

## **2.12. Architect assistant profession standards**

### **2.12.1. General questions**

1. Name of profession – architect assistant.
2. Profession code – 2161 02.

### **2.12.2. Description of the employment**

1. Level of professional qualification –fourth level of professional qualification.
2. Summary of basic tasks of professional activity:
  - Architecture assistant is specialist having first level higher education in architecture, acquiring basic designing principles and universal design principles, being competent in architecture, town planning and art history, in traditional and modern building materials and technologies as well as in other areas related to composition of dimensional environment and having a self-dependent skills in survey of objects and in making survey drafts, working out the constructive nodes of architecture of buildings including the specification of materials and details, in preparing the cost estimates documentation, in graphical summarization of information and processing the documentation of construction plans using computerized designing programs and other technologies as well as in presentation materials making.

Architecture assistant is able to work in architects' office, state or local government institution providing building processes supervision and control; valuation of real estates, building materials and building utilities and equipments production and trade agencies.

### **2.15.3. Professional competencies required for professional activity realization**

1. Ability to make the projecting of specific objects under the guidance of architect according to the laws and regulations of Republic of Latvia regulating the construction process and legal standards of construction of European Union as well as universal design principles.
2. Ability to product, form graphically and complete the documentation of construction design according to the scope and order defined in laws and regulations.
3. Having a good knowledge in cooperation principles of different construction designing fields' specialists and their solutions in developable construction design documentation according to the architectonically dimensional solution of object as well as solving of problems forming during the designing and making the decision adequate for own responsibility.
4. Having a good knowledge in construction processing work and raw materials including basic principles of geodesic, geologic, topographic work and metrology.
5. Ability to work in team and unaided.

6. Ability to make measurements of object and drawings of measurement.
7. Ability to evaluate and analyze economic factors and power efficiency factors of the project and provide eligibility of the project solution to requirements of protection the environment, accessibility to the environment, fire security and labor safety rules.
8. Ability to be competent in legal system of Republic of Latvia.
9. Ability of focused usage of information and communication technologies during the projecting process.
10. Ability to communicate in professional level in official language and at least two foreign languages.

#### **2.15.4. Required skills for realization the basic tasks of professional action**

1. Understanding and developing under the guidance of architect and completing of the documentation of construction plan and preparing relevant visual materials by using professional computer programs and other technical tools.
2. Compiling, analyzing and using the information needed for projecting.
3. Adapting the requirements of construction standards of Latvia in compliance with object to be projected and choosing appropriate building materials as well as building equipment and designing systems.
4. Evaluating building constructions and utilities of the developing object in architectonic dimensional solution.
5. Calculating the costs of construction works, evaluation of economic factors, and relative analysis of versions and selection of the optimal version.
6. Using the basic principles of standardization for construction solutions optimization.
7. Evaluating own professional work and qualification critically and improve it.
8. Official language skills.
9. Ability to use the professional terminology in official language and at least in two more languages.
10. At least two foreign language skills in communication level.
11. Knowledge and usage of universal design principles.

#### **2.15.5 Required knowledge for doing the basic tasks of professional action**

1. Required knowledge for doing the basic tasks in conception level:
  - 1.1 Higher mathematics;
  - 1.2 Construction chemicals;
  - 1.3 Building thermal physics;
  - 1.4 Structural analysis;
  - 1.5 Strength of materials;
  - 1.6 Building utilities;
  - 1.7 Electric power security;
  - 1.8 Law basics;
  - 1.9 Sociology basics.
2. Required knowledge for doing the basic tasks of professional action in understanding level:
  - 2.1 Basic principles for making dimensional environment;
  - 2.2 Basic principles for architecture and interior projecting, renovation and restoration of buildings;

- 2.3 Basic principles for territory and town planning;
  - 2.4 History of architecture, town planning and art, modern architecture;
  - 2.5 Typology and parts of building;
  - 2.6 Detail equipments of side rooms;
  - 2.7 Composition;
  - 2.8 Basic principles of universal design;
  - 2.9 Building materials/ theory of architectural materials;
  - 2.10. Building constructions (reinforced concrete and stone constructions, metal constructions, wood and synthetic material constructions);
  - 2.11. Building laws and regulations;
  - 2.12. Geodesy;
  - 2.13. Engineering of geology;
  - 2.14. Technology and organizing of construction works;
  - 2.15. Fire security;
  - 2.16. Civil defence;
  - 2.17. Professional terminology in official language and at least more in two languages.
3. Required knowledge for doing the basic tasks of professional action in conception level:
    - 3.1. Descriptive geometry, drawing;
    - 3.2. Constructions of houses, buildings and nodes;
    - 3.3. Resistance and stability of buildings;
    - 3.4. Fine art, theory of colors and styles;
    - 3.5. Layout design, computer science and computerized projecting assets;
    - 3.6. Economics and business, construction costs;
    - 3.7. Professional communication and psychology of communication;
    - 3.8. Ecology and environmental protection;
    - 3.9. Information technologies;
    - 3.10. Legal relations of work;
    - 3.11. Labor safety;
    - 3.12. Official language;
    - 3.13. At least two foreign language skills in communication level.