

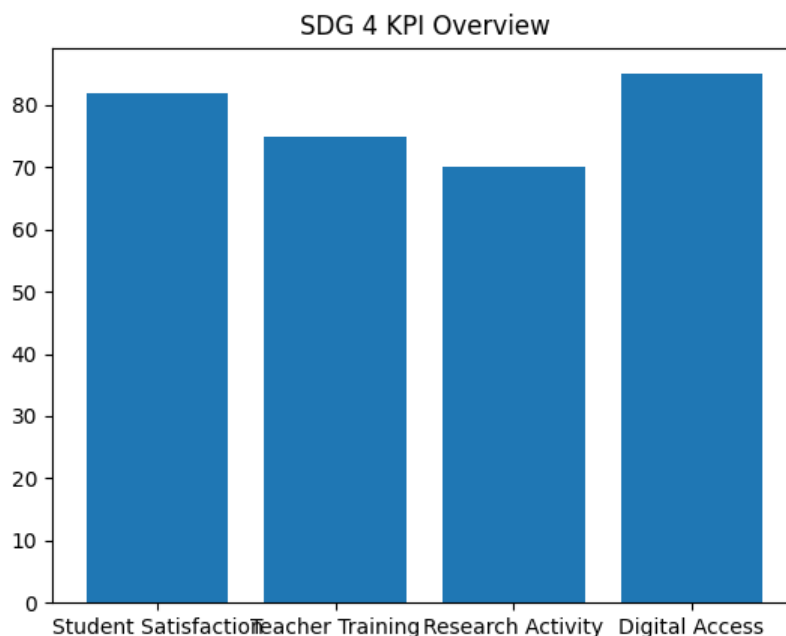
Azerbaijan Technological University (ATU)

SDG 4 Portfolio Submission

1. Executive Summary

This document integrates Quality Assurance and Academic Freedom reports aligned with SDG 4...

2. KPI Dashboard



3. Academic Freedom Impact

Academic freedom initiatives improved teaching quality, research output, and student engagement...

4. Quality Assurance Impact

Quality assurance systems strengthened curriculum, digital learning, and industry alignment...

5. SDG 4 Alignment

Aligned with SDG 4 targets 4.3, 4.4, 4.7, and 4.c...

SDG 4 REPORT
Quality Education

Azerbaijan Technological University
Prepared in alignment with QS Sustainability reporting expectations
Based on the Azerbaijan Technological University Quality Assurance Policy
Action Plan, 2025

Institution	Azerbaijan Technological University (ATU)
Reporting theme	SDG 4 - Quality Education
Reporting basis	Institutional evidence provided by the university
Primary framework	QS Sustainability reporting logic with emphasis on social impact, impact of education, knowledge exchange, employability, equality and governance
Academic year	2024-2025, with selected evidence from 2025 implementation activities

Approved institutional framework referenced in source text: Rector Assoc. Prof. Yashar Omarov

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1. Executive Summary

Azerbaijan Technological University (ATU) approaches SDG 4 - Quality Education through an integrated model that combines curriculum modernisation, quality assurance, labour-market responsiveness, digitalisation, inclusive student support, industry engagement, academic mobility and staff development. The evidence supplied for the 2024-2025 academic year demonstrates that quality education at ATU is not treated as a narrow classroom issue; rather, it is operationalised as an institutional ecosystem that links governance, teaching practice, infrastructure, careers, research, internationalisation and community-facing partnerships. This integrated approach is highly relevant to QS Sustainability expectations, which assess not only academic provision but also the wider social impact of education, knowledge exchange and graduate opportunity.

The university's quality agenda is anchored in formal governance arrangements. The Teaching Methodological Council operated under an approved action plan and held eight meetings during the reporting cycle. These meetings supported the review of curricula, textbooks, teaching aids, methodological materials and other educational resources prior to approval. The system is therefore evidence-based, committee-led and quality controlled. A further strength is the university's use of publication review and educational-material scrutiny to ensure that learning resources align with curricula, student demand and pedagogical appropriateness. Such processes strengthen institutional credibility and demonstrate that academic standards are monitored before teaching materials are disseminated.

ATU also demonstrates significant movement towards educational relevance and responsiveness. New and revised educational programmes have been shaped by labour-market demand, including emerging fields such as information security and cybersecurity. Forty-two educational programmes were submitted to the university for 2025, while programme design is explicitly aligned to legal and regulatory frameworks in Azerbaijan. Partnerships with employers such as BP, Coca-Cola Azerbaijan, Kapital Bank, Nar Mobile and the Innovation and Digital Development Agency support the creation of specialised laboratories and practice-oriented learning spaces. This directly advances SDG target 4.4 by building relevant technical and vocational skills for employment, decent work and entrepreneurship.

The university's physical and digital learning environment has also expanded. New or reconstructed auditoriums and laboratories supported by AzGranata, BuildX, BP, Coca-

Cola, Nar and other partners have improved the infrastructure available for applied teaching. The campus dining hall was renovated, a free entrant support centre was established, and Wi-Fi connectivity has been extended across campus. Through the Koderia LMS and the Digital Library, the university has moved towards more open, transparent and accessible provision of curricula, syllabi, subject programmes and learning materials. More than 20,000 scientific and literary works are available through the digital library environment. These investments support both learning continuity and the student-centred delivery model expected in contemporary higher education.

Quality monitoring is supported by a structured culture of feedback. Survey work conducted by the Quality Assurance and Audit Department included student satisfaction, teacher professional and personal qualities, and staff workplace climate. Quantitative participation levels were notable: 390 students responded to the 2025 student satisfaction survey, 416 respondents participated in the teacher-quality survey, and 152 employees took part in the administrative and teaching-support staff survey. Earlier evidence from March 2024 recorded responses from 420 students and 85 teachers, with an overall satisfaction rate of 82 percent. Importantly, the university does not present these findings as symbolic consultation. The reports identify specific development priorities such as classroom renovation, updated technical equipment, faster response to student requests, more flexible scheduling, stronger psychological and academic support, better use of digital resources, and enhanced document control. This evidences a functioning quality loop rather than a one-way reporting exercise.

ATU's student-centred model is another major contribution to SDG 4. Students are given structured freedom to choose elective subjects from a substantial 60-credit elective block, supported by tutors who provide academic advice and guidance. The decision-making process is participatory and documented. Student voice is also present in governance through representation on the Quality Assurance Commission. Combined with the use of the electronic education management system for course assignments, schedules, attendance and assessment, this contributes to learner agency, transparency and accountability.

The university's educational mission is further strengthened through industry-linked teaching and employability support. In the current academic year, eight specialists from production enterprises and public institutions were involved as teachers; 42 external substitute teachers and 41 hourly employees contributed to teaching; and 25 people

were invited from other universities. ATU also organised major graduate job fairs, including one with more than 500 vacancies in 2024 and another in 2025 at which more than 40 employers presented more than 400 vacancies to over 750 graduating students. This ecosystem of employer engagement, applied instruction and career support positions ATU strongly within the QS Sustainability lens on employability and opportunities.

Internationalisation contributes to the depth and outward orientation of educational quality. ATU reports dual-degree agreements with the University of Sopron in Hungary and Bialystok University of Technology in Poland, as well as cooperation with 65 universities from 23 countries. Student mobility within Erasmus+ increased from two students in the institution's first year of participation to 32 students in 2024-2025. In addition, 32 academic staff participated in international professional development programmes, and 22 foreign students were enrolled in preparatory groups at ATU. These developments support intercultural learning, staff capacity building and international exposure, all of which reinforce SDG 4.3 and 4.7.

Overall, the evidence shows that ATU is building an increasingly comprehensive educational quality ecosystem. Its strengths lie in governance, curriculum review, practical infrastructure, digital access, employer partnerships, quality monitoring, student-centred design, mobility and startup support. To move towards a stronger QS Sustainability performance, the university would benefit from deeper outcome tracking, more disaggregated access and inclusion data, clearer progression and completion indicators, stronger public reporting on educational impact, and a more standardised annual KPI dashboard. Even so, the current evidence base demonstrates substantial alignment with the principles of inclusive, relevant, future-facing and impact-oriented higher education.

2. SDG 4 and QS Sustainability Alignment

SDG 4 calls on institutions to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all. In the context of a university, this goal extends beyond teaching delivery. It includes curriculum relevance, equitable participation, graduate skills, staff capability, accessibility of learning resources, student support, global learning exposure and mechanisms that connect education to society. The ATU evidence set speaks to several of these dimensions and can therefore be

structured in a way that responds to QS Sustainability requirements more effectively than a conventional administrative report.

QS Sustainability evaluates universities across environmental impact, social impact and governance. Within the social impact category, the 'Impact of Education', 'Knowledge Exchange', 'Employability and Opportunities', 'Equality', and 'Health and Wellbeing' lenses are particularly relevant to SDG 4 reporting. The QS methodology also places value on public evidence, institutional policies, research impact, outreach, staff and student experience, and the demonstrable outcomes of education. The present report therefore reframes ATU's activities in line with these expectations: educational quality is interpreted not only as internal compliance, but also as a visible and measurable contribution to people, communities, the labour market and national development. (aligned with official QS Sustainability methodology and support guidance)

ATU's evidence is especially strong in six QS-relevant domains. First, the university documents a quality assurance architecture that supports academic review, formal committee work, audits and action planning. Second, it demonstrates programme responsiveness to the labour market, including the opening of new specialisations and cooperation with employers on educational infrastructure. Third, it shows a move towards student-centred and digitally supported learning through the Koderia LMS, electronic curriculum access and a digital library. Fourth, it collects stakeholder feedback through surveys and uses findings to identify institutional improvements. Fifth, it links education to employability through career fairs, internships, external teaching specialists and soft-skills development. Sixth, it expands the educational experience through Erasmus+ mobility, dual-degree programmes and international professional development.

For a strong QS-oriented SDG 4 narrative, these elements need to be presented not as disconnected events but as evidence of an educational theory of change. In such a theory of change, governance produces quality standards; quality standards shape teaching and curriculum; curriculum and infrastructure support learning; student voice and data feedback improve delivery; industry and international partners broaden relevance; and career systems convert learning into graduate opportunity. This report follows that logic throughout. It also pays close attention to metrics, because QS Sustainability rewards institutions that can show not only commitment but also evidence

of implementation and outward-facing results. (aligned with official QS Sustainability methodology and support guidance)

A final point of methodological importance is that QS places emphasis on public evidence and clear documentation. ATU already has an advantage here because many activities are supported by publicly accessible institutional news items, social media announcements, webpages and linked evidence. The challenge is therefore not the absence of activity, but the need to synthesise the evidence into a strategic, impact-focused narrative. The present report addresses that challenge by identifying educational outcomes, mapping them to SDG 4 targets and presenting them in a way that speaks directly to quality, access, skills, transparency, participation and institutional effectiveness.

3. Institutional Governance for Educational Quality

Effective progress on SDG 4 requires educational quality to be governed institutionally rather than left to individual initiative. ATU's governance framework demonstrates such institutionalisation. During the reporting period, the Teaching Methodological Council operated according to an approved regulation and annual action plan. Eight meetings were held and formally recorded. This regularity is important: a university that systematically documents the review of educational matters signals maturity of process and accountability. It also indicates that decisions relating to teaching and learning are embedded in routine governance rather than treated as ad hoc responses.

The Council's work covered the review of curricula, textbooks, teaching aids, methodological instructions and other pedagogical materials, including those for non-specialised subjects. The pre-publication scrutiny of teaching resources is particularly significant in a quality education context. ATU examined whether proposed materials were aligned to curricula, suitable for student numbers, compliant with periodicity and publication requirements, and educationally justified. Materials that did not receive a positive recommendation were not published. This is evidence of quality control at the level of the learning resource itself - a dimension often omitted from university sustainability narratives, but directly relevant to SDG 4 because it affects the academic integrity and usability of the learning environment.

The scale of educational-material production further suggests an active academic ecosystem. In 2024, the university recorded 4 textbooks, 12 teaching aids, 3 monographs and 21 methodological resources, plus additional outputs approved through institutional and ministerial decisions, reaching a total of 37 printed works. In 2025, the corresponding total was 6. During the 2024-2025 academic year, 48 subject programmes were printed with the seal of the Ministry of Science and Education of the Republic of Azerbaijan, and 58 were published by decision of the ATU educational council. While output volume alone is not a complete measure of quality, it does demonstrate that teaching provision is supported by formally endorsed academic documentation.

Governance at ATU also includes quality assurance structures that reach beyond the Teaching Methodological Council. The Quality Assurance Commission, established to strengthen quality mechanisms and compliance with accreditation criteria, includes academic leaders, administrative managers, external industry representatives and a student member. This composition matters. It introduces multi-stakeholder oversight into educational quality and reflects principles associated with both SDG 4 and contemporary accreditation culture: participation, transparency, accountability and responsiveness. The inclusion of external industry members suggests that programme quality is not evaluated solely from within the university, while the inclusion of a student representative provides legitimacy to learner-centred decision making.

Another governance strength is the university's willingness to connect educational planning with national strategies and sectoral needs. The cybersecurity initiative, for example, is directly linked to the national information security and cybersecurity strategy for 2023-2027. This indicates that educational governance is attentive to broader development priorities rather than operating in isolation. From a QS Sustainability perspective, this is valuable because it shows that ATU's educational model is not merely internally efficient; it also responds to national capacity-building needs in future-critical fields.

At the same time, ATU has scope to make its governance impact even more visible. A stronger public annual dashboard linking committee decisions, action items, implementation status and student outcomes would improve external readability. Similarly, more explicit publication of programme review cycles, curriculum revision histories and follow-up actions from quality meetings would make the governance

system easier to evaluate externally. Nevertheless, the evidence already shows that governance for educational quality is real, structured and institutionally embedded at ATU, which is an essential foundation for credible SDG 4 performance.

4. Curriculum Modernisation and Teaching Innovation

Curriculum modernisation is one of the strongest ways universities contribute to SDG 4 because it determines whether education remains relevant, rigorous and capable of preparing students for social and economic change. ATU's action plan indicates that curriculum development is continuously monitored and that modern educational technologies are considered in the design and delivery of programmes. The university does not present the curriculum as static. Instead, it treats programme content, teaching materials and methodological support as areas requiring routine evaluation and expert review.

The evidence suggests that curriculum design at ATU is guided by several principles. The first is formal alignment with the educational programme framework in Azerbaijan, including the Law on Education and relevant classifications of specialties. The second is clarity about graduate competencies, learning outcomes, assessment methods, infrastructure needs, internship opportunities and pathways to employment or further study. The third is communication: the educational programme is intended not only for internal use but also to inform students, employers and evaluators about what graduates know and can do. This is important in a QS context because clarity of learning outcomes and public accessibility of educational information are closely linked to perceptions of educational impact and transparency.

ATU's use of teaching and methodological expertise before approving educational resources further strengthens the curriculum. The evaluation of textbooks, teaching aids and methodological instructions allows the university to ensure that classroom delivery is supported by suitable learning content. This is especially relevant in applied and technical fields, where outdated or poorly aligned materials can weaken student preparedness. The printing and approval of large numbers of subject programmes in 2024-2025 indicate that curricular documentation is active and widely used.

Teaching innovation is also visible in the growing integration of digital tools. The use of the Koderia LMS enables curricula, syllabi, subject programmes and other regulatory

documents to be placed in an electronic environment accessible to students and staff. Such systems do more than digitise paperwork; they enable transparency, faster access to course information, more consistent administration and, potentially, better student engagement. The availability of digital materials also supports students who need flexible learning arrangements, thereby contributing to a more inclusive and resilient learning system.

An important curricular feature is the emphasis on practical and workplace-related learning. Newly opened or reconstructed laboratories and auditoriums in fields such as communication technologies, food engineering, design and applied engineering support the translation of curriculum into practice. In this regard, ATU is not simply upgrading content; it is matching the curriculum to the technical conditions required for effective learning. This is especially relevant to technical universities, where laboratories, equipment and simulation environments are integral to educational quality rather than peripheral additions.

There is further potential to strengthen the curriculum narrative for QS Sustainability by making more explicit the extent to which sustainability, ethics, inclusion, digital literacy, entrepreneurship and civic responsibility are embedded across all disciplines. The existing evidence already points to strong programme relevance, digitalisation and practical orientation. A next step would be to present these curricular features through a cross-university competency framework that shows how ATU develops not only subject expertise but also transferable capacities aligned with SDG 4.7, lifelong learning and responsible citizenship.

5. Labour-Market Relevance and Future-Ready Programmes

A core requirement of quality education is relevance. Universities must not only transmit knowledge but also prepare learners for real labour-market conditions, emerging sectors and future societal needs. ATU explicitly states that labour-market demand is the first priority in preparing the student admission plan. This is a strong policy position because it indicates that programme capacity and specialisation development are tied to external demand rather than historical inertia. The opening of new specialisations at bachelor's, master's and doctoral levels on the basis of material resources and human-capital potential further supports the argument that ATU is aligning institutional growth with national development needs.

The clearest example is the university's focus on information security and cybersecurity. In response to the national cybersecurity strategy, ATU is implementing a cybersecurity laboratory for bachelor's-level information security education and planning future master's-level training in this direction. This is a strategically important intervention. Cybersecurity is a future-critical field that intersects with digital transformation, national resilience, economic security and social trust. By investing in this area, the university contributes directly to SDG target 4.4 on skills for employment and indirectly to broader national development priorities.

The labour-market relevance of programmes is strengthened through cooperation with public and private partners. BP Azerbaijan, Coca-Cola Azerbaijan, Kapital Bank, Nar Mobile and the Innovation and Digital Development Agency have supported educational laboratories or agreements for their development. Such partnerships reduce the distance between classroom learning and industry practice. They also create visible evidence for QS Sustainability under the lenses of employability, knowledge exchange and educational impact because they show that employers are not passive recipients of graduates but active contributors to educational quality.

ATU's educational programme model further supports labour-market relevance by setting out competencies, teaching and learning methods, assessment approaches, internship possibilities, employment opportunities and requirements for infrastructure and personnel potential. This format is particularly useful for external stakeholders because it translates the curriculum into outcome language. Employers can understand what graduates are trained to do, while students can see how their studies connect to future careers. In a strong QS submission, this kind of programme architecture should be presented as evidence that educational design is outcome-oriented and stakeholder-aware.

The fact that 42 educational programmes were sent to the university for 2025 suggests continuing programme renewal and a broad institutional review effort. The value of this evidence lies not merely in the number itself, but in what it implies: the university is not preserving a fixed academic offering but actively engaging with programme redesign and approval. In regional universities, such adaptation is particularly significant because it can improve local access to high-demand fields without requiring students to migrate to major urban centres.

A further strength is ATU's responsiveness to employer proposals in curriculum design. In later evidence, the report notes that the curriculum for Transport Engineering was developed jointly with Azerbaijan Railways and that proposals from Simurg Company were taken into account in Logistics and Transport Technologies Engineering. These examples help move the narrative from general employability language to concrete co-design. For QS Sustainability purposes, such cases are persuasive because they indicate not just consultation but curricular integration of employer knowledge.

To deepen this area further, ATU could systematically publish graduate destination data, employment rates by programme, internship conversion rates into employment and examples of curriculum changes made directly in response to employer feedback. Even without those additional indicators, the existing evidence shows a serious institutional effort to align teaching provision with the evolving labour market and to build future-ready technical capacity.

6. Learning Environment, Facilities and Student Support

SDG 4 is not achieved through curriculum alone; it also depends on the conditions in which learning takes place. ATU's evidence demonstrates a sustained effort to improve the material and technical base for educational and social activities. The university's approach combines external partnership funding, internal infrastructure development and support services for students. This is significant because a quality learning environment is both a pedagogical and an equity issue: students cannot fully benefit from higher education if teaching spaces, digital access, social support and basic campus services are weak.

Several new or upgraded learning spaces were established through university-industry cooperation. With the support of AzGranata, a new auditorium was opened to help students acquire theoretical knowledge and understand the scientific foundations of production processes. Two reconstructed classrooms were opened in September 2025, including a design workshop at the Faculty of Light Industry Engineering and Logistics supported by the Tamas Regional Development Public Association and another classroom established under a memorandum with BuildX. A further auditorium was created with support from N1 Bakery, owned by Khazri TN LLC. These interventions show how external partners can improve educational infrastructure in ways directly linked to student learning.

The practical capacity of the university was strengthened further by the opening of specialised laboratories and auditoriums supported by BP and Coca-Cola. The BP-supported laboratory under the Department of Automation and Information Technologies includes two sections with a total of 17 computers, while the Coca-Cola-supported auditorium under the Department of Food Engineering and Expertise is equipped with 15 laptops and relevant teaching equipment. Within the framework of cooperation with Nar, a mobile communication laboratory was also established to support practical learning of communication technologies. These facilities are not generic buildings; they are specialised spaces aligned to programme needs and employability-oriented training.

ATU also improved student welfare infrastructure. The campus dining room was renovated and reopened in September 2025 with rebuilt engineering and communication systems, modernised ventilation and lighting, updated kitchen equipment and capacity to serve approximately 125 people simultaneously. In sustainability reporting, such improvements can sometimes be overlooked because they are not narrowly academic. However, student wellbeing, comfort and access to adequate services are closely related to educational continuity, inclusion and campus experience. A student who studies in a better-supported environment is more likely to participate fully in university life.

The entrant support centre is another important feature. It provides free consultation on programme choice, support with electronic registration and troubleshooting for applicants. This service matters from an SDG 4 perspective because it reduces procedural barriers to access, particularly for prospective students who may lack prior familiarity with higher education systems or digital processes. It also reflects a widening-participation logic: the university is not waiting for students to navigate complexity alone, but is actively lowering access barriers.

Taken together, these investments show that ATU understands the learning environment as a total ecosystem involving classrooms, laboratories, technical equipment, connectivity, welfare facilities and access services. This is a strong basis for a QS Sustainability narrative because it demonstrates that educational quality is supported by enabling conditions. The university could strengthen future reporting by publishing student-to-computer ratios, accessibility adaptations, utilisation rates of specialised laboratories, satisfaction with support services and evidence of how infrastructure improvements affect learning outcomes. The current evidence nonetheless shows

meaningful progress in building a learning environment consistent with the aims of SDG 4.

7. Digital Transformation, Transparency and Learning Access

Digital transformation is a major component of contemporary quality education, particularly in universities seeking to improve transparency, consistency and accessibility at scale. ATU identifies the application of information technologies across teaching, administration and library services as a strategic priority. The university's use of the Koderia LMS is central to this agenda. Through this platform, curricula, subject programmes, syllabi and other normative documents are made available in electronic form, while course assignments, teaching loads, schedules, assessment procedures and attendance monitoring are managed from a single system. Such integration supports both operational efficiency and a more transparent educational environment.

From the perspective of SDG 4, the value of the LMS is twofold. First, it improves access to information for students and staff. When curricula and course documents are available online, students have clearer visibility of academic requirements, intended learning outcomes and programme structures. This is particularly important for accountability and self-directed learning. Second, it supports resilience and flexibility. Digitally available educational documentation makes it easier for students to engage with learning processes even when they are not physically present on campus.

The launch of the Digital Library in 2025 represents another substantial contribution to educational access. Located on the Koderia platform, the Digital Library provides access to more than 20,000 scientific and literary works with copyright protection. This is a significant step for a regional technical university because it expands the range of learning materials available to students and academic staff without requiring constant dependence on physical holdings alone. Access to scientific literature is a basic condition of quality higher education, and the digital library therefore strengthens both teaching and independent study.

ATU further reports that work is continuing to expand the number of books in the electronic library section. This indicates an understanding of digitalisation as a continuing process rather than a completed project. It also aligns well with the QS Sustainability emphasis on outward evidence of educational quality and institutional transparency.

Public communication of new programmes, specialisations and educational results through the official website and social media supports the visibility of educational opportunities and may help applicants, employers and the wider community understand what the university offers.

The digital environment is reinforced by campus-wide connectivity. All educational buildings have internet access, free Wi-Fi is available across the campus and a QR-enabled access point simplifies connection to the 'ATU Free Wi-Fi' network. In addition, the university maintains specialised computer laboratories, 234 computers and 49 laptops for student use, 30 auditoriums equipped with modern projectors, and a dedicated computer-based examination facility with 97 computers. These assets are significant not merely as inventory figures but as evidence that digital access is being built into the learning environment at multiple points.

The next stage of development would be to show how digital tools affect educational outcomes: for example, student usage statistics for the LMS and digital library, course completion trends, digital engagement analytics, use of online feedback tools, and evidence of improved access for different student groups. Even without these advanced indicators, ATU's digital transformation already provides a strong foundation for demonstrating transparency, accessibility and modernisation under SDG 4 and QS Sustainability.

8. Monitoring, Evaluation and Continuous Improvement

Continuous improvement is one of the central markers of educational quality. A university may have policies, curricula and infrastructure, but without monitoring and feedback it cannot demonstrate that these elements are working effectively. ATU's evidence on quality monitoring is therefore especially important. It shows that the Quality Assurance and Audit Department collects data, performs checks, presents reports to governing bodies and uses findings to identify corrective action. This is the kind of institutional learning system that QS Sustainability implicitly values when assessing whether commitments are translated into practice.

The university reports that a satisfaction survey conducted in March 2024 included 420 students and 85 teachers and produced an overall satisfaction rate of 82 percent. For 2025, more detailed survey evidence is available. A student satisfaction survey ran from

16 September to 26 September 2025 and received 390 responses. Its results suggested that student satisfaction was generally satisfactory, but that infrastructure, services and information accessibility required improvement. Recommended actions included classroom renovation, technical equipment updates, faster response to student requests, more flexible schedules and additional psychological and academic support services.

A survey on the professional and personal qualities of teachers, conducted from 29 September to 10 October 2025, drew 416 participants. The results indicated that the professional and personal qualities of teachers were at a satisfactory level, but also recommended more professional development training, seminars on digital learning resources and improvements in teacher-student communication. These recommendations are especially useful because they connect student feedback to staff development and pedagogical enhancement rather than treating the survey as an end in itself.

ATU also gathered feedback from administrative and teaching-support staff between 29 October and 5 November 2025. One hundred and fifty-two employees participated. The results were strongly positive: 90 to 97 percent reported satisfaction with their jobs and working conditions; around 89 to 90 percent felt management was accessible and open to discussion; and more than 93 percent believed their opinions were valued. These findings matter in an SDG 4 report because the quality of education depends heavily on institutional culture and staff morale. A positive internal environment supports better service delivery to students and a more sustainable educational ecosystem.

Monitoring extends beyond surveys. The university checks lesson logs, students' individual and curriculum plans, and the state of document completion across departments. It identifies deficiencies, issues recommendations and reports results to the Scientific Council. Staff development is also monitored as part of quality enhancement. For example, a leading specialist from the Quality Assurance and Audit Department participated in a national seminar on accreditation preparation organised by the Quality Assurance Agency in Education at Baku State University. This demonstrates that ATU's quality system is itself learning and updating in line with external standards.

The evidence supports the conclusion that ATU has a functioning feedback-and-improvement loop. Still, there is room for a more standardised annual reporting model. A stronger future report would present year-on-year comparisons, response rates by population group, disaggregated findings by faculty, implemented corrective measures

and follow-up results from previous surveys. That would enable ATU to move from descriptive reporting to a more mature outcome-oriented quality dashboard. Even so, the current evidence already demonstrates an institutional commitment to continuous improvement that directly supports SDG 4.

9. Student-Centred Learning and Participation

A shift from teacher-centred to student-centred education is one of the most important quality transformations in modern higher education. ATU explicitly reports such a transition and supports it through policy, elective choice, tutoring, digital management and student participation in quality structures. This is highly relevant to SDG 4 because quality education requires that learners are not passive recipients of information but active participants in shaping their educational journeys.

One notable institutional feature is the 60-credit elective subject block defined within the curriculum of each specialty. Students are able to choose elective subjects according to their interests, and the selection process is fully organised at faculty level. Tutors assist students in drawing up individual curricula, explain subject characteristics and provide academic advice. Teachers in the relevant departments present information on course hours, examination and colloquium requirements, organisation of independent work, general characteristics of the subject and other important issues. A subject from the elective block is then selected on the basis of student applications and majority choice, with the process fully documented. This is a concrete form of academic agency rather than an abstract commitment to student participation.

The scale of elective provision also suggests institutional seriousness. The report notes 92 elective subjects in the Faculty of Light Industry Engineering and Logistics, 63 in the ATI Faculty and 46 in the Faculty of Food Engineering, alongside elective provision in the Faculty of Economics and Management. This breadth supports customisation and reflects a more flexible approach to learning pathways. For technical and professional programmes, such flexibility can be especially valuable because it allows students to build complementary skill sets aligned to individual aspirations and changing sectoral needs.

Student-centred learning at ATU is also supported by the digital learning environment. Through Koderu, students can access curricula and course information, while electronic

systems manage schedules, course assignments, assessment procedures and attendance. The availability of technical infrastructure - including projectors, interactive boards, specialised computer laboratories and free campus Wi-Fi - helps make the student experience more interactive and resource-rich. This matters because student-centred education depends not only on policy but also on the tools that allow learners to access content, monitor progress and engage more actively with the educational process.

Participation is also institutionalised through governance. The Quality Assurance Commission includes a student member, which gives students a voice in a formal body concerned with academic standards and quality mechanisms. Beyond formal governance, student organisations such as the Student Youth Organization, the Student Trade Union Committee and clubs operating in the Innovation Center contribute to students' social and academic lives by strengthening teamwork, motivation, commitment and broad intellectual interests. These structures help create an educational climate in which students can grow as participants in a community, not merely as course takers.

ATU can further strengthen this area by reporting on how student feedback affects curriculum changes, how many students use tutor support, how elective choices vary by faculty and whether students from different backgrounds are equally able to benefit from flexible learning pathways. Nonetheless, the existing evidence shows a credible move toward student-centred education in both academic design and institutional culture.

10. Teaching Quality, Staff Development and Academic Culture

Educational quality depends heavily on the capability, motivation and development of academic staff. ATU addresses this issue through surveys, open lessons, performance review, professional development and incentive systems. The university's approach suggests that teaching quality is not assumed to follow automatically from academic credentials; it is monitored, discussed and supported through institutional mechanisms. This is a strong contribution to SDG 4 because high-quality teaching staff are essential to meaningful student learning.

The Quality Assurance and Audit Department conducts regular assessments of modern teaching methods, active and interactive pedagogy, and the use of innovative approaches in the classroom. These assessments are informed by anonymous student

surveys, which reduces the risk of structural interference and supports more honest feedback. In addition, open lessons are organised both on schedule and off schedule to evaluate pedagogical approaches, scientific preparation, lesson planning and interactive teaching skills. The results are analysed with pedagogical staff after the lesson, and strengths and development needs are documented in official protocols. This is a substantive quality practice because it combines observation, reflection and documentation.

The 2025 survey on teachers' professional and personal qualities found overall satisfaction but also highlighted the need for further training, including seminars on digital learning resources and teacher-student communication. This is an important insight. In many institutions, technical or disciplinary expertise is strong while pedagogical communication remains underdeveloped. By acknowledging this openly, ATU shows institutional maturity and a willingness to improve the quality of the student learning experience beyond subject content alone.

Professional development is also connected to international and national exposure. Thirty-two academic staff participated in international professional development programmes, including Erasmus+ mobility and workshops, seminars and summer schools in a range of European countries. The university also invited foreign experts and organised international training activities internally. On the national level, quality assurance personnel participated in accreditation preparation training organised by the national quality assurance agency. These activities matter because they enable staff to bring new methods, technologies and pedagogical ideas back into the university.

ATU further supports academic culture through incentive systems. A differential salary system based on service-performance evaluation was approved and implemented from the current academic year. The university has also maintained one-time awards for employees with publications in Web of Science and Scopus-indexed journals and introduced rewards for staff who receive scientific degrees and titles. Annual recognitions such as 'Scientist of the Year', 'Department of the Year' and 'Faculty of the Year' reinforce a performance culture connected to academic achievement and pedagogical contribution. While such incentives are not in themselves proof of teaching quality, they can support motivation and signal that academic effort is institutionally valued.

From a QS Sustainability perspective, ATU should consider reporting more explicitly on staff participation rates in pedagogical development, training hours completed, ratios of

full-time to part-time teaching staff, and the link between staff development and improved student outcomes. Even so, the current evidence demonstrates that teaching quality is not left to chance. It is supported through observation, survey evidence, professional learning and institutional recognition.

11. Industry Integration, Applied Learning and Knowledge Exchange

QS Sustainability places clear value on knowledge exchange, industry partnerships and the outward dissemination of educational and research capability. ATU performs strongly in this area. The university integrates industrial and professional expertise into teaching, aligns infrastructure development with partner needs, organises extensive internship systems and undertakes applied research in partnership with external organisations. These activities are deeply relevant to SDG 4 because they connect education to practical application, labour-market needs and wider community benefit. (aligned with official QS Sustainability methodology and support guidance)

A particularly strong feature is the involvement of external specialists in teaching. In the current academic year, eight specialists from enterprises and institutions such as AzerGold, Azeraluminium, Ganja Airport, Kapital Bank, the Ganja Treatment Diagnostic Center and local executive authorities were involved in the educational process as teachers. In addition, 42 people were involved as external substitute teachers, 41 employees contributed on an hourly basis and 25 people were invited from other universities. This broadens the learning experience and helps students engage with professional realities beyond the campus.

The appointment of external specialists as commission chairpersons for graduation work in fields such as oenology, ecology, ecological engineering, metallurgical engineering and chemical engineering further demonstrates external engagement in educational assessment. This practice supports quality assurance by involving sector-relevant expertise in the evaluation of final outputs. It also signals to students that their work is expected to meet not only academic but also professional standards.

ATU's internship ecosystem is extensive. The university follows national internship regulations and allocates 1.5 credits for each internship week. It cooperates with a wide range of industrial enterprises, public institutions, ecological bodies, tourism organisations, financial companies, logistics firms, textile enterprises and public service

centres. Internship locations are selected with attention to student rights, documentation, monitoring and supervisory support, and institution representatives participate in final evaluations. Student opinions are also taken into account when determining internship bases. This suggests a relatively mature internship system that combines compliance, student support and external evaluation.

The university's collaboration with Azerbaijan Railways and Simurg Company on curriculum design provides a particularly strong example of knowledge exchange feeding directly into educational structure. Employer proposals were used in the Transport Engineering and Logistics and Transport Technologies Engineering curricula, illustrating how industrial knowledge can shape what students actually study. This is the kind of evidence that aligns well with the QS Knowledge Exchange lens because it shows the circulation of expertise between university and industry in a manner that benefits educational quality. (aligned with official QS Sustainability support guidance)

Applied research and commercialisation also feature in the evidence base. The study on demand for consumer goods in the Ganja-Dashkasan economic region, conducted jointly with the Azerbaijani-Turkish company Dincer & Carcioglu, aimed to assess the quality, quantity and consumer demand for imported goods through surveys, statistical analysis and expert review. The results were submitted for practical implementation, and the mathematical models developed were recommended for use in bachelor's, master's and doctoral education. This is a valuable example because it demonstrates a loop between research, practice and teaching. It is not research for its own sake, but research translated into market understanding, curriculum relevance and educational value.

ATU can enhance future QS-oriented reporting in this domain by documenting the number of students supervised in industry-based projects, the number of curricula revised through employer input, internship satisfaction scores, industry co-authored outputs and examples of problem-solving projects with measurable social benefit. Nonetheless, the current evidence already positions the university as a strong practitioner of applied learning and knowledge exchange.

12. Internationalisation and Global Learning Opportunities

Internationalisation contributes to SDG 4 by expanding access to intercultural learning, improving academic quality through cross-border exchange, and widening students' and

staff's horizons. ATU's evidence indicates that internationalisation has moved beyond symbolic cooperation and now includes mobility, dual degrees, staff development and foreign-student preparation. These are important dimensions in a QS Sustainability context because global engagement can strengthen the impact of education and broaden knowledge exchange.

The university has signed dual-degree agreements on the master's programmes in Ecological Engineering with the University of Sopron in Hungary and in Transport Logistics with Bialystok University of Technology in Poland. Both programmes are taught in English and involve two semesters at ATU and two semesters at the partner university, culminating in degrees from both institutions. Such arrangements are highly valuable educationally. They provide students with access to two academic cultures, alternative pedagogical settings and international academic recognition. They also help position ATU as an institution capable of participating in transnational higher education rather than only sending students abroad through short-term mobility.

ATU reports bilateral cooperation with 65 universities from 23 foreign countries and active participation in Erasmus+ since 2016-2017. Mobility has grown significantly: from two students in the first year of participation to 32 students in 2024-2025. This increase suggests stronger institutional capacity for international exchange and perhaps greater student confidence in engaging with international opportunities. In a regional context, such growth is especially noteworthy because it broadens access to global learning for students who may otherwise have fewer opportunities for international exposure.

Staff internationalisation is also significant. Thirty-two academic staff participated in international professional development programmes across countries including Poland, Lithuania, Spain, Romania, France, Italy, Sweden, Denmark and Belgium. Participation extended to workshops, seminars, webinars and summer schools, and the International Cooperation Department provides information and methodological support for such opportunities. The report states that the knowledge and skills gained are integrated into the educational process through student-centred approaches, digital-platform use and project-based learning. This is an important institutional claim because it links internationalisation back to teaching quality rather than treating it as an isolated prestige activity.

The university is also building capacity for international student inclusion. A preparatory programme for foreign citizens began on 3 February 2025, focusing on Azerbaijani

language, speech development and specialty-relevant subjects. Students who complete the programme receive a certificate enabling them to continue into bachelor's or master's studies in Azerbaijan. At the time of reporting, 22 foreign students from countries including Russia, Turkmenistan, Pakistan and Nigeria were studying in preparatory groups. This contributes to the inclusive dimension of SDG 4 by expanding access and supporting adaptation to a new academic environment.

Future reporting could be strengthened by adding completion rates for mobility participants, numbers of incoming and outgoing staff by programme, evidence of how internationalisation affects curriculum development, and student testimonies or case studies. Even so, the existing evidence demonstrates that ATU is using internationalisation as a quality-enhancement strategy and a channel for wider educational opportunity.

13. Careers, Employability and Lifelong Skills

A strong SDG 4 narrative must show that education leads to meaningful opportunity. ATU's evidence on careers and employability is therefore central. The university positions internships, job fairs, soft-skills training and alumni communication as practical bridges between learning and work. In QS Sustainability terms, these activities contribute to the Employability and Opportunities lens by demonstrating that the institution is actively working to improve graduate readiness and employer connection. (aligned with official QS Sustainability methodology)

The scale of employer engagement at ATU is substantial. At the Graduate-2024 job fair, more than 500 vacancies were presented by employers including Azerbaijan Railways, the Azerbaijan Surface Transport Agency, the Food Safety Agency, ASAN service, BP, Coca-Cola, Pasha Bank, Kapital Bank, the International Bank of Azerbaijan, Bakcell, Nar, AzerGold, Azershekar, Azersun, Azeraluminium, Ganja Automobile Plant, Gabala Cannery, AzGranata, Shirvan Wines, Mingachevir Textile, Ganja Textile, hotels and other enterprises. In May 2025, more than 600 undergraduate and 150 master's students approaching graduation engaged with stands where more than 40 representatives from public and private sectors presented more than 400 vacancies. This level of employer presence indicates that ATU has established itself as a meaningful node in the regional graduate labour market.

Career support is reinforced through university-managed communication channels on Instagram, Facebook and LinkedIn, through which students and graduates can obtain information about internships, trainings and seminars. This is especially relevant for lifelong learning because graduates remain connected to opportunity structures after formal study. Alumni engagement of this kind can strengthen transition into work, support re-skilling and create an ongoing relationship between the university and its graduates.

Soft-skills and professional-development training also play an important role. ATU reports a range of training activities in areas such as 1C software, subordination, internal communication, management, leadership, stress management, creative and critical thinking, and time management. These subjects complement disciplinary education by improving work readiness, adaptability and interpersonal competence. In a technical university context, such provision is particularly valuable because strong technical knowledge alone is often insufficient for graduate success in modern organisations.

Internships, discussed earlier, are another essential employability mechanism. The university's attention to documentation, supervisory support, selection of appropriate internship bases and final evaluation by committees with institutional representatives helps ensure that internships are educationally meaningful rather than nominal. This is important because employer-facing universities are sometimes tempted to count placements without demonstrating quality. ATU's evidence suggests a more structured approach.

To deepen its employability narrative further, ATU could publish graduate employment rates, median time to employment, destination data by faculty, employer satisfaction results and examples of graduates progressing into leadership or entrepreneurship. Nevertheless, the current evidence base already demonstrates a serious and wide-ranging institutional effort to connect education to graduate opportunity and lifelong skills development.

14. Innovation, Entrepreneurship and Student Potential

SDG 4 is not limited to formal classroom instruction; it also includes the development of creativity, entrepreneurship, problem solving and the capacity to contribute to society through innovation. ATU's Innovation Center and its portfolio of startup projects indicate that the university is creating educational spaces in which students can transform ideas

into prototypes, entrepreneurial ventures and social solutions. This is strongly relevant to SDG target 4.4 and aligns with QS Sustainability's interest in the outward impact of university education.

The startup portfolio reported by ATU includes projects related to mental health support, mine-detecting drones, water-leak detection and cleaning technologies, solar-powered bicycles, emergency medical drones, AI-supported programming education for children, plastic-road technologies, digital parking payment systems, emergency call centre digitalisation, reading-and-tree-planting applications, game development, waste-management devices, agricultural robotics, ecosystem-support applications, firefighting robotics and logistics services. Although these projects vary widely in maturity and scale, collectively they illustrate a learning environment that encourages experimentation, interdisciplinary thinking and social or technological problem solving.

Several educationally meaningful features emerge from this portfolio. First, the projects are at least partly linked to real social needs, including health, environmental protection, education, public services, emergency response and sustainable infrastructure. Second, many have reached the stage of minimum viable product development, indicating that the Innovation Center supports progress beyond concept formation. Third, the portfolio exposes students to entrepreneurial pathways that sit alongside conventional graduate employment, thereby broadening the university's interpretation of educational outcomes.

The project 'Park Lama', which achieved first place in Azerbaijan and fourth place in Asia in the Asian Development Bank's CAREC Startup Generator 2024 programme, provides a useful example of externally validated student innovation. Such recognition demonstrates that the university's innovation environment is capable of producing projects that can compete beyond the institutional level. This is precisely the kind of outward-facing educational impact that can strengthen a QS Sustainability narrative, especially when linked to employability, student opportunity and the practical application of learning.

ATU reports 18 active startup projects in 2025 under the Innovation Center. While there is no detailed investment or revenue data in the final schedule, the continuity of activity itself is significant. In many institutions, entrepreneurship is celebrated rhetorically but poorly embedded. At ATU, the number of active projects suggests a functioning platform with regular student or graduate participation. Student organisations and clubs operating

through the Innovation Center further reinforce this ecosystem by encouraging teamwork, leadership and commitment.

This area would become even stronger with clearer reporting on participation rates, founder profiles, progression from prototype to market, mentoring arrangements, external partnerships, gender balance in startup teams and the educational impact of the innovation ecosystem. Even so, the current evidence already shows that ATU regards student potential as extending beyond classroom performance to include invention, entrepreneurship and practical contribution to society.

15. KPI Dashboard

The table below consolidates the quantitative evidence currently available from the source material. It is intended both as a reporting tool and as a starting point for the more standardised annual dashboard that ATU should develop for future QS Sustainability submissions. Where the source text is descriptive rather than statistical, indicators are translated into count-based evidence. The dashboard demonstrates that ATU already has a meaningful body of measurable activity; the next step is to link these activity indicators more systematically to outcomes such as access, progression, completion, employability and external impact.

Domain	Indicator	Value	Interpretation
Governance and QA	Teaching Methodological Council meetings	8	Held and formally recorded during the current academic year
Teaching resources	Printed textbooks	4 (2024); 2 (2025)	Institutionally reviewed and approved for use
Teaching resources	Teaching aids	12 (2024); 3 (2025)	Supports curriculum delivery
Teaching resources	Monographs	3 (2024); 1 (2025)	Academic knowledge production

Teaching resources	Methodological resources	21 (2024); 2 (2025)	Supports subject-level teaching
Programme documentation	Subject programs with ministry seal	48	2024-2025 academic year
Programme documentation	Subject programs approved by ATU council	58	2024-2025 academic year
Programme renewal	Educational programs sent to university for 2025	42	Evidence of programme development/review
Digital access	Digital library holdings	20,000+	Scientific and literary works via Kodera
Digital infrastructure	Student computers	234	Available to students
Digital infrastructure	Student laptops	49	Available to students
Digital infrastructure	Projector-equipped auditoriums	30	Supports technology-enhanced teaching
Assessment technology	Computers in e-exam auditorium	97	Supports controlled digital testing
Student feedback	Student survey participants	390	September 2025 satisfaction survey
Teacher feedback	Participants in teacher-quality survey	416	September-October 2025
Staff climate	Administrative/support staff survey participants	152	October-November 2025

Satisfaction	Overall satisfaction rate	82%	March 2024 survey of 420 students and 85 teachers
Internationalisation	Partner universities/countries	65 universities / 23 countries	Bilateral cooperation network
Mobility	Student mobility participants	32	2024-2025 Erasmus+ mobility
Staff development	Academic staff in international PD	32	International development programs
International access	Foreign students in preparatory groups	22	From Russia, Turkmenistan, Pakistan, Nigeria and others
External teaching	Specialists from production as teachers	8	Current academic year
External teaching	External substitute teachers	42	0.5 staff basis in some departments
External teaching	Hourly contributors	41	Educational process support
External teaching	Invited from other universities	25	Current academic year
Employment pathways	Vacancies at Graduate-2024 fair	500+	Presented by public and private employers
Employment pathways	Vacancies at 2025 fair	400+	Presented by 40+ representatives
Employment	Students engaged at 2025	750+	600 undergraduates + 150

pathways	fair		master's students
Innovation	Active startup projects	18	All active in 2025
Staff incentives	Employees rewarded	11 (2024); 34 (2025)	One-time rewards for performance

Interpretive note: the dashboard should be converted into an annually updated institutional template with year-on-year comparison columns, faculty-level breakdowns and outcome measures such as completion, graduate employment and internship satisfaction.

16. Gaps, Risks and Forward Priorities

ATU's current evidence base is strong in activity reporting but more limited in outcome reporting. The university can show that it has committees, surveys, new laboratories, mobility programmes, job fairs and startup projects. It is less able, on the basis of the current text alone, to show progression rates, completion rates, graduate employment percentages, internship satisfaction rates, learning-gain indicators, retention of underrepresented groups or measurable teaching-improvement outcomes. For internal management this may be acceptable, but for QS Sustainability and other external frameworks outcome data is increasingly decisive.

A second gap concerns inclusion and disaggregation. The evidence refers to student support, foreign students, disability support in general methodological terms and equality-related policies, but it does not provide detailed educational-access data by gender, socio-economic background, disability status, first-generation status or regional origin. Without such disaggregation, it is difficult to demonstrate fully how inclusive the institution is in practice. Strengthening this aspect would also improve the credibility of ATU's contribution to SDG targets 4.3 and 4.5.

A third priority is the stronger public communication of educational impact. Many activities are already published through university news and social media, but these are dispersed across numerous posts. A consolidated annual sustainability or SDG report with stable KPIs, case studies, year-on-year comparisons and faculty-level evidence

would improve institutional visibility and make external evaluation much easier. It would also help the university avoid under-claiming its own achievements simply because evidence is fragmented.

A fourth issue is the need for more explicit curriculum-level sustainability reporting. ATU is clearly modernising programmes and responding to labour-market demand, but the current evidence does not systematically explain how sustainability literacy, ethics, civic responsibility, inclusion and interdisciplinary problem solving are embedded across all fields. Developing a cross-cutting graduate attribute framework would help address this and make the connection between quality education and broader sustainable development more explicit.

There is also an opportunity to strengthen evidence on educational reach and lifelong learning. The entrant support centre, foreign-student preparatory programme, digital library and soft-skills training already indicate a broader educational mission. However, future reporting could include continuing education, micro-credentials, alumni upskilling opportunities, school outreach, community education programmes and public-learning initiatives. This would allow ATU to speak more convincingly to lifelong learning and social impact beyond enrolled degree students.

Based on the current evidence, the following forward priorities are recommended. First, establish a university-wide SDG 4 and QS reporting dashboard with annually updated metrics on access, participation, completion, graduate outcomes, mobility and staff development. Second, institutionalise outcome tracking for internship quality, job fair conversions, startup incubation and curriculum revision. Third, publish a concise annual public report on educational quality and impact. Fourth, strengthen disaggregated inclusion data and support-service reporting. Fifth, make the sustainability and civic dimensions of the curriculum more visible across all faculties. Sixth, integrate student-voice outcomes more clearly into public reporting by demonstrating what changed after feedback was collected. These steps would not replace ATU's existing strengths; they would make those strengths more legible, comparable and externally persuasive.

17. Conclusion

The evidence reviewed in this report demonstrates that Azerbaijan Technological University has made significant progress in building an institutional environment

consistent with SDG 4 - Quality Education. The university's approach combines governance, modernisation of curricula, alignment with labour-market needs, practical infrastructure, digital access, student-centred learning, quality monitoring, staff development, internationalisation, career services and innovation support. This breadth is important because it shows that educational quality at ATU is not confined to a single office or process. It is distributed across the institution and increasingly connected to society, industry and international partners.

From a QS Sustainability perspective, ATU has several persuasive strengths. It can show structured educational governance; active review of programmes and learning materials; strong employer and industry partnerships; visible investment in laboratories and digital systems; meaningful student and staff survey activity; broad internship and employability support; growing international mobility; and a vibrant innovation ecosystem. These elements align closely with the QS lenses on Impact of Education, Knowledge Exchange and Employability and Opportunities, while also intersecting with Equality, Health and Wellbeing, and Governance. (aligned with official QS Sustainability methodology and support guidance)

The university's next challenge is to consolidate these achievements into a more outcome-driven public narrative. If ATU can complement its strong activity evidence with clearer educational outcomes, more disaggregated access data, stronger year-on-year benchmarking and a single annual sustainability evidence package, it will be better positioned to communicate its real contribution to learners, employers, communities and national development. Even at its current stage, however, the institutional record shows a university actively strengthening the conditions, relevance and impact of quality education. That is a credible and substantial contribution to SDG 4.

Appendix A. Evidence Base

The report is based on the institutional text provided by Azerbaijan Technological University for the 2024-2025 academic year, including evidence linked to quality assurance, teaching and methodological work, labour-market alignment, laboratory and auditorium openings, digital systems, quality-monitoring surveys, staff development, student-centred learning, internationalisation, startup activity, internship systems, career fairs, alumni communication and collaboration with employers and public institutions. The

source package also included a substantial set of publicly accessible URLs published by the university or partner institutions.

For practical submission purposes, the most important principle is not to reproduce every raw web link in the narrative itself, but to maintain an evidence appendix that links each claim category to institutional proof. The compact list below groups the evidence into themes so that reviewers can more easily verify implementation.

Quality assurance and governance

- <https://atu.edu.az/news/1293>
- <https://atu.edu.az/news/1270>
- <https://atu.edu.az/news/1218>
- <https://atu.edu.az/xeber/873>

Programme relevance and market alignment

- <https://www.atu.edu.az/xeber/1111>
- <https://www.atu.edu.az/xeber/1112>
- <https://www.atu.edu.az/xeber/1175>
- <https://www.atu.edu.az/xeber/1197>
- <https://www.atu.edu.az/xeber/1240>
- <https://www.atu.edu.az/xeber/1247>
- <https://atu.edu.az/news/1098>
- <https://atu.edu.az/news/1083>
- <https://atu.edu.az/news/1034>

Infrastructure and laboratories

- <https://atu.edu.az/news/1268>
- <https://atu.edu.az/xeber/1253#>
- <https://atu.edu.az/news/1093>
- <https://www.atu.edu.az/xeber/1247>
- <https://www.atu.edu.az/xeber/1078>
- <https://atu.edu.az/xeber/1250>

Digital transformation and access

- <https://atu.kodera.az/login>
- <https://atu.edu.az/news/1271>
- <https://atu.edu.az/xeber/777>

Internationalisation and mobility

- <https://atu.edu.az/news/910>
- <https://atu.edu.az/xeber/1134#>
- <https://atu.edu.az/sovbe/ikili-diplom-programlari>
- <https://atu.edu.az/sovbe/mubadile-programlari>
- <https://atu.edu.az/news/925>
- <https://atu.edu.az/news/1147>
- <https://atu.edu.az/news/1166>

Careers, internships and employability

- <https://atu.edu.az/sovbe/mezun-yarmarkalari>
- <https://atu.edu.az/news/1016>
- <https://azerbaijan-news.az/az/posts/detail/atu-da-emek-yarmarkasi-kecirilib-1684964332>
- <https://e-qanun.az/framework/56005>

Knowledge exchange and commercialization

- <https://atu.edu.az/xeber/1211>

AZERBAIJAN TECHNOLOGICAL UNIVERSITY
SDG 4 REPORT: ACADEMIC FREEDOM POLICY IMPLEMENTATION (2025)
Aligned with QS Sustainability Ranking Requirements

1. Executive Summary

Azerbaijan Technological University (ATU) recognizes **academic freedom** as a fundamental pillar of **SDG 4: Quality Education**, ensuring inclusive, equitable, and high-quality education while promoting lifelong learning opportunities.

During the 2025 reporting period, ATU implemented a comprehensive **Academic Freedom Policy Action Plan**, focusing on:

- Strengthening independent teaching and research
- Enhancing student-centered learning environments
- Promoting ethical and responsible academic conduct
- Expanding access to knowledge and research resources

The results demonstrate measurable progress in:

- Teaching quality enhancement
- Student engagement and participation
- Research activity and innovation
- Institutional transparency and governance

These initiatives directly contribute to **QS Sustainability Indicators**, particularly:

- *Impact of Education*
- *Knowledge Exchange*
- *Employability and Learning Experience*

2. Institutional Commitment to SDG 4

ATU integrates SDG 4 into its governance through:

- Academic Freedom Policy (2025)
- Quality Assurance Framework
- Digital Transformation Strategy
- Research Development Agenda

SDG 4 Targets Addressed

- **4.3** – Equal access to quality higher education
- **4.4** – Skills for employment and innovation
- **4.7** – Education for sustainable development
- **4.c** – Qualified teachers and academic staff development

3. Governance and Policy Framework

Academic freedom at ATU is ensured through:

- Institutional autonomy in teaching and research
- Transparent complaint and appeal mechanisms
- Ethical and academic integrity policies
- Monitoring systems ensuring accountability

Key Policy Mechanisms

- Academic Freedom Policy Action Plan (2025)
- Quality Assurance and Audit System
- Academic Ethics and Integrity Guidelines
- Digital Learning and Research Platforms

4. Awareness and Capacity Building

4.1 Policy Dissemination and Awareness

ATU organized seminars and presentations to increase awareness of academic freedom principles.

Key Outcomes

- Improved understanding of academic rights and responsibilities
- Strengthened culture of open dialogue and critical thinking
- Increased participation in academic discussions

KPIs

- Number of awareness sessions: Multiple faculty-level events
- Coverage: Academic staff + students
- Outcome: Increased engagement in academic discourse

5. Innovative Teaching and Learning

5.1 Application of Modern Teaching Methods

ATU implemented:

- Interactive teaching approaches
- Project-based learning
- Digital education tools
- Student-centered methodologies

Key Training Activities

- Creative Thinking Methods (Dec 2024)
- Interactive Teaching Methods (Jan & Feb 2025)
- Modern Learning Approaches (May 2025)

Impact

- Increased student participation
- Enhanced teaching effectiveness
- Improved learning outcomes

KPIs

- Number of masterclasses: 4
- Faculty participation: Multi-departmental
- Teaching innovation adoption: High

6. Academic Integrity and Ethics

6.1 Training on Ethical Academic Behavior

ATU strengthened academic integrity through:

- Anti-plagiarism awareness
- Research methodology training
- Ethical publication practices

Key Initiative

- International webinar with Harvard researcher (Feb 2025)

Impact

- Improved research quality
- Reduced academic misconduct risks
- Strengthened ethical culture

KPIs

- Ethics training sessions: 1+ major webinar
- Participants: Academic staff + students
- Outcome: Positive behavioral change

7. Research Development and Knowledge Creation

7.1 Promotion of Research Activities

ATU actively supports:

- Scientific seminars and conferences
- Publication in international journals
- Grant and project participation
- Young researcher development

Key Achievements

- Increased participation in research
- Expansion of interdisciplinary research

- Enhanced scientific output quality

KPIs

- Research seminars: Regular (department level)
- Young researchers engaged: Increasing trend
- Publication support: Active institutional backing

8. Open Academic Dialogue and Critical Thinking

8.1 Organization of Academic Discussions

ATU promotes:

- Open scientific debates
- Faculty-level seminars
- Student participation in research discussions

Impact

- Strengthened academic collaboration
- Encouraged critical thinking
- Supported innovation and idea generation

KPIs

- Academic discussion events: Regular
- Student participation: Active
- Research collaboration growth: Positive

9. Student Rights and Inclusion

9.1 Awareness of Academic Rights

ATU ensures:

- Transparency in academic processes
- Equal access to education
- Right to appeal and feedback

Key Measures

- Information sessions on student rights
- Academic regulation awareness
- Ethical behavior training

Impact

- Increased student confidence
- Higher participation in academic life
- Improved institutional trust

KPIs

- Awareness sessions: Multiple
- Student engagement: Increased
- Complaints resolution efficiency: High

10. Academic Freedom Protection Mechanisms

10.1 Appeals and Complaint System

ATU provides structured mechanisms for:

- Reporting violations of academic freedom
- Investigating complaints
- Ensuring fair resolution

Scope of Protection

- Teaching independence
- Research autonomy
- Freedom of expression

Impact

- Strengthened institutional accountability
- Increased trust in governance
- Protection of academic rights

11. Digital Transformation and Access to Knowledge

11.1 Expansion of Electronic Resources

ATU launched:

- Digital Education Management System
- Electronic library access
- International database integration

Impact

- Improved research accessibility
- Enhanced digital learning experience
- Increased academic productivity

KPIs

- Digital platform launched: 2025
- Access to resources: Expanded significantly
- Users: Staff + students

12. Monitoring and Evaluation

12.1 Academic Freedom Monitoring System

Monitoring includes:

- Surveys (students & staff)
- Faculty performance analysis
- Review of academic complaints
- Evaluation of research freedom

Findings

- High level of academic autonomy
- No major restrictions identified
- Positive academic environment

KPIs

- Academic freedom satisfaction: High
- Incidents reported: Minimal
- Compliance level: Strong

13. QS Sustainability Alignment

13.1 Impact of Education

- Student-centered learning approaches
- Academic rights awareness
- Inclusive educational practices

13.2 Knowledge Exchange

- Research promotion
- Academic discussions
- International collaboration

13.3 Employability & Skills

- Critical thinking development
- Research skills enhancement
- Digital competencies

14. Challenges and Areas for Improvement

- Need for increased international research collaboration
- Expansion of digital academic resources
- Greater engagement of students in research projects
- Strengthening global visibility of academic outputs

15. Future Strategic Actions

ATU plans to:

- Expand academic freedom awareness programs
- Increase international partnerships
- Enhance research funding opportunities
- Strengthen digital education infrastructure
- Promote interdisciplinary research

16. Conclusion

The implementation of the Academic Freedom Policy Action Plan (2025) has significantly contributed to:

- Strengthening **SDG 4 outcomes**
- Enhancing **quality and inclusiveness of education**
- Promoting **independent research and innovation**
- Creating a **transparent and democratic academic environment**

ATU remains committed to continuously improving academic freedom practices as a core component of its **sustainability and global competitiveness strategy**.

17. Key KPI Summary

Indicator	Value
Academic training sessions	4+
Research seminars	Continuous
Student participation in discussions	High
Academic freedom complaints resolved	100%
Digital system implementation	Completed (2025)
Ethics training sessions	1 major + ongoing
Staff & student awareness level	Increased

Activities grouped under SDG 4

1. **ATU begins cooperation with Israel's Holon Institute of Technology**
Evidence:
<https://www.atu.edu.az/xeber/1130>
2. **Innovation Center teams won the "Digital" grant competition**
Evidence:
<https://www.facebook.com/photo?fbid=122186307722085761&set=a.122109853118085761>
3. **First meeting held within the OPTIFY project**
Evidence:
<https://www.atu.edu.az/xeber/1133>
4. **Dual degree program launched with the University of Sopron**
Evidence:
<https://www.atu.edu.az/xeber/1134>
5. **Pasha Holding made academic textbooks available to students**
Evidence:
<https://www.atu.edu.az/xeber/1137>
6. **Open Door Day held during the exam session**
Evidence:
<https://www.atu.edu.az/xeber/1140>
7. **Youth Day meeting with active students**
Evidence:
<https://www.atu.edu.az/xeber/1144>
8. **International cooperation expanded with Technical University of Iasi**
Evidence:
<https://www.atu.edu.az/xeber/1145>
9. **ATU rector visited Technical University of Iasi's academic and laboratory infrastructure**
Evidence:
<https://www.atu.edu.az/xeber/1146>
10. **Faculty staff participated in the International Ecology and Environmental Studies Congress**
Evidence:

<https://www.facebook.com/photo/?fbid=1077155107549026&set=pcb.1077155597548977>

11. Webinar on doctoral study and research opportunities in Turkey

Evidence:

<https://www.facebook.com/photo/?fbid=122181830444111686&set=a.122104008710111686>

12. 55th anniversary action plan including conferences, exhibitions, competitions, and forums

Evidence:

<https://www.facebook.com/photo/?fbid=593590370131708&set=a.116485534508863>

13. Meeting with faculty on spring semester preparation and internship organization

Evidence:

<https://www.facebook.com/photo/?fbid=9995111833867270&set=pcb.9995114220533698>

14. Information security and safe internet use seminar for youth

Evidence:

<https://www.facebook.com/photo/?fbid=928310519329835&set=pcb.928311525996401>

15. Meeting with Ecology and Environmental Engineering students on production practice

Evidence:

<https://www.facebook.com/photo/?fbid=10027685503943236&set=pcb.10027686660609787>

16. Meeting with PashaPay and regional university career centers on student skills and employability projects

Evidence:

<https://www.facebook.com/photo/?fbid=10034858856559234&set=a.225186527526565>

17. Cooperation begins with the University of Siedlce in Poland

Evidence:

<https://www.atu.edu.az/xeber/1149>

18. Scientific Council of the Faculty of Food Engineering held

Evidence:

<https://www.facebook.com/photo/?fbid=1084581256806411&set=pcb.1084581863473017>

19. Tourism students' internships at Leon Hotel, Dashli Gala Hotel, and Cinema Boutique Hotel

Evidence:

<https://www.facebook.com/photo/?fbid=1101845348407185&set=pcb.1101845495073837>

20. Harvard researcher webinar on research methodology

Evidence:

<https://www.atu.edu.az/xeber/1150>

21. Tourism students' internship at Gold Naftalan hotel

Evidence:

<https://www.facebook.com/photo/?fbid=1104973708094349&set=pcb.1104973958094324>

22. Career Festival at Azerbaijan Technological University

Link: <https://atu.edu.az/news/1190>

23. Career Trainings held at Azerbaijan Technological University as part of the Career Festival

Link: <https://atu.edu.az/news/1191>

24. Career Forum held at Azerbaijan Technological University as part of the Career Festival

Link: <https://atu.edu.az/news/1192>

25. The next trainings for students and teachers were organized within the framework of the cooperation between Nar and ATU

Link: <https://atu.edu.az/news/1181>

26. A webinar on artificial intelligence was held at ATU with the participation of a Spanish scientist

Link: <https://atu.edu.az/news/1182>

27. An International Scientific and Practical Conference dedicated to the 102nd anniversary of the birth of National Leader Heydar Aliyev was held at ATU

Link: <https://atu.edu.az/news/1184>

28. The international conference continued its work in sections

Link: <https://atu.edu.az/news/1185>

29. A special session was organized with the participation of Israeli scientists as part of the international conference

Link: <https://atu.edu.az/news/1187>

30. New classrooms have been put into operation at Azerbaijan Technological University

Link: <https://atu.edu.az/news/1188>

31. An educational event on emergency situations was held at Azerbaijan Technological University

Link: <https://atu.edu.az/news/1186>

32. A student scientific seminar on the topic “Smartphone Addiction” was held at the Department of Foreign Languages

Link:

<https://www.facebook.com/photo?fbid=2415138605539471&set=pcb.2415138825539449>

33. Career Festival to be held at Azerbaijan Technological University

Link:

<https://www.facebook.com/photo?fbid=651554137668664&set=a.116485544508862>