



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



National Qualification Framework

Assoc. prof. dr. Inga Juknytė-Petreikienė

CBHE project: Establishing and development of Quality Assurance Centers at
Azerbaijan Universities

2019 02 11

London

Key concepts (LT case)

Learning Outcomes *are student's knowledge, understanding, abilities and attitudes upon completion of the study module (subject) and / or full study programme* (General requirements for the performance of studies, Article 1, paragraph 5.3, 2016 December 30 No. V-1168 Vilnius)

Competence *is ability to perform a certain activity on the basis of the entirety of acquired knowledge, abilities, skills and values* (Law on Education, 1991, Article 2, paragraph 5, 17 March 2011 (amendment)).

Qualification *is the entirety of a person's competences or professional experience and competences necessary for a certain activity, recognised in accordance with the procedure laid down by legal acts of the Republic of Lithuania* (Law on Education, 1999, Article 2, paragraph 6, 17 March 2011 (amendment)).

Key concepts (AZ case)

Learning outcomes - indicators demonstrating what a learner knows, understands and is able to do on completion of a learning process, as well as identifying knowledge, skills and competences.

Competence - the ability of an individual to perform a job properly; the ability to use knowledge, skills and personal, social and / or methodological abilities, in work or study situations and in professional and personal development; the ability to perform activities to the standards required in employment, using an appropriate mix of knowledge, skill and attitude.

(National Qualifications Framework for Lifelong Learning of the Republic of Azerbaijan. Decree No 311, July 18, 2018, Cabinet of Ministries Republic of Azerbaijan)

Key concepts (AZ case)

Qualification - a formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.

(National Qualifications Framework for Lifelong Learning of the Republic of Azerbaijan. Decree No 311, July 18, 2018, Cabinet of Ministries Republic of Azerbaijan)

Key concepts

Qualification									
Competence		Competence		Competence		Competence		Competence	
LO	LO	LO	LO	LO	LO	LO	LO	LO	LO
<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>	<i>Knowledge</i>
<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>	<i>understanding</i>
<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>	<i>abilities</i>
<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>	<i>attitudes</i>

Qualification is awarded by education institution based on the decision that the person has achieved the Learning Outcomes (LO) of the study programme.

National Qualification Framework

- Framework of Qualifications for European Higher Education Area (EHEA) – “Bologna Framework”, 2005.
- This framework:
 - Three cycles (including within national contexts, the possibility of intermediate qualifications)
 - Generic descriptors for each cycle (Dublin descriptors, 2005).
 - ECTS credit ranges in the first and second cycles (i.e. Bachelors and Masters levels).

Dublin Descriptors

First Cycle : Bachelor's Cycle [180 – 240 ECTS credits]

	Outcomes	ECTS Credits
First cycle qualification	<p>Qualifications that signify completion of the first cycle are awarded to students who:</p> <ul style="list-style-type: none"> have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study; can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study; have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues; can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy. 	Typically include 180-240 ECTS credits

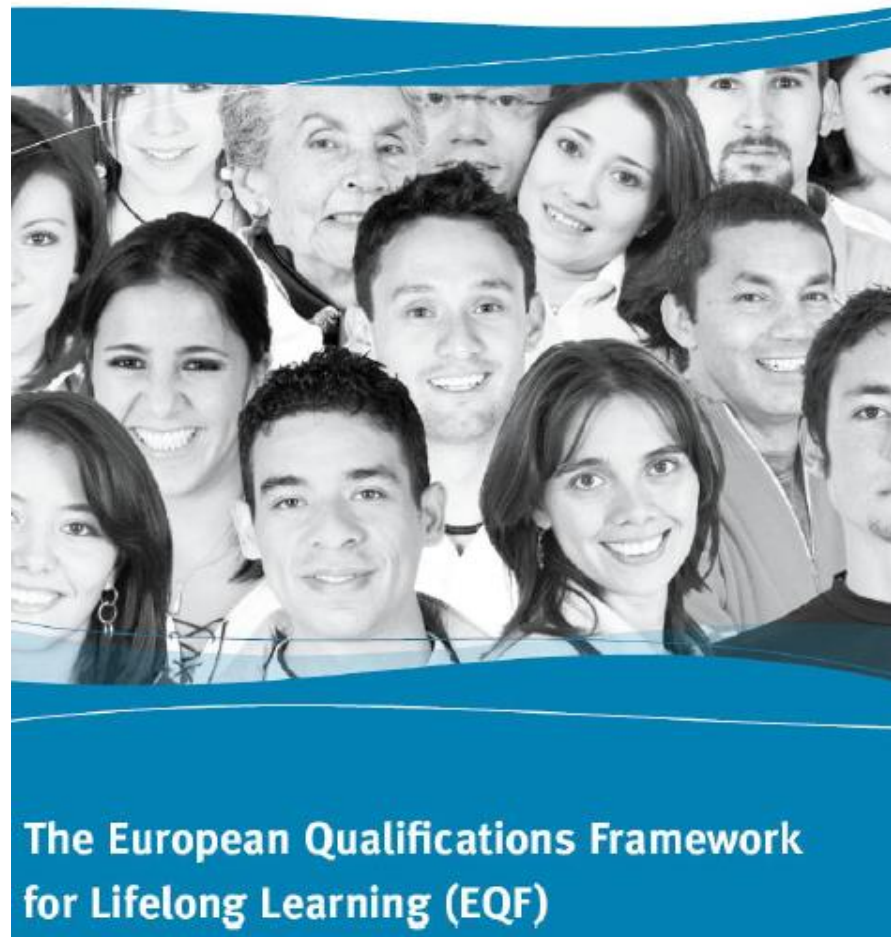
Second Cycle: Master's cycle [60 – 120 ECTS credits]

Second cycle qualification	<p>Qualifications that signify completion of the second cycle are awarded to students who:</p> <ul style="list-style-type: none"> have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context; can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study; have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments; can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously; have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous. 	Typically include 90-120 ECTS credits, with a minimum of 60 credits at the level of the 2 nd cycle
----------------------------	--	---

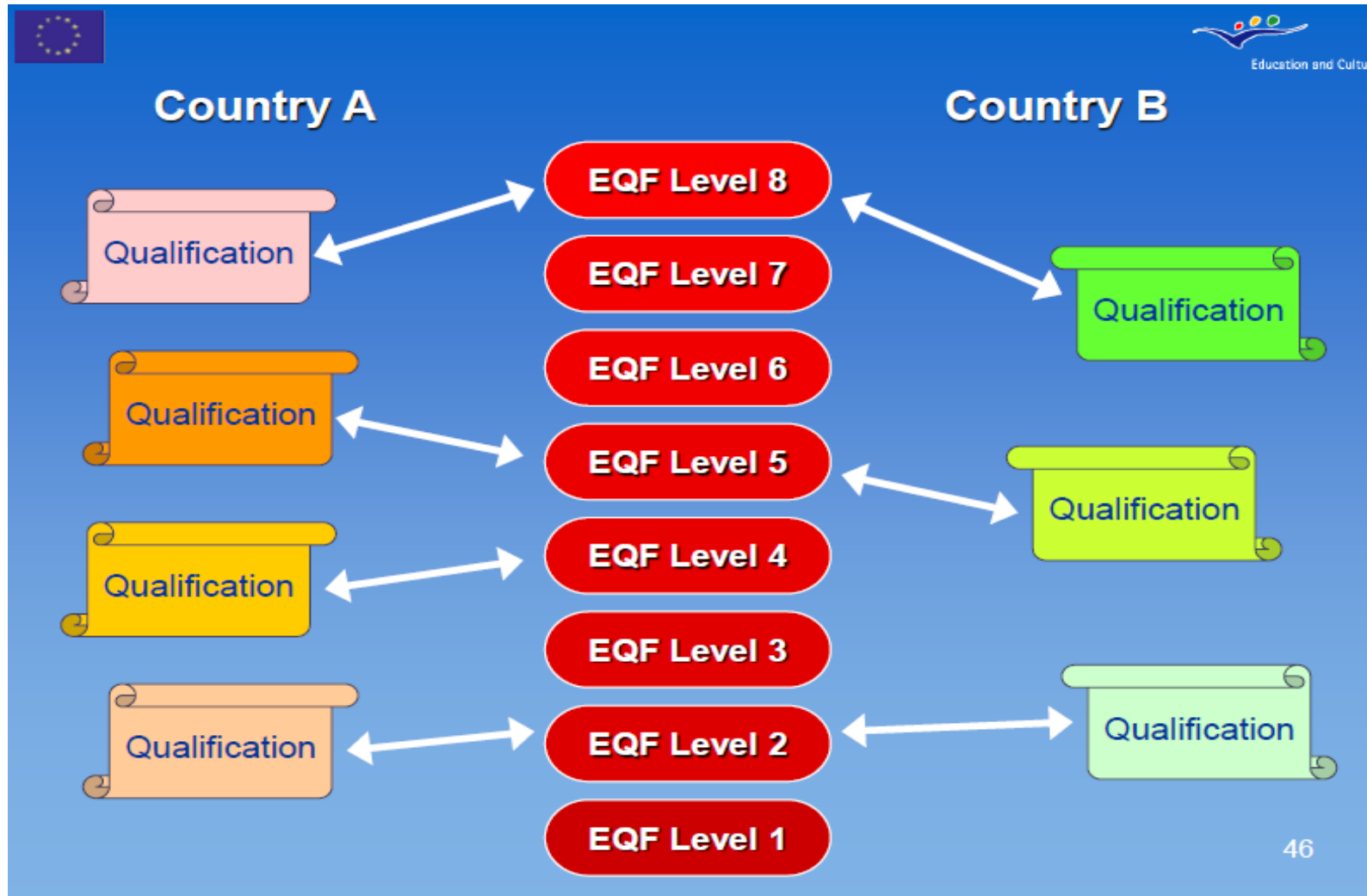
Third Cycle: Doctoral cycle [Number of ECTS credits not specified]

Third cycle qualification	<p>Qualifications that signify completion of the third cycle are awarded to students who:</p> <ul style="list-style-type: none"> have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field; have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity; have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication; are capable of critical analysis, evaluation and synthesis of new and complex ideas; can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise; can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society. 	Not specified
---------------------------	--	---------------

European Qualifications Framework for Lifelong Learning (EQF)



European Qualifications Framework for Lifelong Learning (EQF)



Relationship between EHEA and EQF

	EHEA Framework (Bologna)	European Qualifications Framework for Lifelong Learning (EQF)
Bachelor Degree	First cycle	Level 6
Masters Degree	Second cycle	Level 7
Doctorate	Third cycle	Level 8

Azerbaijani Qualification Framework



REPUBLIC OF AZERBAIJAN **CABINET OF MINISTERS**

DECREE
No 311

Baku, July 18, 2018

On the approval of the 'National Qualifications Framework for Lifelong Learning of the Republic of Azerbaijan'

To ensure the execution of the sub-item 3.3.3 of the 'Action Plan for the implementation of 'the State Strategy for the development of education in the Republic of Azerbaijan' approved by the Decree No 995, date of January 19, 2015 of the President of the Republic of Azerbaijan, Cabinet of Ministers of the Republic of Azerbaijan hereby **RESOLVES**:

"To confirm 'National Qualifications Framework for Lifelong Learning of the Republic of Azerbaijan' (See: Attached file).

**Prime Minister of the
Republic of Azerbaijan**

Novruz Mammadov

Azerbaijani Qualification Framework

- **Level 6** – bachelor's diploma; diploma of basic higher medical education; certificate on outcomes obtained through practical experience on basis of secondary-specialized education (or full secondary education); experience after bachelor's;
- **Level 7** – master's diploma; diploma of postgraduate medical education (residency); further education, experience;
- **Level 8** – Doctor of philosophy, Doctor of science diploma; further education; experience.

Azerbaijani Qualification Framework

AzQF Level	Knowledge and understanding	Skills	Autonomy and responsibility
1	2	3	4
Level 6	Has a systematic overview of the basic concepts, principles, theoretical principles and research methods of the field of study or work.	<p>Analyses facts, theories, principles and methods of the work or study area;</p> <p>Uses knowledge for creative solving of complicated tasks in interconnected areas;</p> <p>Performs complicated tasks assuming new approach;</p> <p>Is able to identify problems relating to the field of work or study and analyse and evaluate different solutions;</p> <p>Is able to select and use appropriate information, technologies and methods when solving problems of the field of work or study within given frameworks, and to model and assess the expected results on the basis of the information provided;</p> <p>Shows initiative, responsibility, leadership and teamwork skills in launching and implementation of projects;</p> <p>Is able to explain problems relating to the field of work or study in Azerbaijani language and in at least one foreign language orally or in written form, and is able to participate in professional discussions.</p>	<p>Works independently in complicated and unpredictable situations;</p> <p>Evaluates the role and consequences of his/her professional activities for the community, with consideration to social and ethical aspects</p> <p>Is able to professionally apply the acquired knowledge and skills in practice and undertakes continuous independent professional development;</p> <p>Guides work and study of team members.</p>

AzQF Level	Knowledge and understanding	Skills	Autonomy and responsibility
1	2	3	4
Level 7	<p>Has a systematic overview and broad knowledge of the concepts, theoretical principles and research methods of the field of work or study;</p> <p>Has in-depth knowledge in a specific field of (specialized) study or work.</p>	<p>Solves unpredictable and complicated tasks in his/her professional area;</p> <p>Initiates and plans relevant activities and methods; analyses their current and perspective consequences;</p> <p>Is able to independently and creatively identify and formulate problems related to the field of work or study; is able to solve them within given timeframes and within limited information;</p> <p>Is able to select and use appropriate technologies and methods when solving the problems of the field of work or study, and to model and assess the expected results;</p> <p>Is able to critically evaluate his/her activities when solving problems of the field of work or study;</p> <p>Is able to present and justify problems relating to the field of work or study orally or in written form in the Azerbaijani language and one foreign language and is able to participate in relevant discussions of specialists and non-specialists.</p>	<p>Works independently in complicated and unpredictable situations requiring innovative approach;</p> <p>Is responsible for the strategic actions of organisations or teams;</p> <p>Is able to convey his/her knowledge to others by teaching, training, or in other methods;</p> <p>Is able to act ethically in complex situations, is aware of the ethical aspect and possibilities, restriction and social role of his/her activities;</p> <p>Is able to assess his/her needs, and the needs of others for continuous training and professional development, as well as to use the effective methods necessary for independent study.</p>

AzQF Level	Knowledge and understanding	Skills	Autonomy and responsibility
1	2	3	4
Level 8	<p>Understands the meaning and scope of the existing knowledge and scientific methods of the field of his/her occupation and the need to extend, re-evaluate, and formulate them as necessary;</p> <p>Has a systematic overview and in-depth and up-to-date knowledge within his/her specialized professional activities;</p> <p>Masters the existing scientific methodology and understands its use in research;</p> <p>Is able to contribute to creation and synthesis of fundamental and practical scientific knowledge.</p>	<p>Is able to initiate a new solution to issues of crucial importance for or the relevant scientific area;</p> <p>Is able to provide updated scientific explanation of economic, technical and technological works of crucial practical significance;</p> <p>Solves crucial problems in professional area formulating new knowledge;</p> <p>Contributes to the development of scientific and academic knowledge;</p> <p>Is able to independently design, implement, and critically evaluate research and development projects that lead to new knowledge and methodical solutions;</p> <p>Initiates, plans and implements strategic research and development-related events that widens the realm of science and knowledge and results in significant changes;</p> <p>Is able to participate orally or in written form in professional discussions, as well as to publish original research results in international academic publications or to present to international audience;</p> <p>Is able to act independently in implementing complex scientific projects inside the country, as well as internationally;</p> <p>Is able to ensure a solution to a new and major scientific problem of crucial social-cultural or economic importance through his/her scientific research;</p> <p>Is able to develop new theoretical arguments that can be considered a</p>	<p>Writes and defends a dissertation in order to obtain doctor of philosophy and doctor of science scientific degrees;</p> <p>Works independently in complicated, undefined situations requiring excellent knowledge and skills, as well as new strategic approach;</p> <p>Is responsible for the planning and development of the professional area;</p> <p>Evaluates independently innovative and complicated ideas regarding professional area;</p> <p>Demonstrates a sensitive approach towards ethical assessment in science, as well as possibilities and limitations of people in the use of scientific achievements;</p> <p>Has the ability to identify personal needs related to the acquisition of new competences;</p> <p>Supports the studies of others both in education and training context, as well as on a wider social level;</p> <p>Is able to independently identify strategy for planning and undertaking scientific researches;</p> <p>Participates in the management of complex social, production and scientific processes;</p> <p>Is able to take responsibility for the activity of an organization or large team;</p> <p>Is responsible for scientific outcome published at area, country, as well as</p>

Relationship between NQF, competences and LOs

Competences and the learning outcomes of study programme and each subject should be corresponding to the level of National Qualification Framework



AZ State standards on Chemistry / Physics teacher (Master)

Study Programme of Bachelor level “050111
– Chemistry teacher”

to master legal and ethical norms (CGC-4)

Study Programme of Master level “060110 –
Chemistry teacher”

to have legal knowledge and ethic norms (CGC-5);

AZ State standards on Chemistry / Physics teacher (Master)

AZ QF Level 7

Knowledge and understanding

Has a **systematic overview and broad knowledge** of the concepts, theoretical principles and research methods of the field of work or study;

Has **in-depth knowledge** in a specific field of (specialized) study or work.

PC: to have basic knowledge in the different fields of chemical science and to determine the importance, content and training-education significance of chemistry (PC-2)

PC: to know the scientific basics of teaching materials and to be able to apply it at high level (PC-7)

- too low for the 7 level of AZ NQF

PRACTICAL ACTIVITY (20 min.)

- Please, evaluate does the general and professional competences described in the State Standard of study programme (at Bachelor and Master level) fully match level 6 and level 7 of Azerbaijanian QF.

PRACTICAL ACTIVITY (20 min.)

2. Specialty characteristics and competences

2.1. Specialty characteristics of a bachelor student

Bachelor student

- shall be ready to work in the field of their specialty in accordance with their fundamental and professional training, as well as to do Master's degree in their specialty;
- shall be able to perform in any manufacturing facilities, organizations, departments, institutions, unions and other fields regardless of their type of ownership and subordination;
- shall be able to work in various education institutions (save for scientific, scientific-pedagogical areas in higher education institutions) in compliance with the existing rules.

2.2. Requirements on the competences graduates shall achieve as a result of the study programme

2.2.1. Graduate shall master the following culture-general competences (CGC):

- to work in team (CGC-1);
- ability to interact with specialists of other fields (CGC-2);
- ability to work in international environment (CGC-3);
- to master legal and ethical norms (CGC-4);
- to preserve healthy lifestyle (CGC-5);
- to propose new ideas and justify them (CGC-6);
- to be ready for intercultural dialogue (CGC-7);
- to be tolerant of criticism and self-criticism (CGC-8);
- to show attentiveness and to take on responsibility in difficult circumstances (CGC-9);
- ability to read and to translate simple texts and to express themselves (CGC-10);
- ability to use ICT (CGC-11);
- always strive to self-develop and improve one's professionalism (CGC-12);
- to properly and briefly express oneself (CGC-13);

2.2.2. Graduate shall master the following professional competences (PC):

On manufacturing-pedagogical performance:

- to know the key issues of subjects related too one's activity and their specific area of application (PC-1);
- to apply ICT in one's professional activities (PC-2);
- to know the meaning of specialty-related concepts and terms (PC-3);
- ability to set certain tasks, to choose and apply relevant methods (PC-4);
- ability to develop scientific-methodological and educational means (PC-5);
- ability to use devices and equipment, visual aids in teaching (PC-6);

PRACTICAL ACTIVITY (20 min.)

What are inconsistencies between LOs of State Standard and AZQF?

What should be improved and how?