ACHIEVEMENTS IN THE FIELD OF QUALITY
Department of «Mechanical Engineering and Standardization» for the 2025–2026 academic year

Content of the objective	Criteria for achieving the objective
1 Management	16 Department meetings were held, during which all scheduled matters were reviewed and addressed, including issues related to the labour discipline of the Department's academic staff. Five members of the Department's academic staff completed professional development training at Moscow State University of Technology "STANKIN" (Moscow, Russian Federation).
2 Educational and methodological	Computer technologies are integrated into all courses assigned to the Department (100%). Student class attendance is 90%, and the academic performance rate is 80%. Two teaching manuals have been published: *1) Metall kesetin kuraldardy zhobalau zhane paidalanu negizderi* (*Fundamentals of Design and Use of Metal-Cutting Tools*), authored by A. Zh. Kassenov, G. T. Itybayeva, Zh. K. Mussina, A. Zh. Taskarina, D. A. Iskakova, K. K. Abishev, and A. V. Mazdubay. *2) Inzhenernoe proektirovanie v programme ANSYS* (*Engineering Design Using ANSYS Software*), authored by R. V. Sapinov and Zh. K. Mussina. Department faculty members conducted 7 peer-observation sessions and delivered 17 open classes. Non-formal learning was implemented in student groups. Students from all groups completed online courses on the AI-SANA, Coursera, and Huawei platforms. Based on the certificates submitted, credits were awarded for certain courses in recognition of the learning outcomes achieved. As part of the organisation and implementation of dual education in the 2025–2026 academic year, 23 students undertook dual training at the following enterprises in accordance with the relevant orders and agreements: KSP Steel LLP, ERG Service LLP, Aluminium of Kazakhstan JSC, ESKORIAL INDUSTRY LLP, Energo Spec Stroy LLP, Kazakhstan Electrolysis Plant JSC, PROMMASH KZ LLP, Pavlodar Petrochemical Plant LLP, Eurasian Energy Corporation JSC, and Eurasian Mechanical Plant LLP. As part of the implementation of the innovative educational programme (EP) 6B07151 "Mechanical Engineering and Reverse Engineering", 14 first-, second-, and fourth-year students obtained the micro-qualification "CNC Machine Tool Operator" during the 2025–2026 academic year. The training was provided at the training centres of Railways Systems KZ LLP, PROMMASH KZ LLP (Ekibastuz), RWS-University LLP (Ekibastuz), and the Centre for Professional Training of NUR-Master-SAMRUK LLP. As part of the academic mobility programme, the following students were sent to partner universities for study: Radchenko D. A., student of group MSiRI-302, EP 6B07151 "Mechanical Engineering and Reverse Engineering", studied at Lodz University of Technology (TUL), in Łódź, Republic of Poland, from 26 September 2025 to 24 February 2026. Aqan B. A. and Sabitkhanov A. S. (group SSM-201), Nurzhanuly K. and Imansharip M. S. (group SSM-301) students of EP 6B07501 "Standardization, Certification and Metrology (by Industry)", and Kabdymali D. T. (group MSiRI-202(c)), student of EP 6B07151 "Mechanical Engineering and Reverse Engineering", were sent to study at Tashkent State Transport University in Tashkent, Republic of Uzbekistan, from 1 September 2025 to 25 January 2026. In May 2026, the second stage of the 18th Republican Student Subject Olympiad among students of higher education institutions of the Republic of Kazakhstan in educational programme group B064 "Mechanics and Metalworking" was held at Satbayev University in Almaty. The Department was represented by students of educational programme 6B07151 "Mechanical Engineering and Reverse Engineering" from group MSiRI-302: Zh. S. Karimov, D. A. Radchenko, and N. V. Chernov. The team was supervised by R. B. Kusainov, Senior Lecturer. Following the results of the Olympiad, N. V. Chernov, a student of group MSiRI-302, won third place and was awarded a diploma. The other participants received certificates of appreciation for their active participation and for representing the

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	University with distinction at the national level. Participation in the Olympiad enabled students to enhance their professional competencies, exchange experience with students from other universities, and strengthen their interest in scientific and technical activities.
3 Scientific	During the 2025–2026 academic year, research was carried out under the following grant-funded projects: “Investigation of the Tribotechnical Characteristics of Resource- and Energy-Efficient Metal-Cutting Tools” and “Development of a Set of Measures for Tooling Support in the Manufacturing Industries of the Republic of Kazakhstan”, supervised by Professor A. Zh. Kassenov. “Investigation and Improvement of the Quality of High-Speed Milling of Difficult-to-Machine Materials through Process Modelling and Optimisation of Cutting Parameters”, supervised by S. O. Tussupova. A total of 61 scientific articles were published, including 10 indexed in Scopus, 18 in publications recommended by the Committee for Quality Assurance in Science and Higher Education, 3 in international conference proceedings, and 25 in national conference proceedings. In addition, 5 patents and certificates were obtained. Students published 37 scientific papers under the supervision of Department faculty members. In December 2025, T. L. Lub was awarded the degree of Doctor of Philosophy (PhD) in the educational programme 8D07101 “Mechanical Engineering”, under the supervision of Professor A. Zh. Kassenov and Professor Zh. K. Mussina. Students participated in the international scientific and practical conferences “XVII Toraighyrov Readings”, dedicated to the 65th anniversary of Toraighyrov University, and “XXVI Satpayev Readings”. Following their presentations, the students received the following awards: First-degree diplomas: D. S. Zholzhaksinov; D. Endibay and A. Shaimaganbet. Second-degree diplomas: A. Sagandykova and A. Aigozhina; A. Ospanova; N. Yu. Vasilchenko. Third-degree diplomas: A. Prokopets; A. S. Daiyrbek (supervisor: E. A. Novosyolova). Department students received a third-degree diploma for their outstanding performance in the *Digital Science Challenge* competition. D. Radchenko, a student of group MSiRI-302, was awarded the Yessenov Scholarship in recognition of his outstanding academic achievements and significant potential.
4 Educational	Student mentoring and educational activities were carried out in accordance with the approved educational work plan. Students actively participated in various university events, including Health Day, team competitions dedicated to Mechanical Engineering Day and World Standards Day, and the *Startup Battle* competition, in which group SSM-401 presented a start-up project. Students also attended performances at the Zhusupbek Aimautov Kazakh Music and Drama Theatre. Meetings and discussions were held with students from first- to fourth-year groups on the prevention of cybercrime and other offences, in accordance with the requirements of the Law of the Republic of Kazakhstan “On the Prevention of Offences”. In March, Department students actively participated in the celebration of *Nauryz Meiramy*. They contributed to decorating the foyer and preparing the traditional dastarkhan. Students D. Baltabayeva (SSM-302) and I. Dumasheva (SSM-301) participated in the *Baursak Party* competition and received the “Altyn Baursak” diploma. An event dedicated to 1 May, the Day of Unity of the People of Kazakhstan, was also held. The programme included competitions featuring national cuisine and traditional clothing, promoting cultural diversity and respect for the traditions of Kazakhstan’s ethnic groups.
5 Household	In accordance with the established schedule, the Department carried out cleaning and maintenance of the area assigned to it at Toraighyrov University. Educational equipment was procured for the educational programmes in accordance with submitted requests, using funds allocated for government-funded and contract-based research projects, in the amount of KZT 57,472,668.40.
6 Marketing and career guidance	In accordance with the Department’s work plan, faculty members conducted career guidance activities at schools and colleges across the city and region. They participated in Open Days and invited representatives of enterprises to meet with graduating students.

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	In 2025, the following students were admitted under state-funded educational grants: Bachelor's degree programmes: 23 students in Kazakh-medium groups and 62 students in Russian-medium groups. Master's degree programmes: 4 students in Russian-medium groups. Doctoral programmes: 2 students in Russian-medium groups.

Discussed and approved at the department meeting (Protocol №. 2 dated September 10, 2026)

Head of the Department of Mechanical Engineering and Standardization **Zh. Mussina**

Agreed:
Dean **A. Zhunussov**