Azerbaijan TECHNICAL University

Report on Sustainable Development Goal 4

Quality Education

2025

4 QUALITY EDUCATION



Foreword

In 2025, Azerbaijan Technical University (AzTU) continues its unwavering commitment to ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all — in full alignment with Sustainable Development Goal 4 (SDG 4).

This report highlights AzTU's progress in advancing academic excellence, innovation, and global collaboration. With a focus on digital transformation, internationalization, and inclusive education, AzTU remains committed to shaping future-ready graduates who are empowered by knowledge and guided by sustainability.

Introduction

AzTU recognizes education as the foundation for sustainable development. In line with SDG 4, the university has undertaken significant reforms to enhance teaching quality, expand access, and foster global partnerships.

Throughout 2025, AzTU has deepened its cooperation with leading universities, introduced new programs integrating artificial intelligence and digital skills, and expanded its student support and scholarship frameworks.

These initiatives aim not only to strengthen institutional capacity but also to ensure that every student—regardless of background—has access to quality, inclusive, and future-oriented education.

The Quality Assurance Department monitors all university activities under the SDG framework to ensure transparency, efficiency, and measurable outcomes.

References

National Information Portal on Sustainable Development Goals of the Republic of Azerbaijan AzTU Sustainability

AzTU SDG 4 Report / November 2023

Pedagogical Mastery Week at Cybersecurity Department

Seminar on AI and Digitalization in German Language Teaching Webinar on Innovations in Foreign Language Teaching

Clarivate Training Session for AzTU Staff

AzTU and "Sağlam Ailə" Medical Center Collaboration

AzTU TGT Named Student Organization of the Year

Digital Transformation Strategy at AzTU

AzTU showcased at the Eurasia Universities Summit

SDG 4 keywords - Quality education			
Quality Education	Inclusive Education	Equitable Access to Education	Higher Education Accessibility
Technical and Engineering Education	Academic Excellence	Teaching Quality Enhancement	Faculty Development
Pedagogical Innovation	Digital Education	Online and Hybrid Learning	Digital Learning Platforms
Smart Learning Systems	Artificial Intelligence in Education	Digital Literacy	STEM Education
Sustainability Education	Lifelong Learning	Curriculum Modernization	Inclusive Learning Environments
Equality, Diversity and Inclusion	Student Scholarships	Student Mentoring	First-Generation Student Support
Accessible Education for Students with Disabilities	International Academic Collaboration	Student Mobility Programs	Internationalization of Higher Education
Research-Based Education	Research and Citation Literacy	Open Educational Resources	Digital Libraries and Repositories
Academic Research Development	Industry-Academia Collaboration	Career Development and Employability	Professional Skills Development
Social Development and Community Engagement	STEM Outreach Programs	Educational Quality Assurance	Sustainable Technical Education

SDG 4 Targets

AzTU actively works towards several targets set by SDG 4:

- **Ensure equal access to affordable and quality technical, vocational, and higher education:** AzTU's diverse student body of 12,500 students (including 2,290 new admissions) reflects its commitment to providing equal access to higher education, especially in engineering and technology, to students from all backgrounds.
- **Increase the number of youth and adults with relevant skills for employment, decent jobs, and entrepreneurship:** AzTU supports this target through its rigorous academic programs in engineering and technology, aligning curricula with industry needs to equip students with relevant skills.
- **Increase the number of scholarships and funding opportunities for higher education students from disadvantaged backgrounds:** AzTU's volunteer and outreach programs provide additional opportunities for students from marginalized communities, including firstgeneration students (756 first-generation students starting their degree at AzTU).
- **Enhance the quality of teaching and learning through more inclusive curricula and faculty development:** AzTU is committed to improving the quality of education through its open access to lecture materials and resources, supporting faculty development by sharing the latest research and academic resources available globally.
- **Promote the development of skills for sustainable development:** AzTU's educational programs integrate sustainability and STEM education, fostering skills in innovation, critical thinking, and responsible decision-making.
- **Ensure that all learners acquire the knowledge and skills needed to promote sustainable development:** Through its outreach activities, including seminars and events such as the "Bibliotherapy" seminar and STEM workshops, AzTU ensures that learners not only gain technical knowledge but also life skills like critical thinking, problem-solving, and a sense of social responsibility.
- **Support the creation of inclusive learning environments that are accessible to all:** AzTU actively promotes equality, diversity, and inclusion with policies that ensure nondiscriminatory academic and social environments, enabling equal participation for students of all backgrounds.

SDG 4's Positive Impact on Other SDGs

The initiatives taken by Azerbaijan Technical University (AzTU) in the realm of Quality Education (SDG 4) have far-reaching positive impacts on various Sustainable Development Goals (SDGs).

- **Empowering Communities through Access to Education:** AzTU's commitment to providing free access to educational materials and resources fosters an inclusive educational environment. By offering lecture materials and full-text books online, the university not only supports its students but also extends its resources to the broader community. This accessibility promotes lifelong learning (SDG 4.3) and empowers individuals in remote or underserved areas to pursue knowledge and education, thus enhancing community empowerment and resilience (SDG 11).

- **Fostering Innovation and Economic Growth:** The partnerships and projects initiated by AzTU, such as the collaboration with TUSAŞ (Turkish Aviation and Space Industry Company) for “AzTU Turkish Aerospace, MGP 2023," create an ecosystem that stimulates innovation and practical learning. This aligns with **SDG 8** (Decent Work and Economic Growth) by equipping students not only with theoretical knowledge but also with hands-on experience that will aid in their employability and entrepreneurship, ultimately contributing to economic development.

- **Strengthening Social Cohesion and Volunteering:** The establishment of the Social Development Center and the active volunteering programs significantly bolster social inclusion and community engagement. Students participating in these initiatives contribute to local schools and communities, fostering an environment of mutual support and collaboration. This work promotes reduced inequalities (SDG 10) and helps build peaceful and inclusive societies (SDG 16).

- **Promoting Gender Equality and Inclusivity:** AzTU's policies on "Equality, Diversity, and Inclusion" ensure a supportive academic environment free from discrimination. This commitment plays a crucial role in promoting gender equality (**SDG 5**) and addressing disparities that first-generation students and marginalized groups might face in accessing higher education. By focusing on sustaining an inclusive academic culture, AzTU encourages participation from diverse backgrounds, thereby enhancing educational equity.

- **Improving Health and Well-Being:** The awareness seminars, like the one on "Bibliotherapy - psychology of readers," reflect AzTU's holistic approach to education, acknowledging mental health and well-being (**SDG 3**). By promoting reading as a tool for mental wellness, the university nurtures a culture that values emotional health alongside academic achievement, thereby improving overall community well-being.

- **Building Partnerships for Education:** AzTU's active engagement with other universities, local schools, and international programs exemplifies the importance of partnerships in education (SDG 17). Collaborative projects and knowledge sharing enhance the quality of education and research, providing a platform for continued learning and development across institutions and communities.

Statistics and their indicators

Indicator	2023	2024	2025	Growth (%)
Total enrolled students	11,200	11,850	10,000+	-10.7%
Faculty development trainings	12	16	22	+83.3%
International partnerships	21	26	80+	+281%
Students in mobility programs	100+	150+	200+	+100%
Publications in indexed journals	350+	400+	500+	+42.9%

Current situations

1. Academic Quality and Pedagogical Development

In 2025, AzTU enhanced teaching excellence through academic workshops and professional training programs. Key events included:

- *Pedagogical Mastery Week* at the Department of Cybersecurity on innovative teaching and digital literacy (source);
- *Seminar on AI and Digitalization in German Language Teaching (source);*
- *Webinar on Innovations in Foreign Language Teaching (source);*
- *Seminar on ISO 21001:2018 Standards* for improving educational management and quality assurance.

These initiatives supported **SDG 4.4** and **SDG 4.7**, strengthening academic staff competencies for digital and sustainable education.

2. Digital Education and Smart Learning Systems

AzTU began developing its Digital Transformation Strategy (source), focusing on:

- Expanding hybrid and online learning;
- Developing e-libraries, open-access platforms, and digital repositories;
- Organizing research and citation literacy training with Clarivate and Elsevier (source);
- Introducing analytics-based systems to monitor student performance. These initiatives advanced **SDG 4.3** by promoting equitable access to quality tertiary education.

3. Inclusive and Equitable Access to Education

AzTU ensures inclusive learning opportunities for students from all backgrounds. In 2025, enrollment reached **12,500 students**, including international and first-generation learners. Support measures include:

- Scholarships and mentoring for low-income and high-achieving students;
- Accessibility facilities for students with disabilities;
- Policies on equality, diversity, and inclusion.

The *Student Youth Organization (TGT)* was named **Student Organization of the Year** for its leadership and inclusivity initiatives (source).

4. Internationalization and Academic Collaboration

AzTU expanded global cooperation to **30+ universities** across Europe, Asia, and the Middle East. 2025 highlights:

- New agreements with universities in *Türkiye, Kazakhstan,* and *Malaysia*;
- Student mobility programs in *Türkiye* and *Pakistan*;
- Participation in the *Eurasia Universities Summit* and *DIRNA Project*.

These collaborations strengthened international visibility and academic exchange.

5. **Social Engagement and Community Outreach**

AzTU's **Social Development Center** (established in 2022) organizes volunteer programs, seminars, and school outreach activities.

Examples include:

- Seminar *"Bibliotherapy – Psychology of Readers"* within the *Volunteer Groups* project;
- STEM and career awareness workshops in local schools;
- Partnership with *"Sağlam Ailə" Medical Center to promote health education (*source*);*
- Annual *Open Doors Days* for schoolchildren.

These efforts foster community engagement and promote educational cooperation.

Future Goals

AzTU's vision for the coming years focuses on transforming education into a sustainability-driven innovation ecosystem. The university's strategic roadmap for 2026–2030 includes the following pillars:

1. **Curriculum Modernization and Internationalization**

Integrate UN SDG modules into all engineering programs. Expand joint and double-degree programs to at least 10 partner universities by 2027. Introduce digital pedagogy certification for all teaching staff.

2. **Research-Driven Education**

Establish an Interdisciplinary Center for Sustainable Education Technologies. Increase student participation in funded research projects by 50% by 2028. Encourage publication of student-faculty co-authored papers in indexed journals.

3. **Equity and Inclusion**

Launch the Women in Tech and Innovation Initiative to achieve gender balance across all faculties. Strengthen access programs for students from rural and conflict-affected regions. Develop targeted scholarships for underrepresented communities.

4. **Digital Transformation and AI Integration**

Expand the AI-powered AzTU Smart Learning Platform to support personalized education paths. Utilize data analytics for student performance prediction and early intervention. Integrate virtual labs and AR/VR content across all STEM disciplines.

5. **Lifelong Learning and Workforce Alignment**

Establish a Lifelong Learning Center offering micro-credentials and industry-based upskilling programs. Deepen cooperation with industry partners such as Baykar Technologies and AzerTechnolayn LLC. Align curricula with Industry 5.0 competencies – sustainability, resilience, and human-centric design.

By 2030, AzTU aims to be recognized as a regional leader in sustainable technical education, embedding the principles of equity, innovation, and continuous learning into every level of academic and institutional practice.

Conclusion

Azerbaijan Technical University's unwavering dedication to quality education, community engagement, and inclusivity reflects its commitment to excellence in technical education. By aligning its strategic goals with the broader objectives of sustainable development, AzTU is not just educating future professionals; it is nurturing responsible citizens equipped to tackle global challenges. As the university continues to innovate and adapt, it remains committed to its mission of fostering a sustainable future through quality education and a robust academic community.

This document highlights AzTU's range of initiatives and resources, underscoring its role in advancing quality education aligned with the United Nations Sustainable Development Goal 4. Through these efforts, Azerbaijan Technical University is shaping a brighter future for its students and the society at large.