

## OCCUPATIONAL QUALIFICATION STANDARD

## Landscape Architect, EstQF Level 7

An occupational qualification standard is a document which describes the set of skills, knowledge and attitudes, i.e. competence requirements, needed to successfully accomplish duties. Occupational qualification standards are used for compiling curricula and awarding qualifications.

Occupational title	Level of Estonian Qualifications Framework (EstQF)
Landscape Architect, EstQF Level 7	7

# Part A DESCRIPTION OF WORK

## A.1 Description of work

The object of the work of a landscape architect is a landscape, i.e. an outdoor space in its entirety. The work of a landscape architect involves both natural environments and environments under construction, regardless of their actual or legal status.

The aim of the work of an interior architect is to create a spatial whole for a landscape as an outdoor space. They plan measures and activities to promote, plan, create or restore the environment, taking into account cultural, social, economic, technical, safety-related, sustainability-related and ecological aspects.

Exterior design by a landscape architect is considered architectural design.

The most common objects for the creation of architectural parts<sup>1</sup> of outdoor construction design documentation that require the competence of a landscape architect are:

- ? road and street space and accompanying civil engineering works;
- ? squares connected to buildings or separate squares;
- ② outdoor areas, courtyards, gardens and roof gardens of residential areas, apartment buildings, schools, kindergartens, etc.;
- 🛾 surroundings of communal, manufacturing and agricultural structures; gardens, parks, green spaces, urban forests;
- [?] playgrounds, sports fields and accompanying sports and recreational structures, exterior areas of stadiums, hiking and educational trails, recreation areas, environmental education areas;
- [?] important infrastructural objects which require an architectural design, such as irrigation and drainage structures; [?] protective planting next to roads, manufacturing areas, etc.;
- ? shore and swimming areas, promenades and bank protection structures or other structures in public water bodies necessary to serve buildings located on the shore;
- 2 sports and recreational structures which serve a beach but are not permanently connected to the shore;
- ② outdoor structures incl. stairs, ramps, fences and gates (including those that require excavation), terraces (incl. those that are over 1 m high), awnings (incl. those with over 20 m² of construction area), sculptures, monuments, fountains and other such structures (incl. those over 5 m high designed for the public), flagpoles, signs, information boards:
- ? cemeteries;
- [?] landscape objects, outdoor structures or small buildings under protection.
- A landscape architect creates, leads or participates in all types of planning according to their competence.

Landscape Architect, Level 7 is a responsible specialist who creates, assesses or leads the planning of spatial environments on land or water, in cities and other settlements, and solutions for outdoor construction projects and assesses landscape (both natural and constructed).

A landscape architect conducts expert assessments of landscape architecture projects and audits of solutions for landscape architecture, not including outdoor space of high public interest or its structures<sup>2</sup> or plans<sup>3</sup>.



A landscape architect at this level is able to act as a design project manager, guide their colleagues and lead the work of working groups.

<sup>1</sup> EVS 932 standard 'Construction Design Documentation'

<sup>2</sup> e.g. outdoor space and structures, not including parts of their construction, that are located in areas of cultural and historical value, under protection or remarkable on account of their history, architectural design, infrastructural value or location.

<sup>3</sup> e.g. plans for areas located in areas of cultural and historical value, plans for areas that are under protection or remarkable on account of their infrastructural value or location.

#### Δ 2 Tacks

- A.2.1 Creating an outdoor architectural solution for a construction project as a whole in all its stages
- 1. Analysis of primary conditions and creation of a programme
- 2. Creation of spatial visions, concepts and sketches
- 3. Creation of the outdoor architectural part of a construction project
- 4. Finalisation and documentation
- 5. Cooperation with interested parties and relevant agencies
- 6. Designer's supervision and participation in the process of adopting the outdoor space and its structures for use
- 7. Conducting expert assessments and audits

### A.2.2. Creating different types of plans

- 1. Inspection of the planned area, spatial analysis and establishing the primary positions of a plan
- 2. Creation of spatial visions and sketch solutions for plans
- 3. Taking the opinions of the public, interested persons and relevant public institutions into account through a balanced spatial solution
- 4. Creation of a spatial whole for the planned area
- 5. Introduction and definition of the spatial whole of a plan through cooperation and disclosure
- 6. Finalisation of the plan

A.2.3 Landscape research, inventory, assessment and maintenance planning

- 1. Planning the work process
- 2. Collection of source data, incl. fieldwork
- 3. Data analysis
- 4. Drawing conclusions
- 5. Drafting and formulation of the final document

#### A.3 Work environment and specific nature of work

A landscape architect works both in an office and outdoors on site. The work is mostly creative and can periodically cause mental stress. The workload may be unevenly distributed. Fieldwork may require moderate physical effort.

## A.4 Tools

A landscape architect uses regular office equipment, a variety of communication technology, office, photo-editing, modelling and design software, maps and model-making tools. They also use measuring and documenting tools (e.g. a camera, tree callipers, rangefinder and hypsometer) in fieldwork.

## A.5 Personal qualities required for work: abilities and characteristics

Mental capabilities: spatial cognition, analysis, imagination and composition, logical thinking and the ability to generalise.

Personal qualities: ability to cooperate, take responsibility and communicate; discipline, creativity and decision-making skills.

#### A.6 Professional preparation

A person working as a landscape architect has a Master's degree or higher education equivalent thereto in their specialty and work experience as a landscape architect.



## A.7 Most common occupational titles

Landscape architect, landscape architect/consultant, urban landscape architect, landscape architect/planner, architect/planner, city gardener, urban architect, urban planning specialist, landscaping and maintenance specialist, etc.

## A.8 Regulations governing profession

- a) Planning Act
- b) The Planning Code and its relevant implementing acts (incl. MEAC regulation no. 97 'Requirements for Building Design Documentation' and MEAC regulation no. 61 'Detailed Divisions of Areas of Activity That Require Proof of Qualification and the Specific Qualification Requirements Corresponding to Those Areas of Activity')
- c) Construction design documentation standard EVS-932
- d) Other international agreements, legislation and standards governing the landscape architecture sector.

## Part B COMPETENCY REQUIREMENTS

## **B.1 Structure of occupation**

Competences B.2.1-B.2.3 and B.2.4 (recurring competence) must be certified when applying for the qualification of Landscape Architect, Level 7.

## **B.2 Competences**

#### **MANDATORY COMPETENCES**

# **B.2.1 Creating an outdoor architectural solution for a construction project as a whole in all its stages**

**EstQF Level 7** 

#### Performance indicators:

- 1. Determines and analyses primary conditions based on the location and the user's needs and possibilities and creates a primary task and programme for outdoor design.
- 2. Creates spatial visions, concepts and sketch solutions based on the primary task, producing a functionally, socially, ecologically, constructively and technically suitable, safe, aesthetically and economically balanced and sustainable environment.
- 3. Creates solutions for the outdoor architectural parts of preliminary, main and work projects based on sketches and in accordance with good practice, the requirements of and other parts of the construction project. Ensures the integrity of a spatial solution and its preservation throughout the design process.
- 4. Formulates the graphic, textual and illustrative parts of a construction project in a clear, legible and comprehensible way and according to the requirements for formulating design documentation.
- 5. Determines the needs of the parties involved and finds reasonable and balanced solutions in cooperation with relevant agencies.
- 6. Performs designer's supervision in order to protect copyright. Clarifies and adds to the project throughout the construction process, if needed. Ensures the integrity of a spatial solution and its preservation throughout the construction process.

Creates instructions for the maintenance and use of outdoor space and its structures, taking into account the requirements and instructions of the manufacturers of products and materials.

7. Conducts expert assessments of landscape architecture projects and audits of solutions for landscape architecture, not including outdoor space of high public interest or its structures or plans.

### Knowledge:

- 1) general cultural history: development of local cultural landscapes and their changes over time, basic connections between people and their physical and socio-cultural environments; changes in values, attitudes, beliefs and behaviour over time;
- 2) history, theories, typologies and principles of spatial composition in urban design, landscape architecture and architecture and principles of empirical and construction sciences and construction techniques and technologies related to architecture;



- 3) principles of spatial composition;
- 4) principles of landscape formation and function based on a landscape as a whole;
- 5) ecological processes, principles of planning a sustainable environment and landscape maintenance;
- 6) development and change in cultural landscapes, social sciences. Connections between people and physical and socio-cultural space;
- 7) types of land use, their development over time, internal function and territorial demands, mutual impact and compatibility;
- 8) principles of the reconstruction, restoration, conservation and maintenance of outdoor spaces and the infrastructure connected to them;
- 9) principles of the design process and project management, requirements of project stages;
- 10) generally accepted methods of inclusion;
- 11) legislation and other technical norms governing design;
- 12) generally accepted theories of planning and developmental directions of society; principles and special cases of the planning process, differences resulting from the degree of accuracy of a plan;
- 13) safety techniques, incl. fire safety, direct and indirect safety of outdoor space (landscaping, railing, stairs, sports grounds and playgrounds, lighting solutions, etc.), traffic safety (car parks, non-motorised transport routes, etc.), material safety and child safety;
- 14) ergonomics;
- 15) universal design and a barrier-free environment;
- 16) knowledge of solutions for people with special needs.

## **B.2.2 Creating different types of plans**

**EstQF Level 7** 

## Performance indicators:

- 1. Analyses the primary situation of the plan, taking long-term trends and the needs of spatial, economic, social, natural, historical, cultural and other types of environments into account. Creates initial positions for the creation of a spatial whole for a plan, taking the needs and interests of as many members of society into account as possible.
- 2. Creates a variety of spatial visions, strategies and sketch solutions for plans based on initial positions, finding solutions that are functionally, aesthetically and economically balanced and necessary for society.
- 3. Comprehends the needs of the parties involved and participates in finding balanced solutions to any underlying issues. Cooperates with the public, interested persons and relevant public institutions using appropriate forms of cooperation.
- 4. Creates a spatial whole for a plan in conjunction with other parts of the plan whilst bearing in mind previous analyses, visions and sketch solutions. Plans out the prerequisites of and opportunities available for a plan to create an integral and high-quality living environment.
- 5. Introduces, explains and justifies the solution for the plan and answers in a comprehensible way any questions raised. Ensures the availability of information and knows how to highlight the key points of a discussion based on the purpose of the plan.
- 6. Formulates or organises the formulation of the graphic, textual and illustrative parts of a plan in a clear, legible and comprehensible way.

## Knowledge:

- 1) history, theories, typologies and principles of spatial composition in urban design, landscape architecture and architecture and principles of empirical and construction sciences and construction techniques and technologies related to architecture:
- 2) principles of landscape formation and function based on a landscape as a whole;
- 3) ecological processes, principles of planning a sustainable environment and landscape maintenance;
- 4) development and change in cultural landscapes, social sciences. Connections between people and physical and socio-cultural space;
- 5) types of land use, their development over time, internal function and territorial demands, mutual impact and compatibility;
- 6) generally accepted theories of planning and developmental directions of society; principles and special cases of the planning process, differences resulting from the degree of accuracy of a plan;
- 7) principles of the reconstruction, restoration, conservation and maintenance of outdoor spaces and the infrastructure connected to them;
- 8) methods of landscape object research, inventory and assessment;
- 9) generally accepted methods of inclusion;
- 10) the economic and business environment and their general trends;



- 11) legislation and normative documents governing planning;
- 12) safety techniques, incl. fire safety, direct and indirect safety of outdoor space (landscaping, railing, stairs, sports grounds and playgrounds, lighting solutions, etc.), traffic safety (car parks, non-motorised transport routes, etc.), material safety and child safety;
- 13) ergonomics;
- 14) universal design and a barrier-free environment.

## B.2.3 Landscape research, inventory, assessment and maintenance planning

**EstQF Level 7** 

#### Performance indicators:

- 1. Plans the work process based on the task, chooses the appropriate methodology, involves experts where necessary and determines the need for coordination.
- 2. Collects source data according to the task, using relevant databases, expert opinions, etc. Performs fieldwork, obtaining approval where necessary.
- 3. Analyses data received from databases, experts and/or fieldwork using relevant and appropriate methodologies and methods.
- 4. Draws conclusions based on the results of analysis, taking into account the primary task, individual interest groups and the specific nature of the subject, using occupational knowledge.
- 5. Drafts a final research report, report, maintenance plan, inventory or other document based on the initial task, formulating its graphic, textual and illustrative parts in a clear, legible and comprehensible way.

#### Teadmised:

- 1) linnaehituse, maastikuarhitektuuri, arhitektuuri ajalugu, teooriaid, tüpoloogiad ja ruumikompositsiooni põhimõtted ning arhitektuuriga seotud reaal- ja ehitusteaduste, -tehnikate ja -tehnoloogiate alused;
- 2) erinevad maakasutustüübid, nende areng läbi aegade, sisemine toimimine ja territoriaalsed nõudmised, omavaheline mõju ning sobivus;
- 3) ökoloogilised protsessid, säästliku keskkonna kavandamise ja maastiku hooldamise põhimõtted;
- 4) välisruumi ja välisruumiga seotud taristu rekonstrueerimise, restaureerimise, konserveerimise ja hoolduse põhimõtted;
- 5) maastiku kujunemise ja toimimise põhialused lähtudes maastikust kui tervikust;
- 6) maastikuobjektide uurimis-, inventeerimis-, hindamis-, viisid ja -meetodid;
- 7) üldised teadmised taimebioloogilistest teadustest (sh botaanika, dendroloogia, fütopatoloogia),

keskkonnateadustest, maastikuteadusest, geodeesiast ja topograafiast, mullateadusest;

- 8) looduslike süsteemide füüsilised ja biootilised alused;
- 9) kultuurmaastike tekkimine, muutumine;
- 10) teadmised puittaimede hindamisest.

## Knowledge:

- 1) history, theories, typologies and principles of spatial composition in urban design, landscape architecture and architecture and principles of empirical and construction sciences and construction techniques and technologies related to architecture:
- 2) types of land use, their development over time, internal function and territorial demands, mutual impact and compatibility:
- 3) ecological processes, principles of planning a sustainable environment and landscape maintenance;
- 4) principles of the reconstruction, restoration, conservation and maintenance of outdoor spaces and the infrastructure connected to them;
- 5) principles of landscape formation and function based on a landscape as a whole;
- 6) methods of landscape object research, inventory and assessment;
- 7) general knowledge of plant biology sciences (incl. botany, dendrology and phytopathology), environmental sciences, landscape science, geodesy, topography and soil science;
- 8) the physical and biotic basis of natural systems:
- 9) development and change in cultural landscapes;
- 10) knowledge of the assessment of woody plants.

#### **RECURRING COMPETENCES**

B.2.4 Recurring competences of Landscape Architect, Level 7	EstQF Level 7
Performance indicators:	



- 1. Negotiates using a variety of communication techniques. Determines and analyses the interests and needs of the individual parties involved and finds sensible and balanced solutions to any underlying issues that may arise. Is able to handle contradictory and non-standard situations.
- 2. Creates the outdoor architecture part of a construction project as a whole in cooperation with the creators of other parts of the project. Is familiar with the specific nature of other parts of the construction project and their effect on the outdoor part of the project.
- 3. Leads and organises the work of a working group: delegates tasks, motivates and consults team members and solves any problems that arise during the process.
- 4. Creates trust through the full and precise execution of their work. Acts in accordance with agreements, behaves consistently and takes responsibility for their decisions and actions.
- 5. Is informed about and takes into account innovations, knowledge and best practice in their sector and specialty and the requirements of legal acts.
- 6. Analyses their experience and skills and assesses their need for self-improvement. Participates in further training and takes advantage of opportunities to further themselves professionally.
- 7. Participates in competitions and exhibitions in their area of specialty. Contributes to the development of the sector through a variety of activities, e.g. participating in law-making, tutoring students, translating professional literature, writing professional articles, conducting training activities, participating in the work of juries and creating assignments for competitions.
- 8. Uses a computer daily for information processing, safety and problem-solving at the Independent user level, for communication at the Advanced user level and for content creation at the Basic user level (see Annex 1 Scale of self-assessment in digital competence). Uses the software solutions, incl. CAD software, required for working in their specialty.
- 9. Is fluent in Estonian and uses correct occupational terminology. Is able to communicate professionally in at least one foreign language at the B1 level (see Annex 2).
- 10. Comprehends the nature of the role of a landscape architect, their profession and ethics in society, takes social factors into account and follows the requirements of occupational ethics in their activities.

#### Knowledge

- 1) general cultural history: development of local cultural landscapes and their changes over time, basic connections between people and their physical and socio-cultural environments; changes in values, attitudes, beliefs and behaviour over time:
- 2) the economic and business environment and their general trends;
- 3) legislation and normative documents governing the sector;
- 4) generally accepted methods of inclusion;
- 5) connections between people and physical and socio-cultural space;
- 6) safety techniques, incl. fire safety, direct and indirect safety of outdoor space (landscaping, railing, stairs, sports grounds and playgrounds, lighting solutions, etc.), traffic safety (car parks, non-motorised transport routes, etc.), material safety and child safety;
- 7) code of ethics:
- 8) basics of teamwork and management.

# Part C GENERAL INFORMATION AND ANNEXES

C.1 Information concerning compilation and certification of occupational qualification standard and reference to classification of occupations		
1. ID of occupational qualification standard in register of occupational qualifications	22-16052018-6.2/5k	
2. Occupational qualification standard compiled by:	Nele Nutt, Eesti Maastikuarhitektide Liit Sulev Nurme, Artes Terrae OÜ Toomas Põld, Loovmaastik OÜ Toomas Muru, Eesti Maaülikool Merlin Kalle, Hendrikson & Ko OÜ Edgar Kaare, Eesti Maastikuarhitektide Liit	
3. Occupational qualification standard approved by:	Architecture, Geomatics, Construction and Real Estate	



4. No. of decision of Sectoral Council	13	
5. Date of decision of Sectoral Council	16.05.2018	
6. Occupational qualification standard valid until	19.02.2023	
7. Occupational qualification standard version no.	5	
8. Reference to International Standard Classification of Occupations (ISCO 08)	2162 Landscape Architects	
9. Reference to European Qualifications Framework (EQF)	7	
C.2 Occupational title in foreign language		
English:	Landscape Architect, EstQF Level 7	
C.3 Annexes		
Lisa 1 Scale of self-assessment in digital competence		
Lisa 2 Language skills level descriptions		