of information elements.

These mandatory data fields guarantee comparability, portability, and trust in the value of the credential. The requirements below reflect the Law on Higher Education and Science, National



qualifications and QA regulations, ANQA standards, ArmEnic recognition practices, and European MC metadata standards.

Required Information Elements: The following pieces of information are mandatory for all MCs in Armenia, aligning with European standards:

- **Title of the MC:** A clear, concise name of the MC or the learning program. The title should reflect the content and **professional area** addressed by the MC. This helps users immediately grasp the subject or skill area.
- **Identification of the Learner:** The credential should clearly indicate the name of the individual who earned it (and possibly a learner ID or national ID, if relevant). This ties the MC to its holder
- **Issuing Providers:** The name of the institution or organization that issues the MC. MCs must be issued by accredited institutions—such as universities, vocational training providers, continuing education centers or authorized training centers—that comply with the established quality assurance (QA) standards in Armenia. The provider’s information should be transparent and accessible to ensure credibility and trust. If multiple partners are involved (co-branded programs), each awarding body can be listed. This element signals the provider’s identity and credibility.
- **Country/Region of the Issuer:** Indicate that the MC is issued in Armenia (and specify the institution’s location if needed). This is useful for cross-border recognition, so foreign entities know under which national system it was awarded.
- **Date of Issuing:** The date when the MC was awarded (after the learner completed the requirements). This can be important for validity (some credentials might include an expiration, though generally MCs do not expire unless for regulated skills). It also helps verify recency of the skill.
- **Objective of the MC:** A concise statement describing the purpose and intended added value of the MC. The objective should clearly explain why the MC exists, what gap it addresses (e.g. skills development, upskilling, reskilling, specialization), and how it contributes to learners’ professional or academic development. The objective must be consistent with the learning outcomes, level, workload, and labour-market relevance of the MC and serve as a reference point for curriculum design, assessment, and quality assurance.
- **Level of Learning (NQF/EQF):** The MC should indicate the *level* of the learning experience in reference to the Armenian NQF, EQF, or QF-EHEA cycle. For instance, a MC might be labeled as “*Level 6 (Bachelor’s level)*” or “*EQF 5*”, etc., if such a determination can be made. In Armenia, since MCs can be part of formal programs, a university-issued MC will typically correspond to a certain cycle (e.g. first cycle/Bachelor or second cycle/Master). If the MC is outside the formal system, level can be indicated if the provider maps the outcomes to NQF descriptors. Including the level greatly aids recognition: it allows employers and international institutions to understand the complexity and depth of the skills (e.g. distinguishing an



advanced postgraduate skill from an entry-level skill). Note: If determining an exact level is difficult, providers should state “Level: not applicable” only in exceptional cases.

- **Mode of delivery:** MCs can be offered in various formats, such as **face-to-face, online, blended, or hybrid**. The delivery method must be clearly stated, including details on how learners will engage with the content, what digital tools or platforms will be used, and any specific requirements. This describes how the learning was undertaken – was it an online course, in-person training, blended learning, self-paced or instructor-led, etc. Additionally, it can specify if the learning was full-time, part-time, a workshop series, etc.
- **Volume of Learning (Workload):** The workload of a MC must be expressed in terms of learning hours and **credits (e.g., ECTS)**. This indicates how much time a learner will need to complete the program, including both formal instruction and independent study. For consistency, the workload should align with **ECTS standards**, with each credit corresponding to 25–30 hours of learning.
- **Volume of Credits:** Each MC should have a **credit value** that reflects the learner's total workload. Credits should be calculated according to the workload and level of learning, typically following the **ECTS framework**. This ensures that the MC is comparable to other European qualifications and supports portability across educational systems.
- **Learning Outcomes:** MCs must clearly define their **learning outcomes**—the knowledge, skills, and competences a learner is expected to achieve by the end of the program. These outcomes should be measurable and aligned with **professional and academic standards**. The outcomes should also reflect the specific labor-market needs that the MC addresses.
- **Assessment Methods and Criteria:** MCs must include information on how learning outcomes will be **assessed**. This includes the types of assessments (e.g., projects, exams, portfolios), the grading criteria, and how the results will be measured and communicated to learners. Transparent and reliable assessment methods are crucial for the credibility of the MC.
- **Quality Assurance:** Each MC must meet the established **quality assurance (QA)** standards. This includes **internal QA processes** within the issuing institution and **external QA evaluations**. The MC must be subject to regular reviews to ensure it maintains high educational standards.
- **Recognition and Progression:** MCs should be clearly linked to potential **pathways for further education or employment**. If stackable, the MC should indicate how it can be accumulated to form part of a larger qualification (e.g., diploma or degree).

Recognition within Armenia’s educational system and by employers should be clearly outlined, alongside any opportunities for credit transfer.

- **Accessibility and Support:** Institutions must provide appropriate **support services** for learners, including accessibility for **adult learners, people with disabilities, and individuals in rural areas**. Details on support options (e.g., tutoring, career counseling, flexible schedules) should be available to ensure the MC is accessible to a diverse range of learners.



- **Certification and Verification:** The MC should be accompanied by a **certificate** that includes essential information such as the title, learning outcomes, credits, and the issuing institution. In addition, the certificate should include a **unique identifier or digital verification link** (e.g., Open Badge or digital credential), allowing employers and other institutions to verify the authenticity of the credential.

These mandatory elements ensure that anyone reading a MC certificate or description can answer the key questions: Who earned it, What was learned, Who issued it (and under what authority), When and Where, How much learning was involved, At what level, and How it was assessed and quality-assured. This standardized set corresponds to the European Commission’s recommended standard elements, facilitating comparability. Armenian providers are expected to include all these on the certificate itself or in an attached “MC Supplement” (analogous to a Diploma Supplement) that accompanies the certificate. In cases where space is limited (e.g. a paper certificate), the crucial items (learner, title, issuer, date, outcomes, etc.) should be on the certificate, and additional details like assessment method can be on a supplementary document or digital record.

Optional (Recommended) Information Elements: In addition to the above, the framework encourages including other relevant information where applicable:

- **Prerequisites:** If the MC had any entry requirements (e.g. “Prerequisite: at least 2 years of industry experience” or “must have completed Course X”), listing these helps contextualize the level of learners who took it.
- **Supervision and Identity Verification during Assessment:** Particularly for online courses, note how the assessment was administered – for example, “Assessment was proctored online with ID verification” or “In-person supervised exam”. This detail, while optional, further strengthens the credibility (it assures that the person named is indeed the one who completed the assessment).
- **Integration/Stackability Options:** Indicate if this MC is part of a larger set or pathway. For example, “This MC can be stacked toward the Diploma in Advanced Digital Skills” or “Stand-alone credential (not part of a sequence)”. This information helps learners and advisors see if the MC can lead to other qualifications.
- **Validity/Expiration:** Normally, MCs do not “expire” (unlike certain certifications like First Aid which expire after X years). If the MC is in a field where skills quickly become obsolete or requires periodic renewal, an expiration date or recommended refresh period can be stated. (E.g. “Valid for 3 years from issue, after which updating is recommended.”)
- **Learner’s ID (if not already included) or certificate ID:** A unique certificate number or digital ID that can be used to verify the credential in the national registry or issuer’s database. This is helpful for authentication.
- **Digital Verification Link or Code:** If a digital credential is issued, include a QR code or link that a recruiter or institution can scan to see the online verification (for instance, linking to the national registry entry or the Europass digital credential). This is increasingly common to



combat fraud and ease verification – digitally signed credentials allow instant checking of authenticity.

CHAPTER V: GENERAL POLICIES FOR MCS

Micro-credentials (MCs) in Armenia must be developed and implemented within a coherent system that ensures consistency, transparency, and quality across all providers. The following policies establish the national parameters for design, delivery, integration, and recognition of MCs, in alignment with the Law on Higher Education and Science (2025), the Armenian National Qualifications Framework (ANQF), and relevant European standards.

This chapter outlines the general policies and principles that apply to the development and govern the implementation of MCs in Armenia, covering their integration into the National Qualifications Framework (NQF), funding, and the stakeholder involvement necessary for the successful implementation and recognition of these credentials. These policies provide a coherent framework ensuring that MCs contribute effectively to national education and employment goals while aligning with European values of quality and transparency. All stakeholders should observe these policies in their planning, governance, and practices related to MCs.

5.1. National Standards and Alignment

All MCs issued in Armenia must adhere to nationally agreed standards to ensure comparability and credibility. This includes:

- using the standard definition and elements as described in law.
- aligning MC design with the Armenian National Qualifications Framework (where applicable) and referencing the EQF levels for international transparency. National authorities need to provide guidance on how to map MCs to NQF levels without excessive bureaucracy.
- Ensuring terminological consistency: all institutions should use the term “MC” for such offerings and apply it correctly (avoiding confusion with mere certificates or other awards). The Ministry will disseminate a common glossary to avoid inconsistent use of terms.

This policy is meant to standardize practice so that whether a MC comes from University A or a professional body, it adheres to core principles.



5.2. Inclusion in National Qualifications Framework (NQF)

Armenia's policy is to integrate MCs into the national qualification framework and support flexible learning pathways. Rather than creating a completely separate system, MCs should complement and interact with existing qualification pathways:

- The NQF needs to be updated or interpreted to allow referencing MCs as “non-formal qualifications” or “partial qualifications.” For example, some MCs might be recorded in a special section of the ANQF (as Ireland and other countries have done, where they classify MCs as minor or supplemental awards. Others might be explicitly linked as components of larger qualifications.
- Clear criteria should be set for a MC to be eligible for ANQF inclusion: e.g. it must have learning outcomes mapped to ANQF descriptors, an assessment, and quality assurance. If those are met, the MC can be assigned an ANQF level and appear in national registers, improving its visibility and recognition.
- The policy warns against over-regulation: inclusion in the ANQF is encouraged but not mandatory so far for all MCs, to avoid stifling innovative or very niche offerings.

This approach maintains flexibility while ensuring that MCs remain understandable and recognizable within Armenia and internationally.

5.3. Funding and Incentives

To stimulate the uptake of MCs:

- The government may provide targeted funding for MC development in priority areas.
- Support lifelong learning initiatives, including grants or vouchers for learners.
- Encourage employers co-invest in MCs by recognizing those credentials in HR processes professional development frameworks.

These incentives aim to strengthen participation in adult learning and address national skill gaps.

5.4. Stakeholder Involvement and Collaboration

Successful development and implementation of MCs require close collaboration among key stakeholders, including employers, sector councils, educational institutions, and learners. These stakeholders contribute valuable insights into the design and delivery of MCs, ensuring that the credentials meet the needs of both the education system and the labour market. A fundamental policy is the inclusive involvement of stakeholders in MC ecosystems. This reflects the understanding that MCs bridge education, industry, and individual learners' needs. The Ministry and institutions should:



- Consult and involve employers and industry representatives in identifying skill needs and designing MC curricula. This ensures relevance (e.g. tech companies advising on an IT MC content).
- Engage academic staff and subject matter experts in the creation and review of MCs to maintain academic rigor.
- Include learners or student representatives in feedback loops – for example, pilot offerings can gather student input to refine the format or scheduling of MCs.
- Cooperate with quality assurance agency (ANQA) and ArmEnic on quality assurance and recognition aspects.

5.5 Inclusivity and Access

All policies around MCs emphasize they should broaden access to education, not narrow it. Thus:

- Ensure MC offerings are available to diverse learners, including those in remote regions (via online options), those working full-time (via flexible scheduling or part-time pacing), and learners with disabilities (via accessible design).
- Encourage providers to adopt open access or low-cost models for MCs where feasible (for example, some universities might offer free MCs for basic digital skills, funded by state or grants, to boost digital literacy in the population).
- Measure and monitor who is taking MCs (gender, age, region) to ensure equity. If gaps are found, adjust outreach or support (e.g. special initiatives to encourage women into STEM MCs, etc.).

5.6. Continuous Improvement and Support

Lastly, national policy will support continuous improvement in this domain:

- The MOESCS will periodically review the implementation of MCs (possibly annually or biannually) and update guidelines as needed. Stakeholder feedback will be collected to refine policies.
- A knowledge-sharing platform or community of practice for MC providers will be established so institutions can share experiences, tools, and resources (for example, sharing curriculum designs or technology solutions for issuing digital badges).
- Training and capacity building: The Ministry and international partners will provide training workshops for university staff and faculty on MC design and for career/guidance counselors on advising learners about MCs. This support to implementation is crucial – guidelines on paper are not enough without building the know-how in institutions.



The general policies outlined in this chapter are designed to ensure that MCs in Armenia are credible, valuable, and aligned with both national educational frameworks and international standards. By integrating MCs into the ANQF, defining mandatory elements like learning outcomes, workload, assessment, and quality assurance, and involving key stakeholders such as employers and sector bodies, Armenia can create a system that supports lifelong learning, labour-market adaptability, and international recognition.

CHAPTER VI: DEVELOPMENT, DESIGN, AND DELIVERY OF MCS

The development, design, and delivery of MCs (MCs) must be done in alignment with both Armenian legislation and international standards to ensure that the credentials are high-quality, relevant to the labour market, and comparable internationally. The Armenian Law on Higher Education and Science and the Armenian National Qualifications Framework (ANQF) establish key principles for MCs, while international frameworks such as the EU Council Recommendation on MCs (2022/C 243/02) and the European Higher Education Area (EHEA) guide the process in the broader European context.

Designing and delivering a MC involves a structured process to ensure the resulting learning experience is high-quality, relevant, and learner-centred. This chapter provides guidance for providers on how to develop MC courses or programs from conception through delivery. The process can be thought of in stages: **Needs Analysis → Curriculum Design → Validation/Approval → Delivery & Instruction → Assessment → Issuance**. We outline each stage and best practices below, along with examples and recommended tools.

6.1. Needs Analysis and Stakeholder Input

Successful MCs start with identifying a genuine learning need. Before designing a course, the provider should:

- **Consult Industry and Labour Market Data:** Determine the skills gaps or emerging competencies in the labour market that a MC could address. For example, if IT employers in Armenia report a shortage of data visualization skills, a MC on “Data Visualization with Python” might be warranted. Use sources like employer surveys, sector skills studies, and Armenia’s priority sector plans to inform topics. Engaging directly with employers or sector associations through focus groups can yield specific insights (e.g. certification needs in tourism, agriculture, etc.).



- **Consider National Priorities:** Align with national development priorities (as indicated in strategic documents). For instance, if the national agenda emphasizes innovation and tech, MCs in digital literacy, AI, or cybersecurity should be prioritized; if regional development is a goal, maybe MCs for entrepreneurship in rural areas.
- **Target Learner Group Definition:** Identify who the intended learners are. Are they university students (for extra credential on top of their degree), working professionals, unemployed youth, etc.? Understanding the demographic will influence design (level, prerequisites, delivery mode). Providers should even involve a sample of potential learners in discussions – what format would suit them (evening classes, online self-paced)? Which credential would they value?
- **Benchmark Internationally:** Check if similar MCs exist elsewhere (perhaps through MOOCs or other universities) to gauge demand and get curriculum ideas. But ensure the design is tailored to local context (language, examples, local regulations if any).
- **Feasibility and Resource Assessment:** Determine if your institution has the expertise and resources to offer this MC. Do you have qualified instructors? Content already available (maybe a module that can be repurposed)? Required lab or software access if needed? If not, consider partnerships or capacity building first.

By the end of needs analysis, you should have a justification for the MC – what specific gap it fills and who benefits. Document this justification as it may be needed for internal approval and later QA reviews. As recommended by the ETF guide, consultative outreach to stakeholders is a vital first step to ensure relevance.

6.2. Curriculum and Assessment Design

Once the need is clear, proceed to design the curriculum. This stage involves:

- **Define Learning Outcomes:** Write 4–8 clear learning outcomes that cover the knowledge, skills, and competences the learner will gain (for a typical MC; the number can vary with size). Use action verbs and ensure they are achievable in the short timeframe.
- **Align to ANQF Level:** After defining the LOs, they should be aligned with the ANQF level targeted (e.g. at level 6 expecting more analysis, at level 4 more basic application). MCs may be delivered at various levels of complexity. Many will be at the higher education level (e.g. at Bachelor's or Master's level learning outcomes), but they could also address other levels of the NQF if appropriate. The framework allows MCs that correspond to any level of the Armenian Qualifications Framework, provided the learning outcomes can be defined and assessed at that level. For instance, an MC might certify skills at ANQF level 5 or at level 7 (postgraduate level), depending on the content. Each MC should ideally indicate its ANQF/EQF level (if applicable) to clarify the depth of learning achieved.
- **Determine Content and Scope:** Select the essential topics or modules needed to achieve those outcomes. Keep the scope focused – MCs should not try to cover too much. It's often



better to narrow the topic (depth over breadth) given limited time. Ensure content is up-to-date and, where possible, draw on practical examples or case studies (especially if catering to professionals).

- **Estimate Workload and Credits:** While there is no rigid minimum or maximum size for a MC in Armenia's approach, they are generally characterized by a small volume of learning relative to traditional qualifications. Typically, a MC might range from a few hours to a few months of study. In credit terms, this could be anywhere from 1 ECTS credit (around 25–30 hours of student effort) up to 20–30 ECTS for larger MC. The European examples show MCs can vary greatly: some are very short courses of 1–5 ECTS, while others (often called short learning programs or “nanodegrees”) might be 15–30 ECTS. The exact workload should be transparent.

Based on content and outcomes, estimate the hours required (include time for direct instruction, self-study, practice, and assessment). Ensure this aligns with a reasonable ECTS credit if applicable. If the institution uses ECTS, stick to standard calculations (while keeping in mind adult learners might need more flexibility). Workload estimation is important for setting learner expectations and for credit alignment.

- **Select Delivery Mode:** Decide how the course will be delivered – fully online, face-to-face, or hybrid. Online delivery offers flexibility and wider reach (good for working adults or remote learners); ensure you have a suitable platform (LMS) and that instructors are trained in online teaching. Face-to-face might be chosen if the skills require hands-on practice (e.g. lab work) or if local networking is a benefit. Hybrid can combine both, which often works well (e.g. online theory, in-person practical sessions). Also decide if synchronous (live classes) or asynchronous (self-paced) or a mix. Many MCs globally leverage blended models to maximize accessibility.
- **Develop Learning Activities and Materials:** Outline the learning journey – e.g. weekly topics, readings, videos, quizzes, discussions, practical projects. For a short course, creating engaging material is key to keep learners motivated. Make use of open educational resources (OERs) if available to enrich content. Ensure materials are available in the needed language (Armenian or English) and accessible (for example, provide transcripts for videos to support varied learners).
- **Design Assessment Strategy:** The assessment must validly measure the learning outcomes. Decide on formative assessments (quizzes, assignments during the course for feedback) and summative assessment (the final graded component). Options include:
 - Tests/exams (online or on-site, could be multiple-choice, short answer, etc.) - useful for knowledge-based outcomes.
 - Projects or portfolios – great for skills demonstration (e.g. coding project, lesson plan creation, lab experiment report, etc.).
 - Presentations – if communication or explanation is an outcome.



- Practical skill demo – for example, in a healthcare MC, performing a procedure under observation.

It is recommended to include at least one practical or applied assessment if the outcomes are skill-based. Ensure transparency by preparing assessment rubrics or criteria, so learners know how they will be evaluated. Also plan how identity verification and integrity will be ensured (especially online). For instance, consider proctoring solutions or require a live presentation to confirm the learner's work.

- **Grading and Passing Criteria:** Decide if the MC is simply Pass/Fail or uses a grade. Many MCs might opt for Pass/Fail, but a grade can be motivating and informative. If using grades, align with institutional grading scales. Set a clear passing threshold and policy for reassessment or resubmission if a learner fails initially.

6.3 Validation and Approval of Design

Before launching, the designed MC should undergo an internal approval process (analogous to new program approval in universities, but streamlined):

- Prepare a brief MC Proposal document containing: rationale (from needs analysis), target learners, learning outcomes, content outline, workload/ECTS, delivery mode, staff, assessment plan, and any resource needs.
- Submit this to the relevant academic committee or curriculum council in your institution. Even if not required by external regulation, an internal review ensures academic oversight. The committee should verify that the MC meets quality standards and aligns with the institution's mission. Does it overlap with existing courses? Is the level appropriate? Are the outcomes clearly written and assessable? Such review might involve QA staff or external experts for feedback.
- Make the adjustments if the committee suggests improvements. Common suggestions could be to clarify outcomes, ensure assessment matches outcomes, or adjust workload.
- Once approved, document it in the institution's program catalogue (some institutions are starting to include MCs in their course catalogues or as an addendum).
- If the MC is intended to be credit-bearing and stackable, also communicate with the registrar or academic affairs about how it will be recorded (e.g. will it have a course code? will it show up on transcripts or as a certificate only?).

Additionally, for the initial accreditation purposes, initiate that process by sharing the proposal with ANQA for their feedback or clearance.

6.4 Delivery and Instruction

With approval, move to delivering the course:



- **Marketing/Outreach:** Announce the MC to potential learners. Use multiple channels: university websites, social media, employer networks, job portals, etc. Emphasize the outcomes and benefits. Clearly state if it's free or the tuition fee, schedule, and any prerequisites.
- **Enrolment process:** Make it easy for non-traditional learners to register. This may involve creating a short application or simply an online registration form. Ensure clarity on any prior requirements (e.g. "must have basic programming knowledge").
- **Course orientation:** At the start, provide an orientation (live webinar or document) to explain the course structure, how to use the online platform (if applicable), and the assessment timeline. Setting expectations at the outset leads to better retention.
- **Instruction:** The teaching methods should be learner-centred and active. Given many MC learners might be adults with work experience, use approaches like project-based learning, case studies, and peer discussion. Encourage interaction (through forum discussions, live Q&A sessions, group work if possible). This not only helps learning but also builds a learning community – important for motivation and networking.
- **Support:** Provide adequate support throughout. Assign a course tutor or assistant who can answer questions, especially if the main instructor has limited hours. If the MC is online, ensure technical support is available for the platform. Monitor participation and reach out to learners who fall behind (since drop-off can be an issue in short courses, a proactive approach helps).
- **Flexibility:** While maintaining structure, allow some flexibility knowing learners might be juggling other responsibilities. For instance, if self-paced, allow them to complete modules at their own speed within an overall deadline. If cohort-based, perhaps record live sessions for those who miss them. Show understanding if someone requests an extension due to work issues, etc. This flexibility is part of being learner-centred and will improve completion rates.

6.5 Monitoring and Continuous Improvement during Delivery

Treat the first (and every) run of a MC as an opportunity to learn and improve:

- **Collect feedback** at various points. A quick mid-course survey can gauge how learners are finding the pace and content – you might adjust on the fly if needed (e.g. provide extra revision on a topic that many struggled with in a quiz).
- **Observe assessment results** – if everyone did poorly on a certain quiz question, maybe that material needs clarifying.
- **Keep a reflective log as instructor:** note what worked and what didn't (e.g. "Week 3 content too heavy, split into two weeks next time" or "the project rubric needs refinement"). These notes will be invaluable for future iterations and for QA reporting.
- For any significant issues that arise (technical glitches, low attendance, etc.), try to address immediately and also note them to find long-term fixes (e.g. maybe an in-person session is



hard for working folks to attend; next time do it as a Saturday workshop or online evening session).

6.6 Assessment and Credential Issuance

As learners complete the course:

- Conduct the final assessment as planned, ensuring fairness and academic integrity. If using online exams, ensure proctoring or honour codes are implemented; if projects, use plagiarism checks if relevant. Grade the assessments promptly and accurately. If multiple evaluators are involved, standardize grading with rubrics or calibration meetings. Determine the final results: who has met the requirements to earn the MC. Communicate results to learners individually, along with any constructive feedback (especially if someone failed – ideally give them guidance on whether they can retry or what to improve).
- **Issuance of Certificates:** For those who passed, issue the MC certificate (and supplement). Under Armenian law, each MC must result in the issuance of a formal certificate that confirms the learner’s achievement. The certificate must include detailed information about the learner’s learning outcomes, credits, and provider. If digital, generate the files or credential links. If physical, prepare printed certificates (perhaps handed out in a small ceremony or mailed). Ensure each certificate has a unique identifier and is recorded in the institution’s records.
- **Register the issuance in the national MC registry** (or your institutional database that will feed into it). This means inputting the key data about the credential and the recipient. This registration makes the credential verifiable to third parties and contributes to national statistics.
- **Encourage learners to claim/add their credential to their profiles** (e.g. “Add this to your LinkedIn, share it with your employer, etc.”). Also guide them on how to use the digital verification if they need to show it (e.g. provide a link or code they can give to others).

6.7 Integration with Existing Programs

Many MCs will be new standalone offerings, but some may be extracted from or later integrated into existing programs:

- If designing a MC from an existing course/module (e.g. turning a semester course into a MC), ensure that doing so doesn’t dilute the parent program’s integrity. Coordinate with department heads so that content and scheduling align and decide whether the MC learners will join regular classes or have separate sessions.
- Conversely, if a MC may become part of a degree (stackable), design it to be equivalent in rigor to degree courses. That way, if a student uses it for credit, it matches the learning



outcomes of the portion of the degree it substitutes. Document mapping of MC outcomes to the degree program outcomes where relevant.

- Be clear in information whether the MC corresponds to any existing course (some institutions label MCs with the same code/title as an elective course if it's dual-purpose). Transparency avoids confusion among learners and faculty.

6.8. Instructor and Staff Preparation:

Ensure those teaching or facilitating MCs are prepared for potentially a different audience or format:

- Provide pedagogical training especially for online teaching if needed (short workshops on online engagement, using Zoom or LMS features, etc.).
- Emphasize a mindset of teaching adult learners – more practical examples, respecting that learners bring prior knowledge, facilitating peer learning, etc.
- If industry experts are co-teaching (common for MCs to have guest lecturers), brief them on instructional best practices and how their sessions fit into the learning outcomes.

Developing and delivering MCs is an agile but responsible process. By following the steps of needs analysis, careful design, internal validation, and employing engaging delivery methods, providers will create MCs that are both educationally sound and highly valued by learners and employers. The focus should always remain on the learning outcomes and how to best enable learners to achieve them in a short time, while maintaining the standards that ensure credibility of the credential they earn.

CHAPTER VII. QUALITY ASSURANCE

A robust quality assurance (QA) system is essential to ensure that MCs issued in Armenia are trusted, comparable, and aligned with national and international standards. Although MCs are shorter, more flexible learning units, their quality requirements must correspond to those applied to higher education programs, as required by the Law of the Republic of Armenia on Higher Education and Science.

According to the Law, any educational program offering credits—including MCs—falls under the national quality assurance and programme accreditation framework. Therefore, MCs that assign credits and are intended for recognition within the formal education system must undergo QA in accordance with the existing accreditation mechanisms implemented by ANQA (National Center for Professional Education Quality Assurance). This ensures that MCs are not treated as “lighter” or “informal” learning activities, but as quality-assured, outcome-based educational offerings integrated within the national qualification system.



In Armenia, QA for MCs integrates two complementary layers:

1. **Internal quality assurance at the provider level**
2. **External quality assurance through programme accreditation, as defined in national legislation**

This dual-layered system ensures that MCs maintain academic integrity, labour-market relevance, and learner-centred design consistent with both national expectations and European standards (ESG).

This chapter outlines how QA should apply to MCs in practice, drawing on the ESG (Standards and Guidelines for Quality Assurance in the EHEA), European recommendations on MCs, and Armenian legislation.

7.1 Alignment with the National Quality Assurance Framework

MCs must be fully aligned with the National Quality Assurance Framework of Armenia, which is based on the Law on Higher Education and Science, The Armenian National Qualifications Framework (ANQF), ANQA's institutional and programme accreditation regulations and standards, The ESG – European Standards and Guidelines for Quality Assurance in the EHEA, European guidelines on MCs (2022 Council Recommendation, MICROBOL, QUATRA, QA-Fit). **Key Alignment Principles are:**

- **Programme Accreditation Requirement:** Any MC that awards credits must go through programme accreditation according to national legislation.
- **Outcome-Based Design:** Learning outcomes must be clearly defined, measurable, and mapped to ANQF descriptors.
- **Consistency with Higher Education Standards:** MCs must follow the same quality standards applied to degree and non-degree programs.
- **Integration into Institutional QA:** Providers must include MCs in their existing internal QA processes.
- **Proportionality:** While QA must be rigorous, processes may be streamlined to reflect the short and flexible nature of MCs.
- **Transparency:** Minimum information requirements must be published to allow learners and employers to evaluate the quality and relevance of each MC.

7.2 Roles: Provider, Employer, ANQA, MOESCS, and Other Stakeholders

Quality assurance requires clear distribution of responsibilities among all actors involved in the design, provision, evaluation, and recognition of MCs.



1. **ANQA (National Center for Professional Education Quality Assurance)** is the national body responsible for ensuring the independent external quality assurance of MCs. ANQA's responsibilities include:
 - Establishing regulatory frameworks for the QA of MCs
 - Developing appropriate criteria and standards
 - Conducting programme and institutional accreditation for MCs awarding credits
 - Evaluating institutional QA practices related to MCs during institutional accreditation
 - Ensuring alignment with ESG and national QA standards
 - Providing recommendations for improvement
 - Maintaining public registers of accredited programs
 - Providing capacity-building and methodological guidance.
2. **MOESCS (Ministry of Education, Science, Culture and Sport)** ensures strategic governance and alignment with national priorities. It is responsible for:
 - Establishing regulatory frameworks for MCs
 - Ensuring legal consistency with ANQF, ANQF, and national education policies
 - Approving changes to accreditation rules when necessary
 - Overseeing implementation at system level
 - Ensuring the national database/registry of MCs operates effectively.
3. **Higher Education Institutions / Authorized Providers** remain the primary guarantors of quality and are responsible for:
 - Conducting internal QA (approval, monitoring, evaluation)
 - Ensuring staff qualifications and adequate learning resources
 - Conducting self-evaluation for programme accreditation
 - Publishing complete and transparent information
 - Collecting and using feedback for continuous improvement.
4. **Employers' and Sector Bodies'** role reinforces the labour-market relevance of MCs. They contribute by:
 - Identifying labour-market needs
 - Participating in curriculum design and review
 - Evaluating the relevance of learning outcomes
 - Providing work-based or practice-based learning environments
 - Supporting recognition of MCs in hiring and promotion.



5. **Learners'** perspectives are essential for learner-centred QA. They contribute by:
- Providing feedback on content, delivery, workload, and relevance
 - Engaging in assessment processes honestly and responsibly.

7.3 Internal Quality Assurance of MCs

Internal Quality Assurance (Provider Level): Internal QA is the first line of defence in ensuring quality. Each institution or provider offering MCs should integrate them into its internal QA system. MC should meet the same quality criteria as other programs, just scoped to their size. The same internal QA processes as for other programs, including collecting learner and external feedback, and regularly reviewing the courses should be applied. If an institution treats MCs with a “small but serious” mindset – not bypassing any QA steps – the credibility of the credentials will be strong.

- **Design and Approval:** As described in Chapter 6, a formal internal approval process for new MCs is essential. This mirrors ANQA Programme accreditation (PA) criteria 1 and 2, Institutional accreditation (IA) criterion 3, as well as ESG Standard 1.2 (Design and approval of programs) – even short courses should be scrutinized to ensure they have clear outcomes, coherent content, appropriate resources, etc. A committee or at least a peer review by senior faculty should confirm the academic soundness of the MC before launch.
- **Qualified Teachers:** Ensure that those teaching MCs are qualified and supported. ANQA PA criterion 4, IA criterion 5, as well as ESG 1.5 (Teaching staff) applies – instructors should have appropriate expertise in the subject and, if needed, pedagogical training for short course delivery or online methods.
- **Learning Resources & Support:** Even for short courses, adequate learning resources (e.g. access to labs, libraries, e-learning materials) and student support (academic guidance, IT support) should be provided (ANQA PA criterion 5, IA criterion 7 and ESG 1.6. For example, if offering an online MC, make sure the platform is stable and someone is available to help students with technical issues.
- **Student-Centred Learning:** MCs often attract diverse learners, so ANQA PA criterion 2, IA criterion 3 and ESG 1.3 (student-centred learning) is particularly relevant. Providers should be flexible to learner needs, as mentioned (e.g. offering recorded lectures, options for remediation, etc.), and treat learners as active participants. Encourage feedback and adapt accordingly – that is part of internal QA (using feedback to improve teaching).
- **Assessment Quality:** ANQA PA criterion 2, IA criterion 3 and ESG 1.3 and 1.9 (learning assessment) – ensure assessments in MCs are valid, reliable, and fair. Use internal moderation if multiple assessors (e.g. two instructors cross-check grading standards). Ensure transparency in criteria as earlier noted. Even if MCs might sometimes be more practically oriented, upholding academic integrity is key. For online assessments, internal QA includes verifying identities or using plagiarism detection as appropriate.



- **Collect Feedback:** After each MC run, collect learner feedback (surveys, focus groups). Also gather input from instructors and any external partners (like guest lecturers or employers involved). ANQA PA criteria 2 and 6, IA criteria 3 and 10, as well as ESG 1.7 emphasizes that institutions should ensure feedback mechanisms and evaluate programs. A short post-course survey can ask about content relevance, teaching effectiveness, difficulty level, etc. In the MC context, response rates might be higher than in long programs because learners can reflect on the whole experience immediately. The results of the feedback must be analysed, and accordingly based on the identified issues improvement actions must follow.
- **Analyse Outcomes:** Internal QA should review key outcomes: completion rates, pass rates, learner satisfaction, perhaps even initial indications of impact (did learners report using the skill at work?). If a MC sees very low completion or poor satisfaction, internal QA flags it for action. Conversely, high demand or great feedback might prompt scale up the offering.
- **Continuous Improvement:** Based on feedback and outcome data, make the adjustments for future iterations (closing the QA loop). Document changes in a brief report or annual review. For instance, a department might have an annual MCs QA meeting to go over all the MCs run that year, discuss what to improve, and update course designs. Such periodic reviews align with ANQA PA criterion 6, IA criterion 10 and ESG 1.9 (ongoing monitoring and periodic review of programs).
- **Role of the Internal QA Unit:** If the institution has a quality assurance office or unit, that unit should include MCs in its remit. They might adapt existing QA forms to MCs or create a lighter-weight QA checklist specifically for MCs (ensuring the core elements are present). They can also train faculty on quality aspects unique to MCs (like how to ensure equivalent rigor in a short course).

7.4 External Quality Assurance of MC Providers

External QA provides validation that providers are maintaining standards. Armenia should leverage existing QA structures to cover MCs:

- **Institutional Accreditation:** During institutional accreditation or re-accreditation, ANQA should evaluate how the institution manages MCs as part of its portfolio. Do they have appropriate policies for the development, approval, assessment and monitoring? Are staff competent? Are outcomes achieved? External reviewers might interview those responsible for MCs and review evidence (like program descriptions, student feedback, etc.). ESG Part 1 expectations would be checked in this context for MCs too. For example, reviewers will want to see that the institution's internal QA (as above) is actually implemented for MCs.
- **Programme (MC) Accreditation:** If a MC program is substantial (especially if it carries ECTS and is intended to be stackable into degrees), it should undergo initial and program accreditation by ANQA. The Law indicated that *accredited MC programs that assign ECTS credits* are subject to national QA/accreditation. This could mean:



- The provider submits an application outlining the MC's content, outcomes, assessment, etc.
- The provider prepares self-evaluation report and submits to ANQA. The SER would convince that learning outcomes are well-defined and aligned with NQF if claiming a level, workload, assessment is clearly defined, the content and staff are adequate, monitoring and improvement records are in place, QA processes are in place, continuous improvement actions are in place, etc.
- ANQA evaluates it via desk- review and a site-visit if needed (though likely streamlined) and prepares an expert report.
- If MC programme meets criteria, the program is accredited/approved for a certain period and registered in the State Accreditation Register and National Register of Qualifications.

This approach treats MCs like to short programs. All MCs intended for credit recognition likely should be accredited to assure other institutions of their quality.

External QA Standards: External QA should be fit-for-purpose. The EU principle says MCs' external QA should largely focus on the provider's internal QA effectiveness. In other words, accreditors check that the institution has robust processes for MCs rather than micromanaging each course's content. That said, the external QA body might sample some MCs to see how they were developed and delivered as evidence of the institution's capability.

Use of ESG and Other References: Quality assurance agency should ensure that MCs offered by HEIs meet ANQA criteria and ESG standards like any program. For alternative providers, QA can refer to relevant standards (for example, vocational training QA standards).

Registers of Trusted Providers: A possible element of QA ecosystem is maintaining a list of providers or courses that are quality-assured. QA agency should publish a registry of accredited MC providers/programs. This list could interface with the issuance registry so that whenever a credential is verified, one can see if the provider was accredited. In order to ensure automatically validated credentials, they can be included in the DEQAR register as well.

Peer Review and Exchange: Given MCs are new, QA agency may use a more collegial approach initially: engaging in dialogue with institutions, sharing good practices across institutions, maybe organizing a peer-review workshop specifically on MCs. The aim is capacity building as well as accountability.

International QA Collaboration: MCs might involve cross-border provision (e.g. an Armenian university uses a foreign MOOC as part of its MC). ANQA may collaborate or at least communicate with foreign quality bodies in such cases, possibly recognizing each other's evaluations. Also, since MCs are part of the Bologna agenda, ANQA may likely engage with the European Association for Quality Assurance (ENQA) and others to stay updated on QA guidelines specifically for MCs, adjusting Armenian criteria accordingly.



7.5 Publication and Transparency of Quality Data

Transparency is essential to ensure trust and recognition of MCs. QA itself should be transparent. Providers must publicly share complete and accurate information on how their MCs are quality-assured and any outcomes of QA. They might even share summary reports or statistics (how many took it, pass rates, satisfaction). This aligns with ANQA PA criterion 6, IA criteria 8 and 10 and ESG 1.8 (public information) and builds trust externally. Employers or learners seeing such statements know the provider takes QA seriously. Besides publishing the outcomes of the external QA, it is important to publish information, including:

- **Program-Level Information** (description, purpose, learning outcomes, workload and credits, ANQF level, entry requirements, mode of delivery, assessment methods, etc.)
- **Quality Assurance Information** (accreditation status, internal approval and monitoring procedures, summary of recent improvements, learner feedback results)
- **Issuance and Verification** (MC certificates or digital badges must include provider information, learning outcomes, credit value, verification link or unique digital identifier).

CHAPTER VIII. RECOGNITION OF MCS

The following chapter addresses the recognition of MCs across all education sectors – higher education, vocational training, and non-formal learning – in both domestic and cross-border contexts. They emphasize alignment with national laws and regulations, where applicable, to ensure MCs are credible, transferable, and valued by all stakeholders.

8.1 National Recognition Principles and Procedures

National authorities should establish clear principles and procedures for recognizing MCs within their education and training systems. By implementing these principles, countries create a coherent national ecosystem where MCs are valued and can be portable. While approaches currently vary by country (with some at a nascent stage and others, like Australia or Malaysia, already issuing national MC frameworks), there is a clear trend toward integrating MCs into policy. Aligning with this guideline will promote consistency, learner trust, and smoother recognition of MCs nationwide.

Key guidelines include:

- **Alignment with Qualifications Frameworks:** Map MCs to the ANQA (and by extension to regional frameworks like the EQF where relevant) to ensure their level and outcomes are comparable to traditional qualifications. Assigning an ANQF/EQF level to each MC enhances its portability and recognition, making it easier for other institutions and employers to



understand its value. However, it should be made clear that a MC at a given level is not a full degree qualification.

- **Legal and Regulatory Backing:** Where possible, integrate MCs into national education laws or regulations to formalize their status. Legal recognition provides a basis for consistency across institutions. National agencies or qualification authorities should issue guidelines or criteria for MC programs in line with existing frameworks.
- **Quality Assurance Standards:** Apply the same rigorous quality assurance (QA) standards to MCS as those used for traditional programs. Internal QA processes (and external accreditation if applicable) must ensure that MCs meet the national criteria and the Standards and Guidelines for Quality Assurance (in higher education, for example). In practice, this means vetting the content, assessment, and outcomes of MCs so they are trustworthy. If MCs become part of the formal system, they should adhere to the same principles and standards as degrees or certificates. Regular monitoring and review of MC offerings is advised to maintain their quality and relevance.
- **Credit and Transferability Procedures:** Develop procedures to credit learning from MCs within the broader education system. Many MCs are credit-bearing (e.g. carrying a few ECTS credits in Europe or equivalent units) to allow stacking and transfer. National guidelines should encourage institutions to recognize credits from certified MCs toward degrees or other formal qualifications where appropriate. Having a credit transfer framework (such as a national credit bank or registry) helps learners accumulate MCs and have them recognized across institutions. Clear credit transfer policies prevent duplication of learning and facilitate lifelong learning paths.
- **Transparency and Information Requirements:** Ensure each MC comes with a transparent description (a credential supplement) detailing the learning outcomes, credit value, level, issuing body, date, and the QA or accreditation info. Comprehensive information allows credential evaluators – whether academic or professional – to properly assess and recognize the MC. All providers (including alternative providers beyond formal education) should maintain records of issued MCs just as higher education institutions do for diplomas, ensuring verifiability and trust in the credential.

8.2 Recognition within Formal Education Pathways

For MCs to bridge into formal education pathways, educational institutions should establish mechanisms to recognize and credit them toward academic programs. This ensures that learners can move between short-term courses and traditional education seamlessly. Formal education providers should treat MCs as an adjunct to, or component of, traditional qualifications. Through credit recognition, Recognition of Prior Learning, and curricular integration, MCs can enhance formal education by providing flexible, targeted learning opportunities without losing academic rigor. This approach also supports lifelong learning – allowing learners to step in and out of education, collecting MCs that eventually contribute to higher awards. It is crucial that faculty and academic governance bodies support these measures, ensuring that recognized MCs



maintain the integrity of the academic programs they feed into. Key guidelines for formal education recognition include:

- **Credit-Bearing MCs:** Wherever feasible, design MCs to carry academic credit (e.g. assign a credit value using the standard credit system in the country). Having a credit value allows an MC to be counted toward a degree or certificate, making it more than just a standalone certificate. For example, universities might offer MCs worth 5–15 credits that could be applied to elective requirements in a degree program. Clear articulation of credit hours or ECTS in the MC documentation is crucial for academic recognition.
- **Stackability and Pathways:** Encourage the use of “stackable” MCs – multiple MCs that can accumulate into larger qualifications or exemptions. Formal programs can be unbundled into smaller modules (MCs) that learners earn over time and later combine into a diploma or part of a degree. Institutions should clearly define which MCs (or combinations of them) are acceptable for credit transfer into their programs. This creates flexible pathways: learners might earn a series of MCs (for instance, in specific skill areas) that equate to a semester of coursework, thereby shortening the time to a qualification.
- **Recognition of Prior Learning (RPL):** Leverage existing RPL policies to evaluate MCs attained outside the institution. HEIs can use their RPL procedures to grant credit or advanced standing for relevant MCs a student has earned externally. For example, if an incoming student presents a verified MC in a subject, the university’s RPL committee could assess it and waive a corresponding course requirement. Clear criteria should be set for when an external MC is equivalent to a course (considering content, level, and outcomes). This enables non-formal and vocational learning via MCs to be bridged into formal programs.
- **Institutional Frameworks for External MCs:** Each institution should establish an internal framework or policy for recognizing MCs issued by alternative providers (industry platforms, online providers, etc.). Since such external MCs are not automatically part of the higher education system, having a formal review process is important. Institutions might require that the external MC comes from a quality-assured provider or meets certain standards (e.g. taught by qualified instructors, includes assessment). Once vetted, the institution can formally record the MC in the student’s transcript or credential registry. This practice prevents dismissal of valuable learning simply because it was acquired outside academia and instead integrates lifelong learning achievements into the formal record.
- **Embedding MCs in Curricula:** Universities and colleges are encouraged to embed MCs within degree programs. This can mean offering MCs as optional modules or as additional certifications concurrent with a degree. By embedding MC opportunities institutions make their graduates more adaptable and skilled. Studies indicate students are substantially more likely to enrol in a program that includes credit-bearing MCs, seeing them as boosting career readiness.



8.3 Recognition by Employers and Industry

Recognition of MCs in the labour market is vital for their success. Employers and industry bodies need to understand and trust MCs so that they count in hiring decisions, employee development, and professional advancement. The following aspects help strengthen employer recognition of MCs:

- **Industry Relevance and Design:** Involve employers and industry experts in the design of MCs to ensure the skills and competencies being certified are directly relevant to workplace needs. MCs should target specific, in-demand skills (technical abilities, soft skills, etc.) that employers are seeking. When an MC's learning outcomes align with industry standards or job competencies, employers are more likely to recognize its value. Many governments encourage aligning MC offerings with industry needs as a policy objective, which in turn boosts employer acceptance.
- **Employer Awareness and Communication:** Increase awareness among employers about what each MC signifies. Each MC should come with a clear description of the skills mastered or tasks the holder can perform. Employers often face confusion due to the vast variety of credentials. To address this, standardize the information presented (via digital badges or certificates) – including issuing institution, verification of authenticity, skill descriptors, and even evidence of work (projects, assessments). Effective communication and transparency (for example, providing employers with access to an online credential profile or portfolio) will build trust in MCs and dispel uncertainty about their rigor.
- **Validation and Quality Signals:** Emphasize the quality assurance and recognition status of MCs to employers. Employers are far more inclined to value “recognized, credit-bearing” MCs issued by reputable institutions. This willingness increases when the MC is backed by academic credit and formal recognition, as it signals higher credibility. Highlighting that an MC was earned from an accredited education provider or under a nationally- recognized framework can reassure employers of its validity. Where possible, link MCs to industry certification standards or have industry endorsements.
- **Incorporation into HR Processes:** Encourage employers to formally incorporate MCs into their hiring, upskilling, and promotion criteria. For example, organizations can update job posting templates to explicitly mention relevant MCs or accept them as evidence of skills (in lieu of or alongside traditional degrees). Additionally, employers note that MC holders often help fill skill gaps and improve workforce quality. Companies can also use MCs for the continued professional development of their staff – by offering or recognizing MCs for upskilling programs, employers create a culture of lifelong learning in the workplace. Notably, some employers are even willing to offer higher starting salaries to candidates who have earned relevant MCs, given the demonstrated proficiency in key skill areas.
- **Partnerships and Talent Pipelines:** Foster partnerships between educational providers and industry to co-develop and recognize MCs. If employers co-create MC curricula or standards, they will have greater trust in and awareness of those credentials. Such collaboration can also establish talent pipelines: learners earning industry-developed MCs become prime candidates



for hiring. Education providers should seize this opportunity to ensure their MCs have direct industry buy-in, which in turn guarantees recognition and usefulness in employment contexts.

Employers are increasingly receptive to MCs, seeing them as a way to verify specific skills and reduce training costs, but widespread recognition depends on clarity, quality, and relevance.

8.4 Recognition of Cross-Border and Digital MCs

MCs should be portable across borders so that skills gained in one country (or online through global platforms) are recognized in another. Cross-border recognition is challenging due to differing education systems, but adopting common standards and cooperative frameworks can facilitate international acceptance of MCs. Key aspects for cross-border and digital recognition include:

- **International Standards and Transparency:** Utilize internationally agreed-upon definitions and standard elements when describing MCs. A common approach – such as that recommended by the European Commission in 2022 – ensures that key information (learning outcomes, workload/credit, level, issuer, etc.) is consistently presented. When all credentials share a transparent format, it is easier for foreign institutions or employers to interpret them. Without such common standards for quality, transparency, comparability and portability, MCs cannot reach their full potential globally. Thus, aligning with frameworks like the UNESCO Open Badges standard or the EU’s Europass Digital Credentials format can greatly aid cross-border understanding.
- **Integration into Qualifications Frameworks:** Encourage mapping of MCs onto regional or global qualifications frameworks. For instance, placing an MC at an EQF level (European Qualifications Framework) provides an immediate reference for institutions across Europe to gauge its level. Similar integration into other regional frameworks (such as the ASEAN or Commonwealth frameworks) should be pursued. When MCs are clearly positioned in these frameworks, recognition authorities can more readily assess them akin to partial qualifications. This also supports credit transfer internationally, where, for example, a MC earned via an online course in one country could be credited by a university in another country because both align it to a shared framework level.
- **Bilateral and Regional Recognition Agreements:** Leverage existing recognition conventions and agreements to include MCs. UNESCO’s global and regional Recognition Conventions (e.g. the Lisbon Recognition Convention for Europe, and new global convention adopted in 2019) provide a foundation for recognizing foreign qualifications. These conventions, while traditionally focused on degrees, underscore principles (like fairness and transparency in recognizing studies) that can extend to MCs as components of someone’s learning. Countries should cooperate to update or clarify these agreements to explicitly cover MCs and other short learning experiences. Regional bodies (such as the European Higher Education Area, ASEAN, African Union, etc.) are already exploring coordinated approaches – for instance, a UNESCO study recommends a regional framework of minimum standards for MCs in Latin



America. Such frameworks aim to balance harmonization with local relevance, enabling trust in each other's MCs without forcing identical systems.

- **Cross-Border Quality Assurance:** Establish mechanisms for quality assuring cross-border and online MCs. One country's regulatory system might not automatically recognize a MC issued abroad by a private platform. To address this, nations can designate credential evaluation services or ENIC-NARIC centers (in Europe) to evaluate MCs from abroad, similar to foreign degree evaluations. Another approach is trusted provider lists or credentials registries: for example, the creation of a global or regional credential registry where verified providers list their MCs, giving others confidence in their legitimacy. Additionally, mutual recognition arrangements between institutions (e.g. university alliances) can allow members to accept each other's MCs for credit or hiring. Ultimately, enhancing interoperability between national systems (through shared QA guidelines and digital verification methods) is critical for cross-border recognition.
- **Digital Credentials and Verification Across Borders:** Since many MCs are issued digitally (often by international platforms like Coursera, edX, etc.), ensure that the digital credential itself is verifiable globally. Using digital signatures or blockchain (see next section) can allow instant verification of authenticity anywhere in the world. Tools like the Europass Digital Credentials Infrastructure (EDCI) in Europe issue digitally signed credentials that any employer or institution globally can verify online. Learners should be encouraged to use digital wallets or profiles (such as LinkedIn, Open Badge passports, etc.) to share their MCs when going abroad. If the credential meets a recognized standard (for example, an Open Badge containing machine-readable metadata about its issuer and learning outcomes), this goes a long way in securing trust across borders. In summary, embracing digital verification standards ensures that a MC earned in one country can be independently validated in another, which is a prerequisite for recognition.

8.5 Use of Digital Badges and Blockchain Technologies

Digital badges and blockchain technologies are powerful enablers for the recognition of MCs. They provide the technical infrastructure to issue, share, and verify credentials in a secure and transparent manner. The following guidelines highlight how to utilize these tools to support MC recognition:

- **Digital Badges for MCs:** A digital badge is a visual representation of a MC that is embedded with rich metadata. Badges are commonly used for MCs because they are easily shareable and instantly verifiable online. Each badge contains information such as the issuer (who awarded it), the criteria for earning it, the level or skill attained, and evidence of achievement. This metadata provides context and trust – for example, a badge might say “Awarded by XYZ University for completing Data Analytics Fundamentals (10 credits, EQF level 5) with an assessment score of 85%”. Because of this, digital badges ensure transparency and credibility in what a learner has done. Education providers should issue MCs in the form of open digital badges compliant with widely accepted standards (such as



Mozilla's Open Badges standard), which guarantees that all the relevant data is embedded and can be read by different platforms. An open standard badge from one platform can be added to a learner's profile or portfolio and later verified by employers or other institutions with a simple click.

- **Real-Time Verification & Authenticity:** One of the biggest advantages of digital credentials is the ease of verification. Digital badges can be verified in real-time through a unique URL or QR code, and many systems now leverage blockchain back-ends for this purpose. What this means is that when an employer or institution wants to check the validity of a MC, they can do so instantly by visiting the badge's link or scanning its code, which will confirm the issuer and that it hasn't been tampered with. In several implementations, the credential's record is stored on a blockchain (or a secure ledger), providing a tamper-proof, immutable record of the achievement. The use of blockchain technology adds an extra layer of security – each credential is cryptographically signed and cannot be altered or forged. This is especially useful for cross-border scenarios where a relying party may not be familiar with the issuing institution; the blockchain verification assures them the credential is authentic. Education and training providers are advised to use platforms that support such secure verification methods. In practice, this eliminates the need for manual certificate checks or intermediaries, simplifying recognition.
- **Security and Fraud Prevention:** By recording MCs on blockchain or similar distributed ledgers, issuers can prevent fraud. Each credential, once issued, gets a unique digital signature on the blockchain, creating an audit trail. This ensures that anyone reviewing the credential can trust it has not been revoked or altered. For learners, this means their earned MCs are safe from loss or misrepresentation – they own a digital proof that is as good as a notary stamp. For employers/educators, it dramatically reduces the risk of accepting a falsified certificate. Blockchain-secured credentials are trusted credentials, which will accelerate acceptance of MCs in academic and hiring decisions.
- **Portability and Lifelong Access:** Digital badges and blockchain credentials give learners lifelong ownership of their achievements. Instead of being tied to a paper certificate or a single institution's records, the credential lives in the learner's digital wallet or online profile. Learners can carry these digital badges from one opportunity to the next, sharing them on professional networks (like LinkedIn) or applications. Because they are portable, MCs earned in various contexts (university, online course, employer training, etc.) can be compiled by the individual into one place, showcasing a holistic picture of their skills. Portability is enhanced by interoperability standards – for instance, multiple universities and platforms accepting the same badge standard means the learner doesn't need to juggle different formats. We encourage the use of credential wallets and platforms (some are blockchain-based) that aggregate a person's MCs, making it easy for them to be presented for recognition when needed.
- **Stackability and Pathways via Technology:** Digital credentialing systems support the stacking of MCs. Because each badge is data-rich, platforms can recognize when a learner has accumulated a set of badges that fulfil a larger qualification pathway. This can trigger the



award of a larger credential or simply help the learner and institutions track progress. For example, if a professional earns five distinct MCs in project management (each represented by a badge), a platform might denote that collectively they amount to an advanced certificate, or the learner can demonstrate a comprehensive skill set. Digital badges are inherently stackable, allowing individuals to accumulate multiple badges that together showcase a broader competency profile. This technological capability reinforces academic and employer recognition: it's easy to see not just one MC, but the collection someone has earned, giving a fuller picture of their expertise.

- **Efficiency in Credential Processing:** Embracing digital badges and blockchain makes the administration of recognition more efficient. Credential evaluators no longer need to await mailed transcripts or certificates; they can verify achievements online instantly. This speed is critical in fast-moving job markets. Moreover, since verification can be automated (a system can check a blockchain or badge URL programmatically), integrating MC checks into recruitment or admissions software becomes feasible. The efficiency gains free up time for deeper evaluation of the actual skills and fit of the candidate, rather than chasing paperwork. Institutions should update their recognition procedures to make use of these digital verification tools, as it both reduces bureaucracy and improves security.

CHAPTER IX. SUPPORTS: ADVISING, TUTORING, CAREER GUIDANCE, AND ACCESSIBILITY FOR LEARNERS

For MCs to truly empower learners, it is not enough to create and offer them; learners must be aware of these opportunities, understand their value, be able to access them easily, and receive guidance on how to utilize them for their personal and professional development. High-quality learner support is essential for the effective implementation of MCs. Given that MCs attract diverse groups of learners, including adults, working professionals, unemployed individuals, rural learners, and returning students, providers must ensure that appropriate support mechanisms are systematically integrated into the design, delivery, and recognition of each MC. This chapter outlines the minimum support services that all recognized MC providers in Armenia must guarantee. Chapter 9 focuses on the systems and services that should be in place to support learners at all stages of their MC journey: from discovering relevant MCs, through the learning process itself, to leveraging earned MCs in further education or employment.

9.1 Information Accessibility and Awareness

A critical first step is ensuring learners (and the public at large) can easily find information about available MCs:



- **National MCs Portal:** The Republic of Armenia should establish (or integrate into an existing education portal) a one-stop online platform listing all recognized MC offerings in the country. This portal should allow searching by field, provider, level, workload, etc. Each MC entry would show the key details (outcomes, credits, level, issuer, etc.) and link to the provider's page for enrolment. Such a portal could be linked with the national qualifications register and updated by providers regularly. The goal is to give potential learners a clear catalogue of opportunities.
- **Clear Communication of Value:** Marketing materials and course descriptions should explicitly state why a learner might want this MC. Emphasizing outcomes, recognition, and success stories will help learners see the tangible benefits. Aligning with European principles, MCs should be measurable, comparable, understandable – which in practice means avoiding jargon and making sure descriptions are plain-language and focus on skills gained.
- **Leverage Multiple Channels:** In addition to the portal, information should be disseminated through university outreach, social media, job fairs, public employment services, etc. Since MCs target also those beyond traditional students, presence in community centres, libraries, and online forums is important. The Ministry can run public awareness campaigns highlighting lifelong learning via MCs, perhaps featuring testimonials (e.g., a short video of a learner who got a better job after a MC).
- **Integration with Europass and Digital Profiles:** Encourage learners to maintain an updated profile on Europass (or similar platforms) where their MCs can be displayed. The European Commission's Europass platform allows individuals to store digital credentials and share them. If Armenian learners use such tools, they become more conscious of MCs as part of their professional portfolio. Guidance on how to add MCs to CVs or LinkedIn should be part of the support (for example, career centres can show learners how to list and describe their MCs to employers).
- **Transparency on Pathways:** Where MCs are part of larger pathways (e.g., part of a series or stackable to a degree), this should be clearly explained to learners *before* they enrol. Visual roadmaps can help – for instance, an infographic showing that if you take MC A, B, and C (each 5 ECTS), you can then get an advanced certificate or skip some part of a longer program. Laying out these pathways helps learners plan their education strategically, rather than taking standalones that don't add up.

9.2 Academic Advising and Tutoring

MC providers must ensure that learners receive adequate academic guidance throughout the learning process.

- **Academic Advising:** providers should offer advising services that help learners understand program expectations, select suitable MCs, and plan learning pathways. As well as they should assist learners in understanding credit accumulation, stacking options, and opportunities for further study. And provide guidance on institutional policies, assessment requirements, and available support services.



- **Tutoring Support:** providers must offer tutoring or academic support to help learners engage with course content and meet learning outcomes. They should provide tutoring in flexible formats, including online, face-to-face, and group sessions. Provider should ensure tutors are trained in outcome-based approaches and adult learning principles.

9.3 Career Guidance and Employability Support

MCs must support learners in achieving improved employment outcomes and career advancement.

Providers are expected to:

- Offer career counselling that explains the labour-market relevance of each MC and its associated skills.
- Provide guidance on job search strategies, emerging occupational trends, and opportunities for progression in the labour market.
- Develop partnerships with employers to ensure alignment between MCs and real labour-market needs.
- Facilitate employer engagement through guest lectures, networking, mentorship, internships, or work-based learning where applicable.
- Maintain job placement or employment support services when relevant to the target group of the MC.

9.4 Digital Infrastructure for Learner Support:

- **Learning Management Systems (LMS):** A robust LMS is vital. It should be user-friendly and accessible from various devices. The LMS can also incorporate some AI tutoring or adaptive learning to support students (e.g., quizzes that adapt to learner level).
- **Learner Portals:** If the MC system grows, having a dedicated learner portal where individuals can track all their MCs, progress, and maybe plan future ones would be beneficial.
- **Integration with Credential Wallets:** Ensure that once a learner completes a MC, the digital certificate is easy for them to retrieve and share. If integrated with Europass or other wallets, support them in linking those accounts. Possibly, the national portal can also double as a personal credential vault for users (with proper security).

9.5 Equity, Inclusion, and Learner Well-Being

We should reiterate that learner support must focus on inclusivity:



- **Cost Support:** If cost is a barrier for learners with financial needs, provide information on scholarships or instalment payment options. Reduced fees or flexible payment plans for specific groups, such as unemployed individuals or working adults. Suggest incentives for employers to co-finance MC training for employees, including through corporate training programs or co-funded schemes. Another mechanism is the collaboration with government agencies, donor programs, and NGOs to support participation in priority skill areas.
- **Language Support:** While many MCs might be in Armenian or English, consider support for those not fluent. Could materials be bilingual? Or provide language support alongside (e.g. glossaries, translation of key terms).
- **Mentor/Buddy for Non-traditional Learners:** If someone hasn't studied in a long time, pair them with a mentor (maybe a student assistant or a peer who is more comfortable) to get used to online systems and study habits for the first few weeks.
- **Equal access:** Ensure equal access and non-discrimination in the provision of MCs. Minimum expectations include:
 - Ensuring inclusive learning environments free of discrimination based on gender, disability, age, socioeconomic background, or ethnicity.
 - Providing psychosocial support where relevant, including access to counselling or referral services.
 - Designing MCs with consideration for rural learners, refugees, displaced persons, and other vulnerable groups.
 - Offering preparatory or bridging modules for learners who need foundational knowledge before entering a MC.

9.6 Feedback and Continuous Improvement

To maintain high standards in learner support, providers must implement mechanisms for monitoring and continuous enhancement. Let learners voice what additional support they need.

- Collect regular feedback from learners regarding academic support, technical provisions, career guidance, and overall satisfaction.
- Use feedback to improve course design, delivery methods, accessibility features, and support services.
- Consult employers, sector bodies, and labour-market representatives to ensure ongoing relevance and alignment with skill needs.
- Include learner success indicators—completion rates, progression, employability outcomes—within internal quality assurance processes.



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4. **National Roadmap for MCs (2025)** – A roadmap document (Micro-GEAR project) detailing phased implementation steps for integrating MCs into Armenia’s education system, including stakeholder engagement, capacity building, digital infrastructure, and monitoring phases (content referenced in Chapter 2 and 5).
5. **European Training Foundation (ETF) – “Guide to Design, Issue and Recognize MCs” (2023)** – Comprehensive guide prepared by Knowledge Innovation Centre for ETF, offering design principles, quality measures, and recognition strategies for MCs. Sections used include quality assurance recommendations, transparency and portability (standard elements and digital credentials), relevance to learners and labour market, assessment practices, and policy-level recommendations.
6. **Council of the European Union Recommendation of 16 June 2022 on MCs for Lifelong Learning and Employability (2022/C 243/02)** – Key EU policy defining MCs and recommending actions for Member States. Annex I of this recommendation provides the *European standard elements to describe a MC*, which Armenia’s framework has adopted. Annex II outlines principles on quality, transparency, etc., which informed Chapters 5, 7, and 8
7. **Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (2015)** – While not quoted directly, ESG Part 1 standards (on program design, student-centred learning, assessment, etc.) underpin QA practices recommended in Chapter 7. References to ESG alignment are made, for example ensuring internal QA for MCs uses ESG principles.
8. **European Qualifications Framework (EQF) and QF-EHEA** – European frameworks for levels of qualifications. These are referenced in terms of assigning levels to MCs for transparency and ensuring MCs can be related to NQF/EQF levels for recognition.
9. **ENIC-NARIC Networks – Recognition of MCs (2023)** – Emerging guidelines and discussions from European recognition centres (as referenced via EHEA Bologna



documents and other sources) on how MCs should be recognized across borders, influencing Chapter 8.

10. **EHEA TPG A “Recommendations and Guidelines on MCs” (2023)** – A document by the Bologna Process working group on Qualifications Frameworks (QUATRA) providing recommendations for national authorities. It covers stakeholder involvement, NQF inclusion, learning outcomes approach, stackability, QA, supplements, transparency, support to implementation, and learning pathways. These inputs guided policy points in Chapters 5, 6 and 8 (e.g., involving stakeholders, not overregulating, providing supplements, promoting stacking).
11. **Micro-GEAR Research Report – “Analysis of Existing MC Practices in HE of Georgia and Armenia” (2024)** – A project report surveying MC perceptions and legislative context in Armenia and Georgia. Used for insights on draft law definitions and current challenges such as recognition of non-HEI providers and stackability.
12. **ETF Case Studies on NQF and MCs** – Examples cited from ETF guide on how countries like Ireland, New Zealand, Namibia, and Georgia integrate MCs into NQFs, informing the discussion in Chapter 5 on NQF inclusion.
13. **Europass and European Digital Credentials (2023)** – European Commission’s digital credentials framework. References from the ETF guide highlight how Europass supports digitally signed MCs and authenticity checks, which influenced recommendations in Chapters 5, 8, and 9 regarding digital verification and use of wallets.
14. **ACQF (African Continental Qualifications Framework) MCs Handbook (2024)** – Provided a definition citing the European Commission 2022 definition which was used in Chapter 2 to align Armenia’s definition with international terminology.
15. **Knowledge Innovation Centre, Camilleri & Hudak (2018)** – Provided the typology of MCs (skill credential vs learning unit vs short program), which informed understanding of MC sizes and contexts in Chapter 3.
16. **Lisbon Recognition Convention (1997) and UNESCO Global Convention (2019)** – Underlying international treaties on recognition of qualifications referenced conceptually in Chapter 8 to frame fair recognition of MCs, though not cited line-by-line.
17. **Industry and Employer Feedback Reports** – Although not individually cited, insights from Armenian IT sector and other employers as gathered in national workshops (per White Paper references) underpin the emphasis on labour market needs, e.g., Chapter 2 and 6 mention aligning with priority economic sectors and employer co-design.
18. **QQI (Quality and Qualifications Ireland) resources on MCs (2021)** – Mentioned in ETF guide context, providing an example of a national QA agency incorporating MCs, supporting discussion in Chapter 7 on external QA perspectives.
19. **Cedefop “Microcredentials: Global Approaches” (2022)** – Provided context on how MCs are viewed in VET and by employers (e.g., German and Slovenian perspectives on keeping regulation minimal and focusing on employer needs), which influenced Chapter 5 and 8 content on not overregulating and on employer preferences for flexibility.
20. **Sustainable Development and Lifelong Learning Policy Reports (various)** – These indirectly support the narrative that MCs contribute to social mobility and continuous



upskilling, aligning with Armenian strategic aims and used as rationale in Chapter 2 and 5.

21. **Arqus Alliance, Report on National Regulations on Micro-credentials** – overview of European national frameworks (legal provisions, QA, credit transfer).
22. **EHEA (2023), TPG A Recommendations on MCs** – guidelines for integrating MCs into NQFs, quality assurance, and recognition practices.
23. **Inside Higher Ed (2025), Survey on Employer and Student Support for Microcredentials** – evidence of employer hiring preferences and student demand for embedded MCs.
24. **Higher Ed Dive (2023), Employer Perceptions of Alternative Credentials** – highlights employer benefits (filling skill gaps) and concerns (quality, relevance) regarding MCs.
25. **UNESCO IESALC (2025), MCs in LAC: Toward a Common Framework** – stresses integrating MCs into national systems and using UNESCO recognition conventions for cross-border recognition.
26. **European Commission (2022), Council Recommendation on a European Approach to MCs** – defines standard elements and principles to ensure quality, transparency, and cross-border comparability of MCs.
27. **Commonwealth of Learning (2025), MCs for Mobility and Stackability** – examples of national frameworks (Australia, Malaysia) and emphasis on credit transfer and stakeholder support for MC recognition.
28. **University of Texas at Austin (2025), Digital Badging Initiative** – describes features of digital badges (metadata, verifiability via URL/blockchain, shareability, stackability) that enhance recognition.
29. **DoxyChain (2024), The Power of MCs on Blockchain** – explains how blockchain secures credentials and streamlines verification (tamper-proof records, no intermediaries).
30. **European University Alliance** – provides information on how different countries apply national Regulations On Micro-credentials (2023)
31. **Micro-credentials: Towards qualification recognition, mobility and stackability (2025)**
32. **Digital badging initiatives (2025)** – The university of Texas at Austin



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“MICRO-GEAR: MICRO-CREDENTIALS FOR HIGHER
EDUCATION SYSTEMS OF GEORGIA AND ARMENIA:
SOUTH CAUCASUS LIGHTHOUSE PROJECT”

MICRO-GEAR
Project #101127144

Guide to Micro-Credentials

Georgia

LEPL –National Center for Educational Quality Enhancement

TBILISI 2025



Document Information

Deliverable title:	Guidelines on Micro-credentials
Author:	LEPL –National Center for Educational Quality Enhancement (NCEQE)
Confirmation:	Approved by the MICRO-GEAR Project Management Board
Deliverable number:	4 (D2.2)
Work package:	WP2
Lead partner:	NCEQE – 4
Due date of deliverable:	31 December, 2025
Dissemination Level	15 December, 2025
Reviewed by	All partners

Version	Date	Modified by	Modification reasons
V-1	September, 2025	National Center for Educational Quality Enhancement (NCEQE)	Initial version designed and circulated for review in NCEQE and Micro-Gear
V-2	November, 2025	Discussion with Georgian Partners	Working Meeting
V-3	Oct-Nov, 2025	Online discussion among Consortium members	Consortium management meeting
V-4	18 Dec. 2025	NCEQE	Nationa final version Delivered
V-5	23 Dec, 2025	EU / all partners	Final Approval

“MICRO-GEAR: MICRO-CREDENTIALS FOR HIGHER
EDUCATION SYSTEMS OF GEORGIA AND ARMENIA:
SOUTH CAUCASUS LIGHTHOUSE PROJECT”
Project #101127144

This project has been funded with support from the EC.
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Definitions of Terms and abbreviations Used in the Document

- **Accreditation Council of Higher Education Programs** - Decisions concerning accreditation of educational programs are made by the Accreditation Council of Educational programs. The members of Accreditation Councils are appointed and dismissed by the Prime Minister of Georgia by the submission of the Ministry of Education and Science of Georgia for the term of 1 year. The members of the Accreditation Council of Educational programs cannot be public servants, except for the invited members of the Accreditation Council of Educational programs.
- **EHEA** - The European Higher Education Area.
- **ENQA** - The European Association for Quality Assurance in Higher Education.
- **ESG 2015** - European Standards and Guidelines for Quality Assurance.
- **Georgian National Qualifications Framework (GNQF)** considers the requirements of the European Qualifications Framework (EQF LLL) and European Higher Education Area Qualifications Framework (QF-EHEA). The document unites all the qualifications existing in Georgia, reflects the learning outcomes of different levels of general, vocational and higher education. The National Qualification Framework establishes what knowledge, skills, and responsibilities should a person have for obtaining the document verifying the completion of the relevant cycle.
- **NCEQE** - National Center For Educational Quality Enhancement.
- **Subject Benchmark Statement** - represents the academic standard that defines the minimum learning outcomes required for awarding Bachelor's (Level I) and Master's (Level II) qualifications in specific fields. It outlines the essential competencies of graduates, including theoretical knowledge, practical skills, responsibility, and autonomy. Furthermore, it specifies the teaching, learning, and assessment approaches necessary to achieve these outcomes and other fundamental characteristics of the educational program.



I. Introduction

This guide outlines the principles governing the development, quality assurance, and implementation of Micro-credits within the framework of the Georgian National Qualifications Framework (GNQF). It is based on the European approach to Micro-credentials¹, the standards of the European Higher Education Area, and the recommendations for quality assurance (ESG-2015). Its aim is to support education providers and industry in the implementation of Micro-credentials.

The guide includes:

- a definition of the essence and purpose of Micro-credentials;
- standards and procedures for designing Micro-credentials and ensuring quality;
- the methodology for determining their alignment with the level descriptors of levels 6 and 7 of the National Qualifications Framework.

II. Definition of Micro-credentials

Micro-credential is a small-scale educational programme certifying the learner's knowledge, skills, and competencies. A micro-credential is delivered by a reliable provider, is designed to meet the needs of industry, the labour market, or society, and adheres to established quality assurance standards. It can be offered as a stand-alone programme or combined with other micro-credentials. Additionally, a micro-credential may be recognised as prior learning toward obtaining a broader qualification.

Micro-credential is implemented at levels 6 and 7 of the National Qualifications Framework and is recorded in the National Qualifications e-registry.

¹ Council Recommendation of 16 June 2022 on a European approach to micro-credentials for lifelong learning and employability 2022/C 243/02 [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022H0627\(02\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32022H0627(02))



III. Objectives of Micro-credentials

Micro-credentials aim to ensure:

- targeted learning that meets the demands of a rapidly changing labour market;
- development of skills in areas such as information and communication technologies, business and administration, education, arts, tourism, and others;
- access to education and contribution to reducing social inequalities, particularly for those with limited opportunities to pursue a full qualification;
- recognition of the learning outcomes achieved within the programme at both national and international levels.

IV. Characteristics of Micro-credential

There is no universally accepted definition of micro-credentials worldwide; however, all interpretations related to this learning experience can agree that it is a small-scale learning experience focused on acquiring and developing knowledge, skills, and competencies that meet labour market demands. Micro-credentials ensure the portability of this learning experience and its combination with other micro-credentials for the purpose of obtaining a broader qualification.

Micro-credentials share the following common characteristics worldwide:

- the acquisition of small units of knowledge, skills, and competencies that have particular significance and value for the employability or professional needs.
- verification by a recognised and trusted provider (for example, an educational institution or an industry organisation);
- issuance of a digital artifact, such as a digital certificate or badge, which is considered an alternative to a traditional qualification document².

Micro-credentials have specific characteristics, which are grouped below:

- **Stackable Credit:** Some institutions offer stackable micro-credentials, where individual credits can be accumulated toward obtaining a broader qualification.

² C.O.L. 2019. Designing & Implementing Micro-Credentials: A Guide for Practitioners <https://www.che.ac.ls/wp-content/uploads/2019/09/14-Designing-and-Implementing-Micro-Credentials-A-Guide-for-Practitioners.pdf>



- **Recognition of Prior Learning:** Micro-credentials offer an excellent opportunity to accumulate and combine knowledge, skills, and competencies, and through recognition of prior learning, they make it possible to obtain broader qualifications.
- **Filling Graduates' Knowledge:** It is often expected that graduates of bachelor's or master's programmes develop skills and attributes that go beyond the scope of their core qualification or explore it in a more focused way within a specific area. The study of some of these issues may serve the acquisition of specific knowledge and skills, or be more closely related to the development of so-called soft skills, ethics, or civic responsibility. Due to their small-scale, diverse and focused character, micro-credentials help higher education graduates enhance relevant skills based on their needs³ (**University of Melbourne, 2021**).

Micro-credentials:

- should be targeted — focused on acquiring or developing a specific skill, knowledge, or competence.
- should have clearly articulated and transparent learning outcomes and undergo internal and external quality assurance procedures.
- the involvement of stakeholders should be ensured during the development and/or implementation process, including the involvement of industry representatives, industry associations and regulatory bodies (where applicable), as well as employers.
- the implementation process should be flexible and provide opportunities for learning in face-to-face, online, or blended formats.

4.1 Credit Volume for Micro-credentials

The range of credit volumes varies across countries; in some, only an upper limit is set, which in certain cases is 40–45 credits. However, considering the specifics of our country's higher education system, in order to develop realistic, measurable, and achievable learning outcomes within micro-credential programmes, and to assess the achievement of these outcomes through appropriate mechanisms, it is recommended to define the minimum volume of micro-credits as no less than 1 ECTS credit and the maximum as no more than 30 ECTS credits.

According to the Order #3 dated January 5, 2007 issued by the Minister of Education and Science of Georgia, this corresponds to half of a full academic year's workload as defined in the "Rule on Calculating Credits for Higher Education Programmes."

³ O'Leary, Paul; Zeta Dooley; Ken McCarthy. 2022. A Quality Framework for HE Micro-Credentials. 8th International Conference on Higher Education Advances (HEAd'22) Universitat Politècnica de València. <https://headconf.org/wp-content/uploads/pdfs/14673.pdf>



V. Designing Micro-credentials and Quality Assurance

In the guideline developed by the European Association for Quality Assurance in Higher Education (ENQA) in 2023 titled "Quality Assurance of Micro-Credentials: Expectations within the Context of the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)", it is noted that the quality assurance system for micro-credentials generally depends on the national context and requires consideration of existing quality assurance approaches. External quality assurance procedures should be flexible and tailored to the specific characteristics of micro-credentials. In turn, the quality assurance of micro-credentials should be based on the existing framework.

- Incorporating micro-credentials in external quality assurance processes is beneficial; however, the implementation of micro-credentials in practice is a multifaceted and complex process.
- In the quality assurance process, the primary priorities are given to transparency, recognition, stackability, and portability of micro-credentials.
- It is advisable to consider various models of collaboration among stakeholders, which would enable quality assurance agencies to re-assess their mandates and roles.⁴

National Standards for Quality Assurance in Higher Education are based on the European Standards and Guidelines for Quality Assurance (ESG, 2015), adopted within the European Higher Education Area (EHEA), which define the fundamental principles of quality assurance that can be applied to the implementation of Micro-Credentials. According to these standards, the internal and external quality assurance of micro-credentials should be structured and transparent, incorporate a learner-centered approach, and be based on learning outcomes to ensure their recognition and effective use.

At the national level, the quality assurance standards for micro-credentials should be based on the accreditation standards for higher education programmes.

⁴ European Association for Quality Assurance in Higher Education – ENQA. 2023. QUALITY ASSURANCE OF MICRO-CREDENTIALS: Expectations within the Context of the Standards and Guidelines for Quality Assurance in the European Higher Education Area. <https://www.enqa.eu/wp-content/uploads/ENQA-micro-credentials-report.pdf>



VI. Obtaining the Right to Implement Micro-credentials

If a legal entity wishes to implement a micro-credential course, it must undergo a process to obtain the right to offer micro-credentials, which determines whether institution meets the standards set by the state for micro-credential courses.

A standard is a requirement established by the state that a legal entity must meet to be able to implement the corresponding micro-credential.

The state establishes the following standards for obtaining the right to implement micro-credentials:

- Design and Development of Micro-Credentials
- Methodology and Organisation of Teaching, Adequacy of Evaluation of the Micro-credential Course Mastering
- Application of Learner-Centered Approaches
- Providing Teaching Resources
- Quality Assurance

Any legal entity has the right to implement a micro-credential course. If the implementing institution is not a higher education institution, it must also submit an agreement with a higher education institution regarding the recognition of learning outcomes and credits earned through the implementation of the micro-credential course. Higher education institutions implementing accredited higher education programmes may also offer micro-credential(s) based on an accredited higher education programme, without obtaining a separate right, by registering them in the relevant e-system. In the relevant e-system, the higher education institution must submit a self-assessment report in which it describes how it complies with the standards established by the procedure for obtaining the right to implement micro-credentials. After acknowledging the submission of the application, the Center is authorised to conduct both scheduled and unscheduled monitoring of the institution.



VII. Submission of an Application to the Center for Obtaining the Right to Implement a Micro-credential

An application for obtaining the right to implement a micro-credential may be submitted to the Center either electronically (through electronic communication channels) or in hard copy (by physically visiting the Center).

Submission of the application through electronic communication channels is possible via:

- electronic document management system -if your institution uses such a system;
- or by sending the application to the Center's official e-mail address: info@eqe.ge to apply for the right to implement a micro-credential.

If submitting the application in person at the Center, the completed application form and attached documentation must be provided via an electronic data carrier (such as a disk or memory card).

The application submitted for obtaining the right to implement a micro-credential must be completed on the institution's official letterhead and accompanied by the completed self-evaluation form of the institution seeking the right to implement the micro-credential course, including all annexes specified in the form. The institution may, if it wishes, also submit additional annexes to demonstrate compliance with the indicator/criterion/component of the standards defined by the procedure for obtaining the right (if applicable).

Submitting the application to the Center means that the administrative process for obtaining the right to implement a micro-credential has officially commenced. The decision on granting the right or refusing to grant the right shall be made within 60 working days from the date of submission of the application.

The learner's workload in micro-credentials is calculated using the European Credit Transfer and Accumulation System (ECTS), where 1 ECTS credit equals 25–30 hours.

Validity period of the right to implement a micro-credential - the right to implement a micro-credential is granted for a term of two years.

Rule for submitting an application to the Center to obtain the right to implement a micro-credential for the purpose of acquiring institutional status; The self-evaluation form for an applicant seeking institutional status and the guide for completing the self-evaluation form can be found on the official website of the LEPL – National Center for Educational Quality Enhancement - eqe.ge.



Upon the expiration of the two-year term, the institution loses the right to implement micro-credentials. To re-gain the right to offer micro-credentials, the institution must submit an appropriate application to the Center.

The application submitted for the purpose of obtaining the right to offer micro-credentials must include: Justification of the needs of employers, industry, or society in the relevant field (e.g., digital skills, education, tourism); minutes must be submitted demonstrating the consultations held with employers, professional associations, or regulatory/governmental bodies.

The alignment of learning outcomes with Levels 6 and 7 of the National Qualifications Framework of Georgia must be determined in accordance with the “Methodology for Determining the Compliance of Micro-credential Learning Outcomes with the Descriptors of the 6th and 7th Levels of the National Qualifications Framework”⁵; see the subchapter with the aforementioned title.

VIII. Evaluation of the Application Submitted for Obtaining the Right to Implement a Micro-credential

The National Center for Educational Quality Enhancement shall evaluate the application submitted by a legal entity/institution for obtaining the right to implement a micro-credential within 3 working days. The purpose of the evaluation is to determine the extent to which the submitted application complies with the requirements established by the “Rule on Obtaining the Right to Offer Micro-credential Courses, as well as on Suspension and Termination of the Right to Implement a Micro-credential” (hereinafter – the Rule)⁶.

If a deficiency is identified during the review process (e.g., an incorrectly completed self-evaluation form by the micro-credential course provider, failure to submit mandatory annexes in the prescribed format, etc.), the Center shall set a period of no less than 5 and no more than 15 working days to fix the issue.

If the deficiency is fixed within the specified period, the Center shall issue an order granting the applicant the status of a seeker of the right to implement the micro-credential course; however, if the deficiency is not fixed within the same period, the Center shall issue an order to leave the application without further review.

⁵ The methodology will be developed subsequent to the establishment of the regulatory legal framework for micro-lending.

⁶ This specific regulation will be formulated following the creation of the legal framework governing micro-credits



If no deficiency is identified in the application submitted for obtaining the right to implement a micro-credential, the Director of the Center shall issue an order within 10 calendar days of submission, recognising the applicant as a seeker of the status to implement micro-credential course. If deficiencies are identified in the application and are fixed within the deadline specified by the Center, the Director of the Center shall issue an order within 15 working days from the date of correction, recognising the applicant as a seeker of the status to implement micro-credential course.

If the deficiencies in the application are not fixed, or if the application is re-submitted with deficiencies, the Center is entitled to issue an order to leave the application without review.

Within 10 working days after recognising the applicant as a seeker of the status to implement micro-credential course, the Center shall issue an order on the formation of an expert group for the visit to the applicant institution.

IX. Formation of the Expert Group

The expert group includes:

- Higher Education Quality Assurance Expert;
- Micro-Credential Course (Curriculum) Expert;
- Field Expert;
- Material Resources and Infrastructure Expert;
- Learner Expert;
- Employer.

This order shall be sent to the applicant seeking the right to implement the micro-credential course for their information who shall be notified in advance of the date and the composition of the expert group that will visit the institution. The applicant seeking the right to implement the micro-credential course is entitled to place a motion for preclusion of the expert(s) and submit the corresponding justification to the Center within 2 working days from the date of receiving the order. A conflict of interest with one or more members of the expert group may serve as grounds for recusal. The Center shall review the recusal request submitted by the applicant seeking the right to implement the micro-credential course, within 3 working days.



X. Visit of the Expert Group

After the expert group is formed, the Center provides them with the application submitted by the institution for obtaining the right to implement the micro-credential. The expert group reviews the application and prepares a visit agenda, specifying the day on which each issue will be examined. The Center sends this document to the institution.

Expert group visits the institution on the dates specified by the Order of the Center Director.

In order to determine the institution's compliance with the standards established for obtaining the right to implement a micro-credential, the experts review the institution's documentation, observe the facilities, and interview relevant stakeholders. The institution is responsible to support the expert group throughout their visit, and in preparation of the evaluation report. They are responsible for submitting all additional documents, as necessary, and ensure interviews with persons requested by the experts. On the final day of the visit, the expert group presents the key findings to the institution orally.

XI. Preparation of the Report on the Visit Conducted for Obtaining the Right to Implement the Micro-credential

The expert group develops a draft report and sends it to the Center. The Center verifies the formal compliance of the draft report with the standards defined by the procedure for obtaining the right to implement the micro-credential, and upon meeting the requirements, it sends the draft report to the applicant. Within 5 calendar days upon receiving the draft report, the institution may submit to the Center a reasoned position regarding the factual circumstances stated in the draft report. The expert group is entitled to take the reasoned position into account when preparing the final report. The final report is sent to the institution and to the Accreditation Council of Higher Education Programmes.



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XII. Stage - Conducting the Oral Hearing on the Issue of Obtaining the Right to Implement the Micro-credential and Making the Decision by the Accreditation Council

The decision on granting the right to implement the micro-credential is made by the Accreditation Council for Higher Education Programmes. The Council meeting is public. The applicant institution shall be notified of the Accreditation Council meeting at least 7 calendar days in advance. The seeker of the institutional status is entitled to participate in the oral hearing. The Council makes the decision by a majority vote of the members attending the meeting. The Accreditation Council announces its decision to the applicant institution during the oral hearing. Within 10 working days of the Accreditation Council meeting, the Council prepares a minute and issues an order regarding its decision, signed by the Chair and the Secretary of the Council. The decision enters into force immediately upon its publication on the Center's website.



XIII. Standards for Obtaining the Right to Implement Micro-Credentials (Draft)

Description	Assessment Criteria	Indicator/Evidence
1. Design and Development of a Micro-Credential Course		
1.1 Objective(s) of the Micro-Credential		
<ul style="list-style-type: none"> The course objectives consider the specificity of the field of study, and the specifics of a first- or second-cycle higher education programme, within the framework of which the recognition of the respective micro-credential is permissible. They also consider the specific characteristics of the micro-credential course and define the set of knowledge, skills and competences a programme aims to develop in graduates. They also illustrate the contribution of the programme to enhancing the learner’s qualifications, improving competencies, and meeting labour market demands. 	<ul style="list-style-type: none"> The objectives of the micro-credential are clearly defined, realistic and achievable; The objectives consider the specifics of the field, the cycle and the specific characteristics of the micro-credential course; Define the set of knowledge, skills and competences the course aims to develop in graduates; The objectives reflect the contribution it makes to enhancing the learner’s qualifications, improving competencies, and meeting the demands of the labour market; They are consistent with the mission, objectives, and strategy of the 	<ul style="list-style-type: none"> Syllabus of the micro-credential course; Analysis of labour market demands and/or vacancies, or a survey of employers regarding the need for the skills and competencies addressed by the course objectives; A brief description of the programme in accordance with the mandatory and/or recommended fields defined by the European approach to micro-credentials, as set out in Council of Europe document N 2022/C 243/02 of 16 June 2022.⁷

⁷ European Commission. 2022. European approach to micro-credentials for lifelong learning and employability (2022/C 243/02) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32022H0627%2802%29&qid=1759397983975>



	<p>implementing institution; as well as with the objectives of the higher education program at the respective cycle, within the framework of which the micro-credential may be recognised;</p> <ul style="list-style-type: none"> • Take into account the demands, trends, and needs of both the local and international labour markets. • 	
<p>1.1 Learning Outcomes of the Micro-Credential</p>		
<p>The learning outcomes of the micro-credential are logically connected to the course objectives, the specific characteristics of the field of study, and the demands of the labour market.</p> <p>Programme learning outcomes describe knowledge, skills, and/or the responsibility and autonomy, which the students gain upon the completion of the programme.</p>	<p>Learning Outcomes of the Micro-Credential:</p> <ul style="list-style-type: none"> • Correspond to the aims of the programme and include main knowledge, skills or/and responsibility and autonomy envisaged by the content; • they are measurable, achievable and realistic; • correspond to the relevant level of the National Qualifications Framework and the relevant level of higher education, and specifies the detailed field as defined by the Classification of Fields of Study; 	<ul style="list-style-type: none"> • Syllabus of the micro-credential course; • Mapping grid of course aims and learning outcomes; • Analysis of the demands of labour market and employers; • A document confirming the participation of the interested persons in drafting the course learning outcomes; • Information on the career development of alumna (in case of the ongoing programme); • Indicator of graduates' progression to the next level of higher education and their employment rate. • Micro-credential course provider website;



	<ul style="list-style-type: none"> • are based on the Subject Statement Benchmarks (if applicable) developed on basis of the NQF; • are consistent with the specifics of the field and the labour market; • All relevant stakeholders participate in the development of the programme’s learning outcomes (academic staff, learners, graduates, employers, representatives of the regulatory body in the regulated field, and others); • Persons involved in the implementation of the programme introduce the learning outcomes to all interested parties; • If applicable, the learning outcomes aimed at developing practical, soft, and transferable skills within the micro-credential are clearly defined. 	<ul style="list-style-type: none"> • Link to the LMS or other type of electronic educational platform used for micro-credential (if any); • Interview results with programme implementers (director, educational staff, students, graduates, and employers); • Learning outcomes oriented toward developing practical, soft, and transferable skills as defined in the learning outcomes (if applicable).
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1.2 Evaluation Mechanism of the Programme Learning Outcomes

<p>The procedures by which the achievement of learning outcomes in the micro-credential course are measured, assessed, and verified are clearly defined and transparent.</p>	<ul style="list-style-type: none"> • The assessment process of the micro-credential learning outcomes is consistent and transparent, considering the level of higher education and a periodicity appropriate to the specifics of the field; • It includes appropriate forms and methods of assessment (both direct and indirect) that enable the determination of whether 	<ul style="list-style-type: none"> • Mechanism of the evaluation of learning outcome is accessible to all interested; • Rubrics for assessing assignments/exams; samples of assessments and completed assignments/works (e.g., tests, project tasks and completed assignments, papers, and other examples); • Syllabus of the micro-credential Course
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	<p>learners have achieved the course learning outcomes;</p> <ul style="list-style-type: none"> • The involvement of all interested parties ((employers, graduates, professional associations and/or national regulatory bodies of the field, among others) in the evaluation of the learning outcomes is provided; • The academic staff involved in the course are familiar with the evaluation methods of learning outcomes; • The staff implementing the course get assistance to draft, measure and analyse the learning outcomes; • The analysis of the results of the micro-credential learning outcomes evaluation is used to improve the course. It implies the revision and development of the course content and/or evaluation system and /or resources (in case of necessity). 	<ul style="list-style-type: none"> • Results of surveys of graduates, employers, and, if applicable, professional associations and/or national regulatory bodies in the field, as well as other relevant stakeholders; • Results of the interviews; • Instruments and mechanisms elaborated to assess learning outcomes; • Materials (reports, protocols and others) confirming the discussion of the learning outcomes evaluation results.
<p>1.3 Ensuring Employer Involvement in the Elaboration of the Micro-Credential</p>		
<p>Active participation of the representatives of the labour market and the adequate reflection of their requirements in the course learning outcomes is ensured during the development</p>	<ul style="list-style-type: none"> • The micro-credential course provider has a formal mechanism for collaboration with labour market representatives; the specific number of working meetings or consultations with labour market representatives is defined and justified; 	<ul style="list-style-type: none"> • Agreement(s) or Memorandum(s) of Understanding signed with labor market representatives; • Minutes or reports of meetings held with labour market representatives;



<p>of micro-credential learning outcomes and their assessment approaches.</p>	<ul style="list-style-type: none"> • Written confirmation from labour market representatives regarding the relevance of the micro-credential course. 	<ul style="list-style-type: none"> • Official correspondence sent to and received from labour market representatives (if applicable).
<p>1.4 Justification of the Need for the Micro-Credential and Its Connection to Labour Market Demands</p>		
<p>Needs Diagnosis — A Brief, Evidence-Based Justification (based on empirical data and/or reports from relevant regulatory bodies and organizations and/or sectoral documents and standards), demonstrating that the knowledge, skills, and competencies specified in the micro-credential course are in demand in the local and/or international labour market.</p>	<ul style="list-style-type: none"> • The need for developing the micro-credential course is justified by vacancy analysis and/or labour market research. Where applicable, based on international regulatory standards of the relevant industry and/or the results of international labour market research; • The development of the micro-credential is also justified by research on employment of professionals in the relevant field and/or graduates of relevant academic programmes, or through graduate surveys. 	<ul style="list-style-type: none"> • Labour Market Research; through a document analysing published vacancies and/or a labour market research report, which, where applicable, also reflects international regulatory standards of the relevant industry and the results of international labour market research; • Results of surveys and/or research involving professionals employed in the field and graduates of academic programmes. • Results of employer interviews.
<p>1.5 Connection of the Micro-Credential Learning Outcomes to Higher Education Programme(s) and/or to Labour Market Demands</p>		
<p>The connection between the micro-credential learning outcomes and higher education programme(s), as well as their alignment with labour market demands, is clearly defined.</p>	<ul style="list-style-type: none"> • The higher education programme(s) within which the learning outcomes achieved through the micro-credential course can be recognised are defined; 	<ul style="list-style-type: none"> • At least, one higher education programme is specified within which the learning outcomes achieved through the micro-credential can be recognised. An agreement and/or memorandum of



	<ul style="list-style-type: none"> • It is justified how the learning outcomes of the micro-credential course align with and enhance the learning outcomes of the academic programme, and how they contribute to increasing the graduate's competitiveness in the labour market. 	<ul style="list-style-type: none"> • cooperation signed with the implementing institution of this programme is provided; • A written confirmation from the higher education institution regarding the recognition of the learning outcomes achieved within the micro-credential course is provided; • A matrix of the micro-credential course learning outcomes in relation to the learning outcomes of the educational programme and the corresponding level descriptors of the NQF (National Qualifications Framework); • Here's the English translation: Results of the interview with the head of the academic programme.
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1.6 Structure and Content of Micro-Credential

<p>The micro-credential course is compiled using the methodology of planning, elaboration and development of educational programmes of HEI. And, it complies with the mandatory and/or recommended fields defined by the European Approach for Micro-Credentials, as set out in the Council of Europe Document dated June 16, 2022, No. 2022/C 243/02.The</p>	<p>The micro-credential course syllabus includes:</p> <ul style="list-style-type: none"> • Course objectives, learning outcomes, thematically structured content, assessment methods, and relevant and up-to-date educational resources; • Information on prerequisites for admission to the programme; 	<ul style="list-style-type: none"> • Methodology for planning, elaborating and enhancement of educational programmes; • Detailed syllabus; module(s) materials (educational resources); • Instructions for using the LMS platform for implementing the micro-credential course and a link to the e-learning course, if applicable;
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<p>structure of the course is consistent and logical. The content and the structure ensure the achievement of the syllabus learning outcomes.</p>	<ul style="list-style-type: none"> • Information on course duration, study workload, and assessment periodicity; • Information regarding the recognition of learning outcomes achieved through the micro-credential within the framework of higher education programme(s); • Information on the body responsible for external quality assurance of the micro-credential; • Details on study workload, timelines, implementation location, language of instruction, and delivery formats; • Information on the fee for completing the micro-credential and on possibilities for credit recognition; • Instructions for using the LMS platform for implementing the micro-credential course and a link to the e-learning course, if applicable. 	<ul style="list-style-type: none"> • An Agreement and/or Memorandum of Understanding signed with the higher education institution (HEI) implementing the relevant academic programmes.
<p>2. Teaching Methodology and Organisation, Evaluation of the Adequacy of the Programme Mastering</p>		
<p>2.1 Micro-Credential Admission Preconditions</p>		
<p>Minimum mandatory requirements for admission to the micro-credential course are defined in accordance with the requirements established by the Georgian legislation.</p>	<ul style="list-style-type: none"> • Admission prerequisites for the micro-credential course are based on the requirements established by the Georgian legislation; the admission requirements are public and easy to understand; 	<ul style="list-style-type: none"> • Educational programme; • Website and other means of dissemination of information to ensure access to information about the program;



	<ul style="list-style-type: none"> • A mechanism for the recognition of prior learning is in place; • Admission prerequisites do not unjustifiably restrict the diversity of the audience. 	<ul style="list-style-type: none"> • Description of the course admission prerequisites in the syllabus;
<h2>2.2 Portability of Micro-Credential</h2>		
<p>The micro-credential course is described in accordance with the mandatory and/or recommended fields defined by the European approach to micro-credentials, as outlined in the Council of Europe’s document N 2022/C 243/02 of 16 June 2022. Through the relevant electronic platform, the achieved learning outcomes are digitally certified, ensuring the portability of qualifications; The micro-credential course is designed in such a way that it can be combined with another micro-credential and/or within an academic program; the recognition of learning outcomes is ensured.</p>	<ul style="list-style-type: none"> • Transparent procedures and agreements have been developed for granting the micro-credits; • There is an electronic and public registry of micro-credential courses; • At the national level, within higher education institutions that have the authority to grant recognition, there are mechanisms for recognising credits earned and learning outcomes achieved through a micro-credential course. 	<ul style="list-style-type: none"> • Agreements/protocols for the recognition of micro-credentials at the institutional level; • Entries for the registration of micro-credentials in the electronic registry of micro-credentials; • A matrix of the micro-credential course learning outcomes in relation to the learning outcomes of the educational programme and the corresponding level descriptors of the NQF (National Qualifications Framework); • An Agreement and/or Memorandum of Understanding signed with the higher education institution implementing the academic programme; a written confirmation from the higher education institution regarding the recognition of learning outcomes achieved within the micro-credential course is provided.



2.3 Form(s) of Micro-Credential Delivery and Electronic Platforms

Flexible forms of micro-credential delivery are ensured (face-to-face and/or hybrid and/or online). Where necessary, platforms with user-oriented interfaces are provided, along with appropriate technological and pedagogical support.

- The forms used in teaching ensure the achievement of the learning outcomes envisaged by the micro-credential course and provide equal accessibility for all learners;
- In the case of electronic learning management system, appropriate technical support is provided.

- Description of the electronic learning management system (LMS) and the conditions of technical support (if applicable);
- Instructions for using the electronic platform (if applicable);
- Learner feedback on the platform and the electronic course.

2.4. Teaching and Learning Methods

The course is implemented by using learner-centred teaching and learning methods. The methods correspond to the level of instruction and the specifics of the field. The pedagogical approaches used (problem-based, project-based, active learning methods, etc.) correspond to the course objectives and ensure the achievement of learning outcomes.

- The methods are diverse, aimed at ensuring active learner engagement, and are aligned with the learning outcomes; information about assessment methods is accessible to all learners;
- The teaching and learning methods ensure active learner participation in the educational process, as well as interaction between personnel and learners, and among learners themselves.

- Lecture plans;
- Descriptions of activities;
- Learner feedback and participation statistics.

2.5. Learner Evaluation

The assessment system is based on the principles of fairness and transparency and is

- Assessment criteria and procedures are clearly defined;

- Assessment policy document;
- Records of assessment results;



<p>relevant to the subject of assessment and compliant with legal requirements. Mechanisms for appeal and clarification are defined; involvement of an external examiner is provided, when necessary.</p>	<ul style="list-style-type: none"> • Systematic records of results and the resolution of appeals are in place. • Assessment components, methods and criteria are transparent, accessible and familiar for learners in advance; • If necessary, HEI ensures learners' evaluation through electronic/distance methods, taking the specifics of a component and content into consideration; • Learners' feedback on the assessment is considered. 	<ul style="list-style-type: none"> • Documents related to assessment appeals; reports of the external evaluator (if applicable).
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3. Application of Learner-Centred Approaches

3.1 Learner Consulting and Support Services

<p>Micro-credentials provide consultation and technical support to learners, as well as resources for employment opportunities when needed.</p> <p>Learners have an opportunity to experience a diverse learning process and receive relevant information and recommendations from the individuals involved in the programme.</p>	<ul style="list-style-type: none"> • Support services for learners are accessible, with timely responses to their needs; information provision and monitoring of assistance quality are also guaranteed; • Academic/administrative or other staff consult learners over the study process and also, various activities planned within the program. 	<ul style="list-style-type: none"> • List of listener services and rules for their provision; • Contact information of service providers; • Learners' feedback on the services received; • Statistics on the use of services by listeners.
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4. Providing Teaching Resources

4.1 Human Resources



<p>Micro-credential course staff consists of qualified persons, who have necessary competences in order to help students to achieve the programme learning outcomes.</p>	<ul style="list-style-type: none"> • The qualifications and professional experience of the academic staff/instructors meet the programme requirements; a mechanism for the professional development (retraining) of academic staff is in place; • The qualification of the staff is evidenced by the knowledge, experience and competence required for the expected learning outcomes as provided for by the programme. 	<ul style="list-style-type: none"> • CVs of the academic staff; copies of documents certifying education and training; • Academic staff contracts; • Interview results.
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4.2 Material Resources

<p>The institution implementing the course is equipped with appropriate physical and material resources necessary for delivering the microcredit course (laboratories, lecture spaces, computer labs, library holdings and digital educational resource collections) as well as the required digital infrastructure (Learning Management System/LMS, various electronic educational platforms, etc.)</p>	<ul style="list-style-type: none"> • Resources are sufficient to meet the educational objectives and achieve learning outcomes; • Technical and safety standards are observed in the use of material and technical resources; • Resources are available to learners. 	<ul style="list-style-type: none"> • List of material inventory; • Technical documents and licenses (if applicable); • Photo documentation; • Terms of service for the LMS and other educational platforms.
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4.5. Budget of Programme/Faculty/School and Programme Financial Sustainability



<p>The financial resources allocated for the micro-credential course correspond to the program's needs.</p>	<ul style="list-style-type: none"> • The budget is realistic and intended to maintain the quality of the program; • An assessment of financial risks and strategies for their mitigation is in place. 	<ul style="list-style-type: none"> • Sources of funding for the micro-credential course; • Budget document; • Financial reports; • List of expenses; • Memorandums of Understanding on financial support (if any). • Interview results.
<h2>5. Teaching Quality Enhancement Opportunities</h2>		
<h3>5.1 Internal Quality Assessment</h3>		
<p>The implementing institution has clearly defined policies and procedures for internal quality assurance of the micro-credential, which include regular monitoring, evaluation, and improvement of the programme.</p> <p>Quality assurance is based on the involvement of stakeholders in the teaching and learning process (learners, employers, sectoral associations, etc.). Quality assurance is based on the active involvement of stakeholders and the feedback received from them.</p>	<ul style="list-style-type: none"> • The structure of the internal quality assurance and responsible personnel are defined; • The micro-credential undergoes a regular self-assessment cycle; • Quality assurance results are utilised for the improvement of micro-credential; • Feedback on micro-credentials is collected systematically and in a structured manner; • The collected data is regularly reflected in course modification; • The HEI utilises a transparent mechanism for analysing feedback and sharing the results; 	<ul style="list-style-type: none"> • Internal regulations and policy documents; self-evaluation reports; meeting minutes; plans for amendments or improvements; • Reports of surveys conducted with learners and employers; examples of amendments implemented based on feedback; • Assessment policy and procedures; • Reports analysing assessment results; • Improvement plan based on the results; • Professional development policy for academic and administrative staff; • Schedule of trainings; • List of participants;



<p>The institution has established a mechanism to monitor the achievement of the learning outcomes stipulated by the programme.</p> <p>Quality assurance includes the continuous development of educational and administrative staff.</p> <p>Internal quality processes ensure the financial and material sustainability of the micro-credential.</p> <p>Internal quality processes ensure the accessibility and transparency of information.</p>	<ul style="list-style-type: none"> • Internal procedures for evaluating results are defined; • Internal and external moderation mechanisms are used; • The results are used to guide programme improvement; • There is a professional development plan for the staff including: <ul style="list-style-type: none"> • regular trainings/workshops; • Staff satisfaction and their professional development needs are regularly evaluated; • Mechanisms for internal control of the program’s financial and material resources are established; • The resources for micro-credentials are regularly evaluated; • A risk management system is in place; • Information about the program is publicly accessible; • Internal quality reports are published regularly. 	<ul style="list-style-type: none"> • Feedback from academic and administrative staff; • Financial reports; • Assessment records of material and technical assets; • Risk management plans; • Audit findings; • Programme descriptions on the website; • Mechanisms to communicate with Learners and Partners; • Conclusion of a peer review (if applicable) and changes implemented as a result of the recommendations presented in the conclusion;
<p>5.2 External Quality Assurance Assessment</p>		
<p>Obtaining the Right to Implement a Micro-credential – The right to implement a micro-</p>	<ul style="list-style-type: none"> • The submitted documentation complies with the requirements set out in the 	<ul style="list-style-type: none"> • Official reports;



<p>credential is granted upon submission of an application and complete provision of the required documentation.</p> <p>The Center is authorised to carry out unscheduled monitoring based on an official request from an interested party (learner, employer, professional association, etc.) indicating violations by the micro-credential provider.</p> <p>The Center shall ensure the publicity and transparency of the decisions made.</p>	<p>standards for obtaining the right to implement a micro-credential;</p> <ul style="list-style-type: none"> • The assessment process shall be completed within 60 working days; • The Higher Education Program Accreditation Council is obliged to make a reasoned decision regarding granting the right to implement a micro-credential, refusing the right to implement, or granting the right to implement subject to monitoring; • The Accreditation Council’s decision shall specify the exact timeframe for the implementation of the programme. • The micro-credential provider shall fully and strictly comply with the requirements defined by the procedure for obtaining the right to implement a micro-credential throughout the specified period; • The procedures for monitoring a micro-credential course are defined in a pre-approved regulation; • The monitoring process is based on quality standards and includes expert involvement; • The outcomes are utilised for the retention or extension of the right to offer micro-credential; 	<ul style="list-style-type: none"> • Minutes of meetings of the Council for Accreditation of Higher Education Programs; • Documents containing Accreditation Council decisions are published on the Center's website; • Protocols for reviewing complaints; description of the mechanism for appealing decisions.
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	<ul style="list-style-type: none"> • A formal complaint or referral with specific details of violations by the implementing institution can become the basis for ad-hoc monitoring of the micro-credential course; • The Center shall ensure unscheduled monitoring is carried out within 30 calendar days and ensures public disclosure of results. • Decisions are published on the Center's website. Decisions regarding programmes are reflected in the electronic registry of micro-credentials; • Stakeholders are provided with detailed information on monitoring results; • Procedures for reviewing complaints and appealing decisions made by the Accreditation Council are defined. 	
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A qualification must meet two main requirements to be included in the National Qualifications Framework:

- a) The qualification content must be clearly described through learning outcomes to ensure transparency and assessment of acquired knowledge, skills, and competencies.
- b) The qualification must successfully complete quality assurance procedures in line with national standards.

Since the definition and format of micro-credentials encompass both of the aforementioned requirements—specifically, they are based on learning outcomes and are subject to external quality assurance mechanisms—this provides the necessary substantive and legal basis to integrate them into the National Qualifications Framework. Such integration is essential to ensure their recognition and portability.



XIV. Methodology for Determining the Alignment of Micro-credentials Learning Outcomes with Level 6 and Level 7 Descriptors of the National Qualifications Framework

Upon completion of micro-credentials aligned with the relevant level of the National Qualifications Framework (NQF), graduates are awarded a Level 6/Level 7 certificate confirming the completion of the micro-credentials course.

Determining the alignment of learning outcomes with the NQF level descriptors currently remains one of the key challenges. At the international level, there is no common approach or a harmonised methodology. However, the experience of various countries and approaches highlighted in international discussions indicate several core principles that should guide the determination of the alignment of the learning outcomes of micro-credential with the NQF level.

First and foremost is the learning – outcomes - based approach. Regardless of the volume or duration of the micro-credentials, its evaluation is based not on the number of contact hours, but on the content and depth of the described learning outcomes. Alignment with the NQF level descriptors is established by comparing these outcomes.

In this process, the principle of ‘best alignment’ plays a crucial role. In practice, the learning outcomes of micro-credentials may reflect some characteristics of a lower NQF level (but not of a higher level); however, alignment is determined by the dominant learning outcomes — that is, where the majority of outcomes and their complexity most closely correspond to the descriptors of a specific NQF level.

Although micro-credentials are of limited volume and therefore may not encompass the full spectrum of descriptors associated with a complete qualification, they must necessarily include components of all three descriptors (knowledge and understanding, skills, responsibility and autonomy).



Alignment may be established through comparison with both the relevant NQF level descriptors and the learning outcomes of higher education programmes at the same level within the specific field of study.

Transparency and well - reasoned justification are essential parts of this process. All decisions regarding the alignment of micro- credentials with the NQF level must be documented with clear justification to ensure reliability as well as national and international recognition.

XV. Development of Micro-credentials Course

The Quality Assurance Agency for Higher Education (QAA)⁸ of the United Kingdom provides a set of steps for developing Micro- credentials. Based on this guidance, a modified version has been designed, adapted to the requirements of Georgia’s higher education system and labour market.

Stages of Micro-Credentials Development:

Step 1:

- Establishing the vision and significance of micro-credentials;
- Defining the purpose of micro-credentials in collaboration with labour market representatives;
- Identifying target groups for micro-credentials in cooperation with employers;
- Identifying employers or professional and/or regulatory bodies recognising Micro-credentials.

⁸ Quality Assurance Agency for Higher Education (QAA) Guide to Micro-credential Design: Modular learning by design and not default https://www.qaa.ac.uk/docs/qaa/members/guide-to-micro-credential-design.pdf?sfvrsn=699aac81_12



Step 2: 

- Determining the level of micro- credentials (in accordance with the National and European Qualifications Frameworks);
- Defining the volume of micro-credentials in ECTS credits (typically from 1 to 30 credits);
- Determining the mode of delivery (face- to- face and/or online and/or hybrid).

Step 3: 

- Formulating learning outcomes in collaboration with employers;
- Clearly highlighting the skills component within the learning outcomes.

Step 4: 

- Designing teaching and learning strategies (using a collaboration-based approach with employers);
- Designing assessment and feedback strategies with employer involvement (where feasible, work - based assessment is recommended).

Step 5: 

- Developing course content in collaboration with employers;
- Ensuring opportunities for reflection and feedback.

Step 6: 

- Developing formative and summative assessment activities in collaboration with employers.

Step 7: 

- Preparing a draft syllabus.



Step 8:

- Identifying educational resources and ensuring their accessibility.

Step 9:

- Ensuring approval and recognition by professional, normative, and regulatory bodies.

Below is a sample: micro-credentials syllabus, developed in line with the Council of Europe Recommendation on a European approach to micro-credentials and informed by international best practices (United Kingdom, Ireland, Italy, Australia, New Zealand):

Sample Micro-credentials Syllabus	
Title of Micro- credentials course in Georgian and English languages	AI for Enhancing Research Skills in Higher Education (ხელოვნური ინტელექტის გამოყენება უმაღლეს განათლებაში კვლევითი უნარების განვითარებისთვის)
Issuing country(ies)/region(s):	Georgia, Tbilisi
Issuing body/bodies:	Institution/Institutions
Issue date	20.10.2025
Learning outcomes	<p>1. Knowledge and understanding</p> <ul style="list-style-type: none"> • <u>Describes</u> the main artificial intelligence (AI) tools (e.g., ChatGPT, Grok, Google Scholar AI) and their role in enhancing research processes in higher education. • <u>Explains</u> ethical challenges of AI, such as data privacy and plagiarism, in the context of higher education. • <u>Summarises</u> the benefits and limitations of AI for developing research skills, including data analysis and literature search. • <u>Defines</u> key terms and concepts — such as machine learning and natural language processing—used in research projects.



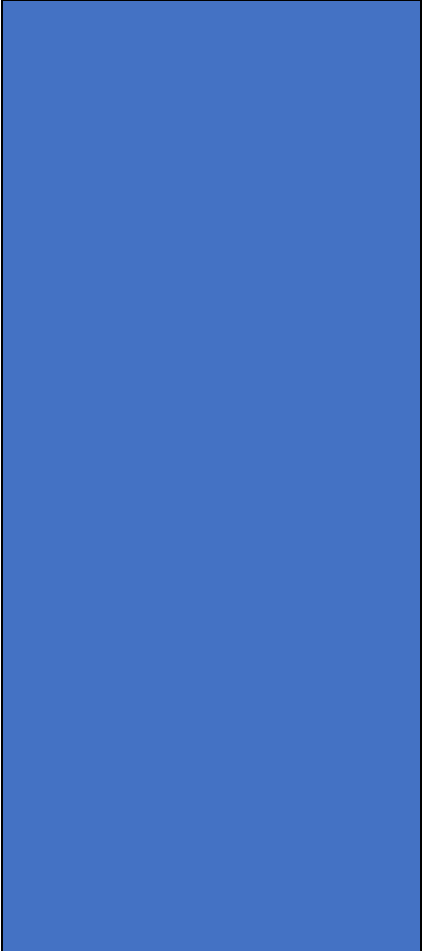
	<p>2. Skills</p> <ul style="list-style-type: none"> • <u>Uses</u> AI tools (e.g., Semantic Scholar, Connected Papers, Research Rabbit, Google Dataset Search, etc.) for literature review and data visualisation in higher education research projects; • <u>Develops</u> digital literacy skills through exploration and research on the use of AI tools. • <u>Critically analyses</u> the value of AI in research and in the development of educational innovations; • <u>Analyses</u> AI-generated outputs to evaluate the accuracy of research data. • <u>Designs</u> an AI- based research plan for a higher education research project, integrating principles of ethics and academic integrity. <p>3. Responsibility and Autonomy</p> <ul style="list-style-type: none"> • <u>Manages</u> their own research process using AI, making independent decisions regarding ethical issues in higher education. • <u>Reflects</u> on the risks and benefits of AI use, ensuring responsible application in research skills development. • <u>Develops</u> an ethical framework for the use of AI in research, <u>assumes</u> responsibility for the reliability of results, and <u>works</u> autonomously within a team environment.
<p>Workload Required to Achieve the Learning Outcomes</p>	<ul style="list-style-type: none"> • 7 ECTS credits 1 ECTS = 25 hours • Contact: 50 hours (synchronous online webinars) • Participation in electronic activities: 15 hours (discussion forums; practical tasks using AI platforms); • Asynchronous content and reading: 100 hours (video materials and readings on AI ethics and research tools; • consultations on developing the research project - 6 hours; • Assessment: 4 hours (project presentation and reflection).
<p>Level of Learning Experience of the Micro- credentials (with reference to National and European Qualifications Frameworks, where applicable: EQF, QF-EHEA;</p>	<ul style="list-style-type: none"> • National Qualifications Framework – Level 7; • EQF – Level 7; • QF-EHEA – Second Cycle.



<p>Types of Assessment</p>	<ul style="list-style-type: none"> • Formative: Written reports; Quizzes; Reflection; Participation in discussions; • Summative: Research project; Project presentation; Written examination.
<p>Mode of Participation in Learning Activities</p>	<p>Fully online (asynchronous + synchronous), delivered via the Moodle LMS platform.</p>
<p>Type of Quality Assurance Applied to the Micro-credentials</p>	<p>Internal quality assurance: see the institution’s Internal Quality Assurance Regulations;</p> <p>External quality assurance: authorised body granting the right to deliver: LEPL - National Center for Educational Quality Enhancement (NCEQE)</p>
<p>Admission/Entry Requirements for Micro-credentials</p>	<ul style="list-style-type: none"> • Full general education or an equivalent qualification; Document confirming English language proficiency at no lower than B2 level; • Transcript confirming completion of the field- specific core compulsory courses of a Master’s degree programme by the learner
<p>Stackability</p>	<p>This Micro - credential may be combined with Micro- credentials in Quantitative and Qualitative Research Methods and with Micro-credentials in Academic Work. Through the combination of these courses, it is possible to recognise up to 25 ECTS within the research component of relevant Master’s degree programmes in Higher Education Administration, Education Management, and Education Policy at the respective university.</p>
<p>Recognition Opportunities</p>	<p>On the basis of an agreement, recognition may also be granted within the Master’s degree programmes in Higher Education Administration, Education Management, and Education Policy of the relevant university by the NNLE Association for Higher Education Research.</p>
<p>Language of Delivery</p>	<p>Georgian (<i>Note: Part of the reading materials is available in English.</i>)</p>
<p>Contact Person(s) Information and Position(s)</p>	<p>Name(s), Surname(s), Position</p>

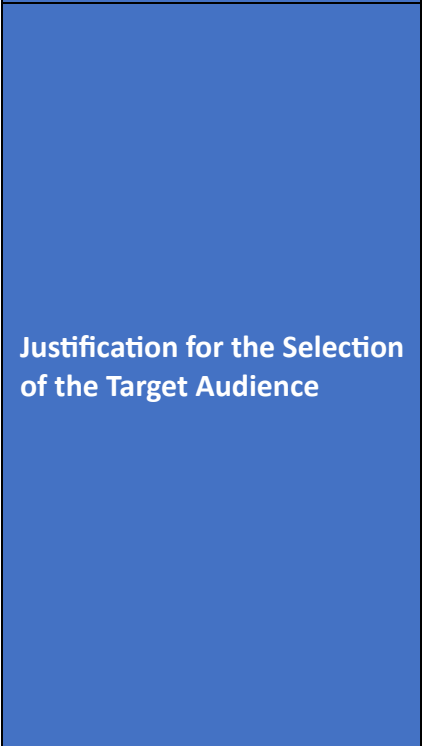


Contact E-mail Address(es)	E-mail address(es)
<p>Target Audience</p>	<p>Master’s students enrolled in education programmes who are interested in educational research; Representatives of associations and non- governmental organisations involved in research in the field of education; Representatives of sectoral ministries and their sub - agencies working in the areas of academic education and research.</p>
<p>Rationale for Micro-credentials Course</p>	<p>The development of Micro- credentials focused on the use of artificial intelligence is linked to several challenges present in the modern higher education system, which are clearly reflected in the knowledge, skills, and competencies of both graduates and current professionals.</p> <ul style="list-style-type: none"> • Firstly, the lack of research skills represents one of the most significant issues. Learners and employees often lack sufficient knowledge of contemporary digital tools, which limits their capacity for data processing and analytical work. This micro-credential is designed specifically to address this gap by providing practical experience in the use of AI- based platforms such as Semantic Scholar, Research Rabbit, Google Dataset Search, among others. • Secondly, issues related to ethics and academic integrity — including plagiarism, data confidentiality, and critical evaluation of reliability — often remain inadequately understood. The course aims to raise awareness in these areas, ensuring that participants not only acquire technical proficiency with AI tools, but also fully understand the principles of their responsible and ethical use. • Thirdly, a low level of digital literacy creates a major barrier for both research and professional activities. • This micro-credential supports the systematic development of digital literacy skills, enabling participants to acquire universal, transferable competencies and enhance their competitiveness in the labour market. <p><u>Gaps Addressed by the Micro-credentials:</u></p>



- Eliminating qualification deficits in the research component – Learners currently lack sufficient and structured knowledge of modern research technologies.
- Promoting innovative approaches – Traditional methodologies continue to dominate higher education and research, whereas the use of artificial intelligence enables faster, more effective, and large-scale data analysis.
- Enhancing compatibility with international standards – Mastery of contemporary research skills is essential for participation in the global academic environment, where AI is already an integrated practice.

Accordingly, the development of micro-credentials focused on the use of artificial intelligence for research competence development not only responds to current educational challenges but also ensures the advancement of knowledge, skills, and competencies aligned with labour market needs. This is evidenced by the fact that the course is being implemented at the request of the NNLE Association for Higher Education Research. The course creates a sustainable foundation for both individual academic and professional growth, as well as for the qualitative transformation of the education system.



**Justification for the Selection
of the Target Audience**

The definition of the above- mentioned target audience in Micro-credentials syllabus is advisable for several reasons. This group ensures the relevance of Micro- credentials, high levels of engagement, practical applicability, and may further enhance its stackability and combinability toward broader qualification pathways.

Since Micro- credentials focuses on the use of Artificial Intelligence (AI) in higher education for the development of research skills at Level 7 of the National Qualifications Framework, the following target groups are identified:

1. Students of Master’s Educational Programmes Interested in Educational Research.

Rationale: This group represents the direct beneficiaries of micro-credentials content, as students in education- related Master’s programmes frequently undertake research projects in higher education, where the integration of AI (e.g., data analysis,



literature search) is critical. Defining this target audience ensures proportionality of learning outcomes, meaning that micro-credentials can be applied as a modular component within Master's courses. This increases participation, as learners acquire transferable skills (e.g., digital literacy, critical analysis) that directly support them in the development of research projects.

2. Representatives of Associations Conducting Research in the Field of Education.

Rationale: This professional group (e.g., researchers of academic associations) regularly conducts studies on educational reforms, where the use of AI (e.g., ethical considerations, data visualization) is highly relevant. Target audience should be selected in collaboration with the industry, which in this case is ensured through the involvement of relevant associations. This guarantees both content relevance and practical applicability. This group has strong motivation to achieve the intended learning outcomes of Micro-credentials (e.g., AI-based research design), as they will be able to apply the acquired knowledge and skills directly in their professional research activities, thereby enhancing the Micro-credential's impact on educational policy.

3. Representatives of Non-Governmental Organisations

Rationale: NGOs working on educational programmes (e.g., research projects, reforms) frequently replace traditional research and analytical methods with AI tools. Accordingly, they require skills to address both ethical and practical challenges related to artificial intelligence.

Defining this target audience ensures flexibility and supports the application of Micro-credentials within non-formal education. The involvement of the non-governmental sector is particularly important, as it enables the use of learning outcomes (e.g., reflection and feedback) in community-based projects, thereby enhancing social impact and contributing to stackability toward broader qualifications.

4. Representatives of Sectoral Ministries and Subordinate Agencies Working in Academic Education and Research



Rationale: These bodies are responsible for developing education policy within their respective domains, which requires strengthened academic and research competencies. Their involvement is justified because the implementation of Micro-credentials in this direction supports capacity building for public-sector employees and the improvement of their research skills. It is noteworthy that recognising state bodies and agencies as accrediting/employing organisations strengthens the legitimacy of Micro-credentials and increases its international recognition potential. This group is motivated to participate, as they can apply the acquired knowledge in policy evaluation, contributing to Micro-credential's national-level impact and supporting the further development of prior learning recognition procedures.

XVI . Recognition of Micro-Credentials

Considering modern approaches to lifelong learning and employment, the recognition of Micro-credentials is becoming increasingly important. In this context, flexibility, transparency, and quality of teaching and learning play a decisive role.

Analysis of recommendations and guidelines developed by various international organisations and platforms enables us to identify general principles that may serve as a foundation for micro-credentials recognition policies.

In the European Union's definition of micro-credentials, one of the key elements is "portability," which implies that certificate holders must be able to store their credentials on a platform of their choice and share it with a relevant entity, which should be able to interpret the credential's content and verify its authenticity (Council of Europe, 2022).

First and foremost, the value of micro-credentials depends on the clarity of the learning outcomes. They must reflect the knowledge, skills, and competences acquired and be confirmed through fair and reliable assessment procedures. Clear formulation of learning outcomes ensures alignment of micro-credentials with the appropriate level of the National Qualifications Framework, and facilitates comparability with other programmes.



It is fundamentally important to ensure full accessibility of information about micro-credentials. Micro-credentials must be accompanied by essential elements — learning outcomes, workload, level within national and the European qualifications frameworks, form of assessment, date of issuance, issuing institution, and other relevant information. This provides a basis for understanding the content and context of micro-credentials and for its recognition at both national and international levels.

Quality assurance plays a decisive role in the recognition process. Internal and external evaluation mechanisms must be designed to ensure the reliability and legitimacy of micro-credentials. At the same time, quality assurance procedures should be proportionate and flexible so as not to become an excessive bureaucratic burden. A necessary prerequisite for developing recognition mechanisms is the establishment and implementation of internal and external systemic evaluation and quality assurance processes that guarantee the credibility of Micro-credentials and their alignment with national and international standards.

It is noteworthy that the qualification obtained within micro-credentials can be confirmed through a digital certificate or a badge.

16.1 On the Relationship between Micro-Credentials Certificates and Badges

Generally, micro-credentials certificates serve as documentation confirming short-term learning, demonstrating the extent to which an individual has acquired specific knowledge, skills, or competences. A badge may either be a digital representation of an already awarded certificate (e.g., a badge issued following the completion of an online course for which a certificate has been granted) or a standalone digital credential that recognises skills, achievements, or learning outcomes.

Both types of badges must include a visual element (i.e., a graphical representation of the credential) and metadata that are uniquely linked to the individual's skills. The metadata of a digital badge also includes information regarding the issuing institution, the holder (learner), and the publisher (the platform where the badge is stored). Only a badge that constitutes the original credential may be considered a micro-credential; other types of badges may merely serve as a digital representation of an already awarded certificate, offering only a visual depiction of the original credential.



One of the most essential principles is the portability and interoperability of micro-credentials. They should be usable across different systems, institutions, and countries, including through digital formats. This enhances the visibility of micro-credentials, ensures the security of information about them, and increases their value both for employers and educational institutions.

In the recognition process, the principle of best fit is crucial. This means that the intended learning outcomes of micro-credentials must be compared with the appropriate level of qualification within national or international qualifications frameworks, and alignment should be determined with the closest equivalent, allowing for flexible interpretation where necessary⁹.



Micro-credentials should also be integrated within broader educational and qualifications systems. They should not exist in isolation; rather, they must be stackable, transferable, and accumulatable so that they can contribute toward a more comprehensive qualification. This strengthens their practical value in both educational and employment contexts.

Furthermore, the credibility of micro-credentials depends on verifiable certification and validation mechanisms. Employers or other institutions must be able to confirm its authenticity, whether through a physical document or a digital format.

⁹ The University of Texas System. 2023. Integrating Microcredentials into Undergraduate Experiences.
<https://www.utsystem.edu/sites/default/files/sites/microcredentials/integrating-microcredentials-web.pdf>



Ultimately, the recognition system for Micro- credentials should be innovative, flexible, and development- oriented. As Micro- credentials represent a new form of learning, the recognition framework must be capable of integrating emerging approaches, technologies, and practices.

Considering the above principles, the recognition of Micro- credentials can become a coherent, transparent, and effective process that simultaneously responds to the needs of both the education system and the labour market.

The primary reference for the information that must be provided about Micro- credentials — particularly for recognition purposes — is the Council Recommendation of 16 June 2022 (No. 2022/C 243/02) on a European approach to Micro- credentials. It specifies the following mandatory standard elements:

- Identification of the learner/listener;
- Title of micro-credentials;
- Name of the delivering institution(s);
- Country/countries or region(s);
- Name of the awarding institution(s);
- Date of award;
- Learning outcomes;
- Estimated workload required to achieve the learning outcomes (in ECTS credits where possible);
- Level (and cycle, where relevant) of Micro- credentials (EQF, QF-EHEA), where applicable;
- Type of assessment;
- Mode of participation in the learning process;
- Type of quality assurance applied to support Micro- credentials.

The guide “Micro - Credentials for Higher Education Institutions – Peer - Supported Approaches in the European Higher Education Area”¹⁰, notes that there is a list of non- mandatory elements, such as entry requirements for Micro- credentials and its integration/stackability potential (i.e., whether Micro-credential is standalone, part of a larger programme, or can be accumulated with other micro-credentials).

Although these elements are not considered mandatory, it is important to provide information on the extent and framework within which micro-credentials can be recognised by the same

¹⁰ Micro-Credentials for higher education institutions approaches developed in the EHEA using peer support.2024. https://www.cimea.it/Upload/Documenti/Micro-credentials%20in%20HE_1.pdf.



institution or by another institution/provider under an agreement or partnership, how many credits can be recognised, and in which educational programme.

This information can be included directly on the certificate, in supplementary documentation attached to micro- credentials, or on the issuing institution's website.

Regardless of the format in which the information is provided, it should be transparent, reliable, and easily accessible to learners and the wider public. It should also consider a historical perspective, since a significant period of time may elapse between the attainment of a qualification and its recognition.

Evidence shows that the presence of standardised descriptions for micro- credentials in online portals and other information systems is crucial, as it enables learners/participants to make structured comparisons of programs and facilitates the recognition process between academic institutions and education providers¹¹ (OECD, 2023).

If all standard elements are properly presented, micro-credentials can be assessed in accordance with the principles of the Lisbon Recognition Convention (LRC), an international convention governing the recognition of qualifications within the European region (European Council and UNESCO, 1997).

If these elements are not transparently documented within micro- credentials, recognition is still possible through the Recognition of Prior Learning (RPL) procedure, that is, by validating learning outcomes, whether they originate from formal education or non - formal learning acquired prior to the validation requirement (ECTS Users' Guide, 2015).

To ensure transparency and completeness of information, and consequently the appropriate approach to recognition, the project "E- evaluate" was implemented under the coordination of the Netherlands' National Agency for International Education and Academic Recognition (NUFFIC). The project aimed to improve the academic recognition of online learning, develop practices for recognizing achievements and certifications from online courses (e.g., MOOCs and SPOCs), and enable higher education institutions to assess these fairly and consistently. Within the project, a methodology was developed¹² that identified seven criteria for verifying the completeness of

¹¹ OECD (2023). Public policies for effective micro-credential learning, OECD Education Policy Perspectives. No. 85, OECD Publishing, Paris. <https://doi.org/10.1787/a41f148b-en>.

¹² The Rise and Recognition of Micro-credentials Stacking Modules and the Future of the Qualification. 2022. <https://www.nuffic.nl/sites/default/files/2022-03/The%20rise%20and%20recognition%20of%20micro-credentials.pdf>



information:

1. Course quality;
2. Certificate verification;
3. Course level;
4. Learning outcomes;
5. Workload;
6. Methods of assessing learning outcomes;
Identification of the teacher/learner.

16.2 Digital Certification and the Use of Blockchain

Digital certificates can enhance portability, transparency of information, and verification of authenticity, which in turn facilitates their recognition process¹³ (MICROBOL, 2022). Digital tools support higher education institutions throughout the entire process of managing and issuing Micro- credentials, as part of a broader digitalization strategy, addressing both internal and external institutional needs.

The modern educational environment increasingly relies on digital technologies for recording and recognizing learning outcomes. In this context, mechanisms for digital certification and blockchain- based systems are particularly important, as they create a reliable, transparent, and flexible environment for the recognition of Micro-credentials.

Digital certification enables the official confirmation of learning outcomes in a format that is protected against falsification and unauthorized modification. The European Digital Credentials for Learning (EDC) platform, developed by the European Union, serves precisely this purpose, providing the production, storage, and sharing of certificates in a secure and legally reliable format. At the same time, the European Learning Model (ELM) defines how information should be structured within a certificate: where and when Micro- credentials was awarded, its workload and level characteristics, how the learning was assessed, and which institution issued the certificate. This standardization ensures the exchangeability of digital Micro- credentials certificates across different countries and systems.

¹³ MICROBOL (2022). Micro-credentials Linked to the Bologna Key Commitments. Common Framework for Micro-credentials in the EHEA. https://microcredentials.eu/wp-content/uploads/sites/20/2022/03/Micro-credentials_Framework_final-1.pdf



The integration of blockchain technologies further strengthens this process. Blockchain-based certificates are stored in a decentralized network, which prevents unauthorized data alteration and increases trust among both employers and educational institutions. Moreover, blockchain simplifies the validation process: an employer can verify within seconds whether a candidate has actually been awarded a specific Micro-credentials, without requiring additional documentation.

Blockchain can be used not only to ensure the authenticity of certificates but also to support the integration of lifelong learning and Open Educational Resources (OER), creating a more flexible and open learning model.

Thus, the implementation of digital certification and blockchain makes Micro-credentials recognition a faster, more transparent, and reliable process. It ensures the portability of Micro-credentials — certificates can be easily shared and recognized across different countries, education systems, and labour markets. Additionally, these technologies reduce bureaucratic burdens and enhance trust among all stakeholders.

At the same time, higher education institutions must ensure that their use of digital tools aligns with European and international standards, including principles of confidentiality and data protection.

Interoperability is a fundamental principle that enables the effective and reliable exchange of digital certificates between institutions, organizations, and jurisdictions.