

**PLAN**  
**research work of the Faculty of Civil Engineering for the 2020-2021 academic year of the**  
**Faculty of General Construction**

№ n.n.	Name of topics	Main performers	Expected scientific results	Deadlines
<p><b>Scientific direction:</b> Geotechnical research, design and strengthening of foundations and foundations of buildings and structures, calculations to ensure sustainability  <b>Head:</b> Khomyakov V. A.-Doctor of Technical Sciences, Associate Professor</p>				
1.	Solving geotechnical problems in the field of construction	Khomyakov V. A. Hadagali I. N. Gumenyuk, V. V.	Execution of a contractual topic; Publication of articles in collections of international scientific conferences, in publications of far and near abroad and in rating journals with an impact factor; Implementation of the obtained scientific results in the educational process; Involvement of students, undergraduates and doctoral students in the field of scientific activity. Participation in scientific seminars, conferences, and symposiums.	November 2020 – May 2021  September 2020 – May 2021  September 2020-June 2021  September 2020 – May 2021  September 2020- June 2021
<p><b>Scientific direction:</b> Modern technologies for ensuring the stability of buildings and structures  <b>Director:</b> E. T. Besimbayev-Doctor of Technical Sciences, Academic Professor</p>				
2.	Modern technologies of construction production.	Besimbayev E. T. Dubinin, A. A. Seytkazinov O. D. Kenjebaeva A. K.	The fulfillment of contractual issues; Publication of articles in collections of international scientific conferences, in journals with an impact factor, including State of the Art; Introduction and use of the results of scientific research in pedagogical practice; Organization of participation of students, undergraduates and doctoral students in scientific conferences and competitions. Involvement of students, undergraduates and doctoral students in the field of scientific activity.	2020-2021 academic year September 2020 – May 2021.  September 2020-June 2021  March – May 2021

<b>Field of research:</b> Improving methods of wastewater treatment <b>Head:</b> A. S. Taubaldieva-Candidate of Technical Sciences, Associate Professor				
3.	Improving wastewater treatment in industrial enterprises	Jartaeva D. K. Kasabekov G. T. Mukhanova T. B.	<p>The fulfillment of contractual issues;  Publication of articles in collections of international scientific conferences, in journals with impact factor;  Organization of participation of students and undergraduates in scientific conferences and competitions.  The connection of scientific research with the educational process by involving students and undergraduates in research work.</p>	<p>2020-2021 academic year  September 2020-June 2021  October 2020– May 2021  September 2020 -June 2021</p>
<b>Scientific direction:</b> Improvement and optimization of DVT systems <b>Head:</b> E. B. Makashev-PhD, Associate Professor				
4.	Improving, optimizing and improving the reliability of heat and gas supply, heating, ventilation and air conditioning systems	Aldabergenova G. B. Auelbek S. Sh. Jumadilova S. J.	<p>Implementation of contractual topics;  Publication of articles in collections of international scientific conferences, in journals with impact factor;  Organization of participation of students and undergraduates in scientific conferences and competitions.  The connection of scientific research with the educational process by involving students and undergraduates in research work.</p>	<p>2020-2021 academic year.  September 2020-June 2021.  March - May 2021  September 2020-June 2021.</p>
<b>Scientific direction:</b> Modern methods of designing buildings and structures <b>Head:</b> I. M. Polyakova-Candidate of Technical Sciences, Associate Professor				

5	The use of modern software systems in the calculations and design of buildings and structures	Polyakova I. M. Kabaeva A. K. Kasimova G. T. Sagalova N. T. Tulegenova O. E.	<p>Obtaining copyright certificates on the subject under study;</p> <p>Publication of articles in collections of international scientific conferences, in journals with impact factor;</p> <p>Organization of participation of students and undergraduates in scientific conferences and competitions.</p> <p>Execution of a contractual topic.</p>	<p>September 2020-June 2021. September 2020-June 2021.</p> <p>March - May 2021</p> <p>2020-2021 academic year.</p>
<p><b>Scientific direction:</b> Design and calculation of load-bearing and enclosing structures of buildings and structures  <b>Head:</b> R. K. Sadyrov-Candidate of Technical Sciences, Associate Professor</p>				
6		The Sadyrov R. K. Imambaeva R. S. Bazarov R. B. Azghaliev B. A. Saidulla M. R. Chuev R.	<p>Participation in the MONRC competition for grant-funded scientific and technical projects;</p> <p>Development of training manuals for the calculation of reinforced concrete structures in accordance with Eurocodes (in the state and Russian languages);</p> <p>Application of modern software systems in calculations and design of buildings and structures;</p> <p>Publication of articles in collections of international scientific conferences, in journals with impact factor;</p> <p>Introduction and use of the results of scientific research in pedagogical practice;</p> <p>Execution of a contractual topic;</p> <p>Organization of participation of students and undergraduates in scientific conferences and competitions of the WRC.</p>	<p>June 2020 - June 2021</p> <p>2020-2021 academic year</p> <p>2020-2021 academic year</p> <p>September 2020-June 2021.</p> <p>2020-2021 academic year</p> <p>2020-2021 academic year March - May 2021</p>
<p><b>Scientific direction:</b> Investigation of welded I-beams with corrugated walls, weakened by technological holes  <b>Head:</b> A. A. Bryantsev-PhD, Associate Professor</p>				

7	Improvement of structural forms and methods of calculation of beams with corrugated walls	Bryantsev A. A.	<p>Obtaining copyright certificates and patents on the subject under study;</p> <p>Publication of articles in journals of XOAN, in journals with impact factor;</p> <p>Organization of students' participation in scientific conferences and competitions.</p> <p>Execution of a contractual topic.</p> <p>Introduction and use of the results of scientific research in pedagogical practice.</p>	<p>September 2020-June 2021. September 2020-June 2021.</p> <p>March - May 2021 September 2020 –December 2020</p> <p>2020-2021 academic year</p>
<p><b>Scientific direction:</b> Research and evaluation of the technical condition of existing buildings and structures</p> <p><b>Head:</b> Klemeshev A. D. - Ph. D., associate. Professor</p>				
8	Research and evaluation of the technical condition of existing buildings and structures	Klemeshev A. D. Mursalina G. B.	<p>The implementation of economic-contractual research topic;</p> <p>Publication of articles in the collections of international scientific conferences, in various publications, including journals with an impact factor;</p> <p>Involvement of students and undergraduates in the field of scientific activity.</p> <p>Implementation of the obtained scientific results in the educational process</p>	<p>September 2020-June 2021. September 2020-June 2021.</p> <p>March 2020g - June 2021 September 2020-June 2021.</p>
<p><b>Scientific direction:</b> Energy efficiency and energy saving in construction</p> <p><b>Head:</b> Zh. K. Maulenov-Doctor of Technical Sciences, Associate Professor</p>				
9	Energy efficiency and energy saving in construction	Maulenov Zh. K. S. A. Nurpeisov Nurmaganbetova A. T. Aubakirova, B. M.	<p>The implementation of economic-contractual research topic;</p> <p>Publication of articles in the collections of international scientific conferences, in various publications, including journals with an impact factor;</p> <p>Involvement of students and undergraduates in the field of scientific activity.</p> <p>Implementation of the obtained scientific results in the educational process;</p>	<p>September 2020-June 2021. September 2020-June 2021.</p> <p>March 2020 - June 2021 September 2020-June 2021.</p>