

**ACHIEVEMENTS IN THE FIELD OF QUALITY OF THE EDUCATION PROGRAMS OFFICE  
«PHYSICS, MATHEMATICS AND INSTRUMENTATION» FOR THE 2023-2024 ACADEMIC YEAR**

<b>Goal content</b>	<b>Criteria for achieving the goal</b>
<p>Functioning of the corporate management framework of EPO «Physics, Mathematics and Instrumentation»</p>	<p>The teaching staff of EPO «Physics, Mathematics and Instrumentation» have completed the following 72-hour refresher courses:</p> <ul style="list-style-type: none"> <li>– «Inclusive education in higher education institutions», 21 persons;</li> <li>– «Artificial intelligence in the educational process», 4 persons;</li> <li>– «Modern teaching and assessment methods for innovative education programs», 3 persons;</li> <li>– «Inclusive education: teaching the blind and visually impaired on a Braille typewriter», 2 persons;</li> <li>– «Development of subject competencies in the discipline «Physics» within the framework of the updated content of education», 1 person;</li> <li>– «Mathematical methods of electrodynamics», 1 person;</li> <li>– «Development of subject competencies in the discipline «Non-destructive testing and technical diagnostics», 1 person;</li> <li>– «Management in higher education. Risk management in the higher education system», 1 person.</li> </ul>

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<p align="center">Ensuring the high quality of educational services provided in accordance with the best university practices</p>	<p>The office's education programs are accredited by agencies</p> <p>1. Kazakhstan Association of Modern (Elite) Education (<b>KAZSEE</b>):</p> <ul style="list-style-type: none"> <li>– 6B05301 – «Physics», EXPIRY DATE 25 December 2028;</li> <li>– 6B05401 – «Mathematics», EXPIRY DATE 25 December 2028;</li> <li>– 6B05402 – «Mechanics», EXPIRY DATE 25 December 2028.</li> </ul> <p>2. Central Asian Association for Accreditation of Education (<b>CAAAE</b>):</p> <ul style="list-style-type: none"> <li>– 7M07105 – «Instrument Engineering», EXPIRY DATE 11 June 2029;</li> <li>– 6B071112 – «Instrument engineering», EXPIRY DATE 11 June 2029;</li> <li>– 7M05301 – «Physics», EXPIRY DATE 11 June 2029;</li> <li>– 7M05401 – «Mathematics», EXPIRY DATE 11 June 2029.</li> </ul>
<p align="center">Ensuring high-quality methodological support of the educational process</p>	<ul style="list-style-type: none"> <li>– staffing of disciplines with electronic educational and methodological complexes 100 %;</li> <li>– 1 educational and methodical manual has been developed (published by Toraighyrov University).</li> </ul>

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<p>Functioning of the educational process through the teaching staff research activities</p>	<ul style="list-style-type: none"> <li>– Research work is being carried out on grant funding for young scientists on scientific and (or) scientific and technical projects: IRN AP19576361 "Studying the effect of the plasmon effect in nanocomposite materials of an ultraviolet detector" (2023-2025, head associate professor A. Zhumabekov );</li> <li>– Bulletin of Toraighyrov University. Physics, Mathematics &amp; Computer Science series. Priority area: Theoretical and Experimental Physics (included in the list of publications recommended by CQAFSHE MSHE RK).</li> <li>Published:               <ul style="list-style-type: none"> <li>– 6 articles in scientific journals recommended by CQAFSHE MSHE RK;</li> <li>– 3 publications in scientific journals included in the international databases Web of Science and Scopus;</li> <li>– 2 publications in international cited journals (Scopus).</li> </ul> </li> <li>Received:               <ul style="list-style-type: none"> <li>– 2 certificates of state registration to a computer program;</li> <li>– 2 certificates of entry of information into the state register of rights to objects protected by copyright.</li> </ul> </li> </ul>

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<p>Functioning of the educational process through the student research activities</p>	<p>Students took courses through the Coursera online mass education platform on the following topics «Introduction to Materials Science», «Optics», «Introduction to Quantum Mechanics» and received certificates (22 students).</p> <p>Students of EP 6B05301 – «Physics» participated in research competitions and received diplomas:</p> <p>IV international scientific research competition «The first step into big science»:</p> <ul style="list-style-type: none"> <li>– Ayaulym Zhumadildinova – First degree Diploma;</li> </ul> <p>II International Scientific research competition «For Science! To the cause»:</p> <ul style="list-style-type: none"> <li>– Birzhan Elemen – First degree Diploma;</li> <li>– Marat Bouez– First degree Diploma.</li> </ul>

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Student contingent forming of education programs	Employment of graduates: – 6B05301 – «Physics» –100 %; – 7M05301 – «Physics» – 100%; – 6B05401 – «Mathematics» –100%; – 7M05401 – «Mathematics» – 100%; – 6B071112 «Instrumentation» – 75%; – 7M07105 – «Instrumentation» –100%; – 6B05402 – «Mechanics» –100%.

**Head  
EP «Physics, Mathematics and  
Instrumentation»**



**A. B. Iskakova**

