Report
on the Activities of the Dissertation Council
in the Field of "Architecture and Construction" for 2025

Dissertation Council at "KazNRTU named after K.I. Satbayev in specialties (direction of personnel training):" Architecture and construction "(in the context of educational programs: 8D07302-"Architecture and urban planning", "8D07303-" Construction and production of building materials and structures, "8D07305-" Construction and production building materials and structures "/8D07308- "Production of building materials, products and structures")

Approved by Rector's Order N47-P dated February 3, 2023, based on the decision of the Academic Council of JSC "Kazakh National Research Technical University named after K.I. Satpayev."

1. **Number of working meetings held – 18. Number of meetings held for dissertation defenses – 9.**
2. **Names of council members who attended less than half of the meetings – none.**
3. **List of doctoral candidates with their respective institutions:**

- Tolegenova A. K. – KazNRTU named after K.I. Satpayev
- Khamza E.E. – KazNRTU named after K.I. Satpayev
- Almukasheva D.B. – KazNRTU named after K.I. Satpayev
- Alenov K.T. – Kyzylorda University named after Korkyt Ata
- Kuttybai M.T. – M. Auezov South Kazakhstan University
- Äuesbek S.T. – M. Auezov South Kazakhstan University
- Shadkam A.S. – KazNRTU named after K.I. Satpayev
- Zhagifarov A.M. – KazNRTU named after K.I. Satpayev
- Yaskevich V.V. – KazNRTU named after K.I. Satpayev

4. **Brief analysis of the dissertations reviewed by the council during the reporting year.**

№	Name of doctoral student	Thesis	Code and name specialties	The year of completion of doctoral studies	Organization of studying
1	Tolegenova A. K.	Development of the composition of monolithic concrete using chemical additives	8D07305 - "Civil engineering and production of building materials and structures"	01.09.2019-31.08.2022	KazNRTU named after K.I. Satpayev
2	Khamza E.E.	Development of technology for lightweight structural concrete using volcanic tuff	8D07305 - "Civil engineering and production of building materials and structures"	01.09.2019-31.08.2022	KazNRTU named after K.I. Satpayev
3	Almukasheva D.B.	Principles of formation of architectural design codes of large cities of Kazakhstan	8D07302 – «Architecture and Urban Planning»	01.09.2021-31.08.2024	KazNRTU named after K.I. Satpayev

4	Alenov K.T.	Study of the Stress-Strain State of Building Structures during Interaction with a Deformable Medium Reinforced with Structural Elements	8D07365 – «Construction»	25.08.2014-01.08.2017	Kyzylorda University named after Korkyt Ata
5	Kuttybai M.T	Improving the performance of cast modified concrete based on ferroalloy production waste	8D07340– «Production of building materials, products and constructions»	01.09.2022-01.07.2025	M. Auezov South Kazakhstan University
6	Äuesbek S.T.	Production of fine-grained cement-based concretes from phosphorus slag with modifying additives	8D07340 - Production of building materials, products and structures	01.09.2022-01.07.2025	M. Auezov South Kazakhstan University
7	Shadkam A.S	Modelling the interaction of a structure with a seismically isolated base under seismic effects	8D07303 –« Civil engineering and production of building materials and structures»	01.09.2022-31.08.2025	KazNRTU named after K.I. Satpayev
8	Zhagifarov A.M.	Improving the operational reliability of self-compacting concrete using various modifiers	8D07305 – "Construction and production of building materials and structures"	01.09.2022-31.08.2025	KazNRTU named after K.I. Satpayev
9	Yaskevich V.V.	Paradigm of BIM Implementation in the Architectural-Construction Practice of the Republic of Kazakhstan	8D07302 – Architecture and Urban Planning	01.09.2019-31.08.2022	KazNRTU named after K.I. Satpayev

1) Analysis of the research topics considered

The topics of the submitted doctoral dissertations cover a wide range of relevant scientific and applied issues in the fields of construction, architecture, production of building materials and structures, as well as digitalization of the industry.

A significant part of the research is devoted to the development and improvement of next generation concretes, including monolithic, lightweight structural, self compacting, cast and modified concretes. Considerable attention is paid to the use of industrial waste such as ferroalloy production waste, phosphorus slag and tuff in building materials, which contributes to resource saving and environmental sustainability. A number of studies focus on improving the operational characteristics and reliability of building structures, issues of seismic resistance and modeling of the interaction between structures and foundations, development of architectural and urban planning approaches including the formation of urban design codes, as well as the implementation of BIM technologies in architectural and construction practice.

Overall, the dissertation topics are interdisciplinary in nature, combining fundamental research with applied tasks oriented toward the needs of the construction industry of the Republic of Kazakhstan.

2) Relationship between dissertation topics and priority areas of scientific development and state programs

The topics of the dissertation research are directly related to the priority areas of scientific development defined by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan in accordance with paragraph 3 of Article 18 of the Law of the Republic of Kazakhstan On Science, as well as with state programs of socio economic and industrial innovative development.

In particular, the research corresponds to the following priorities: sustainable development and green technologies through the use of technogenic waste and secondary resources in the production of building materials; industrial innovative development of the construction sector through the development of new concrete technologies and building structures; improving the safety and seismic resistance of infrastructure, which is especially relevant for seismically hazardous regions of Kazakhstan; digitalization of the economy and the construction industry through research on the implementation of BIM technologies; and development of modern architecture and urban planning focused on creating a comfortable urban environment.

Thus, the dissertation research fully corresponds to the strategic objectives of scientific technological and socio economic development of the Republic of Kazakhstan.

3) Analysis of the level of implementation of dissertation results in practical activities

The results of the dissertation research have a high level of practical significance and are oriented toward implementation in the real sector of the economy.

Within the framework of the completed studies, the developed concrete compositions and technologies can be used at construction industry enterprises as well as in design and production organizations. The obtained scientific results have been implemented or may be implemented in the educational process of higher education institutions in the training of specialists in construction and architecture. Certain provisions and methodologies are applicable in design and survey practice, including calculation and modeling of building structures. Research on BIM technologies creates a basis for their phased implementation in architectural and construction activities of the Republic of Kazakhstan. Dissertation materials are also used in the development of regulatory technical and methodological recommendations.

It should be noted that there are materials confirming the implementation of research results in the form of implementation acts, publications, educational and methodological developments, testing at production and design sites, as well as patents, which confirms the applied orientation of the completed dissertation research.

The Dissertation Council received four dissertation works from doctoral candidates who completed their studies in 2025.

In total, nine dissertations were submitted to the Dissertation Council. All of them correspond to the profile and area of activity of the Council, were preliminarily reviewed at meetings of the relevant departments, and received positive conclusions.

All dissertations were prepared in accordance with the established requirements.

The dissertations were submitted for review to expert commissions established by the Dissertation Council, each consisting of three members.

Acceptance of dissertations for defense, appointment of reviewers, and determination of the date and place of defense were carried out at regular meetings of the Dissertation Council after receiving the conclusions of the expert commissions for each dissertation.

5. Analysis of the work of reviewers with examples of the lowest quality reviews

In accordance with the requirements of regulatory documents, reviewers were appointed for each dissertation at a regular meeting of the Dissertation Council. The reviewers submitted written reviews within strictly established timeframes, prepared in accordance with the form specified in Appendix 5 to the relevant Standard Regulation. All reviews contained comments on the dissertations under consideration; however, these comments were of a recommendatory nature and did not affect the content or main conclusions of the dissertations. All dissertations were recommended for defense. No low quality reviews submitted by reviewers were identified.

6. Proposals for further improvement of the system of training scientific personnel

No proposals.

7. Number of dissertations submitted for the degrees of Doctor of Philosophy PhD and profile Doctor by specialties and fields of training

The total number of dissertations is nine.

1) Dissertations accepted for defense amount to nine, including six works submitted by doctoral candidates of JSC Kazakh National Research Technical University named after K I Satpayev, one work submitted by a doctoral candidate of Kyzylorda University named after Korkyt Ata, and two works submitted by doctoral candidates of M Auezov South Kazakhstan University.

2)There were no dissertations withdrawn from consideration, including those of doctoral candidates from other universities.

3)There were no dissertations that received negative reviews from reviewers, including those of doctoral candidates from other universities.

4)There were no dissertations with negative decisions based on the results of the defense, including those of doctoral candidates from other universities.

5)There were no dissertations sent for revision, including those of doctoral candidates from other universities.

6)There were no dissertations sent for repeated defense, including those of doctoral candidates from other universities.

Chairman
of the Dissertation Council on
Architecture and Construction **B. U. Kuspangaliev**

Scientific Secretary
of the Dissertation Council in the field
of Architecture and Construction **N.I. Berdikul**