BAKU STATE UNIVERSITY

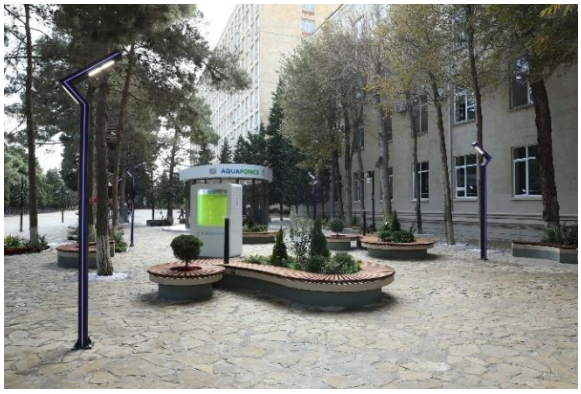
UI GreenMetric World University Rankings

UI GreenMetric Questionnaire

University : Baku State University
Country : Azerbaijan
Web Address : http://bsu.edu.az/en
SDG Focused Web Adress: https://sdg.bsu.edu.az/

[1] Setting and Infrastructure (SI)

[1.18] Conservation: plant, animal, and wildlife, genetic resources for food and agriculture secured in either medium or long-term conservation facilities (SI.10)

	
Aquaponics system (Baku State University)	Museum of evolution (Baku State University)
	
Quba Education, Practice and Recreation Center	Eco Space

plant, animal, and wildlife, genetic resources for food and agriculture secured in either medium and long-term conservation facilities

Altiaghac settlement

Eco Park

Mineral museum

Description:

Baku State University actively contributes to the conservation of flora, fauna, wildlife, and genetic resources through structured medium- and long-term initiatives integrated into its academic, research, and campus sustainability activities. The university has established programs aimed at biodiversity protection, ecological monitoring, and the preservation of genetic and natural resources in alignment with national environmental priorities.

More than 75% of the planned conservation activities have been successfully implemented. These efforts include field-based ecological studies, conservation-oriented research projects, and

collaborations with relevant national institutions and environmental organizations. Particular emphasis is placed on protecting local biodiversity and promoting sustainable management practices within and beyond the campus environment.

The university continues to expand its conservation capacity through interdisciplinary research, student engagement, and partnerships, with the goal of further strengthening the long-term preservation of ecological and genetic resources.

Altiaghac Training and Practice Base

The Training and Practice Base of Baku State University located in the Altiaghac settlement has been operating since 1990 and remains one of the university's most significant field education facilities. Situated in one of the most picturesque regions of Azerbaijan, the Altiaghac settlement lies in the foothills of the Greater Caucasus Mountains, approximately 120 km from Baku, at an altitude of around 1100 meters above sea level. The region is characterized by a warm-temperate climate, which creates favorable conditions for field-based education, environmental observation, and ecological research.

The climatic conditions of the area provide valuable opportunities for long-term environmental monitoring. The absolute maximum temperature recorded in summer reaches +39.8°C, while the absolute minimum temperature in winter drops to −24°C. Relative humidity averages around 73%, reaching 82% in January and decreasing to approximately 59% in July. The average annual precipitation is about 587 mm, with the highest rainfall observed in February (77 mm), June (92 mm), and September (99.6 mm), while the driest months include July (30 mm), August (10 mm), and December (10 mm).

The base is located within the basin of the Atachay River, where diverse vegetation is widely distributed. The ecosystem includes oak, walnut, wild pear, apple, sycamore, hawthorn, dogwood, barberry, mulberry, and wormwood shrubs, among many other plant species. These natural conditions make the Altiaghac Training and Practice Base an important site for biodiversity observation, ecosystem studies, and climate-related research.

In 2025, the Altiaghac base continued to support field-based learning activities for students in biology, ecology, environmental engineering, and geography. The facility hosted practical courses, seasonal field camps, and environmental monitoring programs. Students conducted soil and water quality analyses, vegetation mapping, and biodiversity surveys. The base also contributed to sustainability-oriented research, focusing on ecosystem preservation, sustainable land management, and environmental education. Additionally, the site provided opportunities for outdoor training, teamwork exercises, and nature-based educational initiatives that strengthened students' practical competencies.

Guba Training, Practice, and Recreation Center

The Guba Training, Practice, and Recreation Center of Baku State University is located in the village of Ikinki Nugadi in the Guba district, one of the most scenic and ecologically rich regions of Azerbaijan. Positioned approximately 168 km from Baku, the center occupies a total area of about 8 hectares, providing extensive space for academic training, research, and recreational activities.

The natural landscape of the Guba region includes forested areas, mountainous terrain, and fertile agricultural lands. These environmental features make the center particularly suitable for conducting interdisciplinary research and field-based education. The facility supports practical training in environmental science, agriculture, and natural resource management, enabling students to apply theoretical knowledge in real-world settings.

During 2025, the Guba Center played an important role in experiential learning and sustainability-focused education. The center hosted student internships, research camps, and environmental awareness programs. Activities included biodiversity monitoring, sustainable agriculture experiments, and climate-related studies. In addition to academic training, the center organized cultural and recreational events that enhanced student engagement and promoted holistic education.

The Guba Center also strengthened collaboration between students, faculty members, and local communities. Outreach initiatives included environmental awareness campaigns and practical workshops designed to promote sustainable resource use and ecological responsibility in rural areas.

Aquaponics System

The aquaponics system at Baku State University represents an innovative integration of aquaculture and hydroponics technologies, where fish and plants are cultivated symbiotically within a closed-loop system. Fish waste provides essential nutrients for plant growth, while plants naturally filter and purify the water, maintaining a balanced ecosystem.

In 2025, the aquaponics system continued to serve as a hands-on educational platform supporting interdisciplinary learning in biology, environmental science, and sustainable agriculture. Students actively participated in maintaining the system, monitoring water quality parameters, analyzing nutrient cycles, and evaluating plant growth efficiency. The system also supported experimental research projects focused on water conservation, resource efficiency, and sustainable food production methods.

Furthermore, the aquaponics facility contributed to environmental awareness initiatives by demonstrating innovative agricultural technologies to students and visitors. It highlighted the importance of reducing water consumption, minimizing waste, and promoting environmentally friendly food production systems aligned with global sustainability goals.

Museum of Evolution

The Museum of Evolution at Baku State University serves as a specialized academic and cultural facility dedicated to the study and presentation of the evolutionary development of life on Earth. The museum contains a diverse collection of fossils, skeletal remains, geological specimens, and detailed models illustrating the evolutionary history of flora and fauna.

The exhibits highlight both regional and global biodiversity changes over millions of years, providing valuable educational resources for students studying biology, paleontology, geology, and environmental sciences. The museum supports classroom instruction by offering visual and interactive learning opportunities that enhance understanding of evolutionary processes and natural history.

In 2025, the Museum of Evolution expanded its educational role by organizing guided tours, thematic exhibitions, and academic seminars. These activities encouraged student participation and increased public awareness of biodiversity conservation and evolutionary science. The museum also contributed to research-based learning by enabling students to study specimens and conduct observational analysis relevant to evolutionary biology and conservation science.

Quba Education, Practice, and Recreation Center

The Quba Education, Practice, and Recreation Center functions as a multi-purpose academic facility that integrates education, practical training, and recreational opportunities. Located in the Guba region,

the center provides a supportive environment for experiential learning and professional skill development.

During 2025, the center hosted various educational programs focused on environmental monitoring, agricultural practices, and sustainability initiatives. Students engaged in field-based experiments, soil analysis, and plant cultivation activities designed to strengthen practical knowledge and research skills.

In addition to academic training, the center organized recreational and cultural activities that promoted teamwork, creativity, and community interaction. These initiatives supported the holistic development of students while fostering strong connections between academic learning and real-life applications.

The Quba Center also supported collaborative research projects addressing environmental protection and sustainable rural development, reinforcing the university's commitment to sustainability and community engagement.

Eco Space

Eco Space at Baku State University represents a modern and sustainable learning environment designed to promote environmental education, ecological awareness, and green practices. It combines indoor and outdoor educational spaces where students can explore ecological systems, renewable energy technologies, waste management strategies, and biodiversity conservation.

In 2025, Eco Space became an important hub for sustainability-focused education and student engagement. The facility hosted workshops, exhibitions, and awareness campaigns addressing key environmental challenges such as climate change, pollution reduction, and resource conservation. Students participated in hands-on activities, including waste sorting demonstrations, energy-saving practices, and ecological restoration projects.

Eco Space also supported interdisciplinary research initiatives aimed at developing innovative solutions for sustainable development. Collaborative projects involved students and faculty from environmental science, engineering, and biology programs. These activities strengthened the university's role in promoting sustainable lifestyles and responsible environmental behavior.

Additionally, Eco Space contributed to community outreach by welcoming visitors, organizing educational tours, and hosting public events focused on environmental protection. Through these initiatives, the facility helped foster a culture of sustainability both within the university and in the wider community.

Mineral Resources Museum (Museum of Useful Minerals)

The Mineral Resources Museum at university serves as an important academic and scientific facility dedicated to the study and exhibition of mineral resources, geological formations, and natural materials. The museum houses a rich collection of mineral samples, rocks, ores, and fossil specimens representing both local and international geological diversity. These exhibits provide valuable insights into the formation, classification, and practical applications of mineral resources.

The museum plays a significant role in supporting academic programs related to geology, environmental science, geography, and natural resource management. Students utilize the museum collections to study mineral identification, rock classification, and geological processes. The availability of real mineral specimens enhances practical learning and strengthens theoretical knowledge gained during classroom instruction.

In 2025, the Mineral Resources Museum continued to contribute to student education and research by organizing thematic exhibitions, guided academic tours, and interactive learning sessions. These activities focused on the sustainable use of mineral resources, environmental protection, and responsible mining practices. Students and researchers used museum collections to support laboratory work, comparative analysis, and project-based learning activities related to geology and environmental sustainability.

Additionally, the museum supported public engagement and environmental awareness initiatives. Educational visits were organized for school students and visitors, allowing them to explore the importance of mineral resources in everyday life and industrial development. The museum also highlighted the environmental impacts associated with mining activities and emphasized the importance of sustainable resource management, aligning with global sustainability and conservation goals.

Through its educational and research-oriented functions, the Mineral Resources Museum strengthens the university's commitment to scientific knowledge, environmental responsibility, and sustainable development. It serves as a valuable resource for promoting awareness about natural resources and their responsible utilization within both academic and public communities.

Facility	Location / Type	Key Features & Academic Role	2025 Activities and Contributions
Altiaghac Training and Practice Base	Altiaghac settlement (~120 km from Baku, ~1100 m altitude)	Field education center in a temperate mountainous ecosystem; supports biodiversity studies, environmental monitoring, and ecological research in diverse forest and river basin environments.	Hosted field courses in biology, ecology, geography, and environmental engineering; conducted soil/water analysis, vegetation mapping, biodiversity surveys, and sustainability-focused research.
Guba Training, Practice, and Recreation Center	Ikinki Nugadi village, Guba district (~168 km from Baku, ~8 ha)	Interdisciplinary field training site in forested and mountainous landscape; supports environmental science, agriculture, and natural resource management.	Organized internships, research camps, biodiversity monitoring, sustainable agriculture experiments, climate studies, and community outreach programs.
Aquaponics System	Campus-based facility	Closed-loop system integrating aquaculture and hydroponics; supports sustainable agriculture and resource efficiency research.	Students conducted water quality monitoring, nutrient cycle analysis, and plant growth studies; used for experimental research in sustainability and water conservation.
Museum of Evolution	Baku State University campus	Academic museum of fossils, skeletal remains, and geological specimens	Hosted guided tours, thematic exhibitions, and seminars; supported student research in

		supporting evolutionary biology and natural history education.	paleontology, evolution, and biodiversity conservation.
Quba Education, Practice, and Recreation Center	Guba region	Multi-purpose education and recreation facility supporting experiential learning and professional development.	Conducted field experiments, soil and plant studies, sustainability training, and cultural/recreational programs enhancing student engagement.
Eco Space	Campus-based sustainability hub	Dedicated environmental education and innovation space promoting ecological awareness, renewable energy, and green practices.	Hosted workshops, exhibitions, waste management training, climate awareness campaigns, and interdisciplinary sustainability projects.
Mineral Resources Museum (Museum of Useful Minerals)	Baku State University campus	Geological and mineralogical museum supporting education in geology, geography, and natural resource management.	Organized exhibitions, academic tours, and research-based learning on mineral classification, sustainable mining, and environmental impacts of resource extraction.

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):

Main Campus & Infrastructure

1. http://bsu.edu.az/az
2. https://bdu.info.az/universitet/kampus
3. http://sdg.bsu.edu.az/facilities
4. https://www.youtube.com/watch?v=fCjMTFnThJQ
5. https://www.youtube.com/watch?v=fGcrMYHlmkM
6. https://www.youtube.com/watch?v=M3itFePb1GY

Extended Campus & Field Facilities

7. http://bsu.edu.az/az/content/quba_tdristcrb_v_istiraht_mrkzi
8. https://bdu.info.az/universitet/quba-ttim
9. https://www.youtube.com/watch?v=gvmYxYlUddE
10. https://bdu.info.az/universitet/Altiaghac-ttb

Student Spaces & Campus Life

11. https://bdu.info.az/xeberlerr/bdu-da-telebe-mekaninin-acilisi
12. https://youtu.be/gbRRydedxW0?si=O8f2idnLKWvmrf0n
13. https://bdu.info.az/xeberlerr/bdu-da-telebe-inkisaf-merkezi-acilib

Academic & Support Facilities

14. https://sdg.bsu.edu.az/news/a-special-classroom-of-azerbaijan-international-mining-company-limited-opened-at-bsu
15. https://bdu.info.az/xeberlerr/baki-dovlet-universitetinde-azerbaycan-koreya-komputer-elmleri-merkezinin-acilisi-olub
16. https://bdu.info.az/xeberlerr/BDU%20Elmi%20Kitabxanas%C4%B1n%C4%B1n%20elektron%20b%C3%B6lm%C9%99sinin%20bpnin%20d%C9%99st%C9%99yi%20il%C9%99%20yenid%C9%99nqurulmadan%20sonra%20a%C3%A7%C4%B1l%C4%B1%C5%9F%20m%C9%99rasimi
17. https://bdu.info.az/xeberlerr/bdu-da-azertac-in-xususi-auditoriyasi-acilib
18. https://bdu.info.az/xeberlerr/olkenin-birinci-banki-ve-birinci-universiteti-arasinda-memorandum-imzalandi26
19. http://bsu.edu.az/az/news/bdunun_nzdind_qtisadiyyat_v_humanitar_kollec_yeni_tdris_ilin_hazrdr

Eco & Sustainability Facilities

20. http://sdg.bsu.edu.az/news/new-unique-project--eco-space-at-the-university
21. http://bsu.edu.az/az/news/eko_mekan

Affiliated Units & Extensions

22. https://bdu.info.az/universitet/iqtisadiyyat-ve-humanitar-kolleci
23. https://bdu.info.az/universitet/genc-istedadlar-liseyi
24. https://bdu-qazax.edu.az/index.php/az/

Museums & Cultural Facilities

25. https://bdu.info.az/tekamul-muzeyi
26. https://youtu.be/EjWyygbr0ic?si=6b9lWTUMV8PShBuo
27. https://youtu.be/fbMvIPpQhQ0?si=XOYMsTcMgUb6VlI6
28. https://www.youtube.com/watch?v=eABNCshUQLg

Student Activities

29. https://youtu.be/PJeRMOOfZCM?si=OE4RfUU9U4PIvi59

External Reference

30. https://www.topuniversities.com/universities/baku-state-university

Reports and Policies

1. https://sdg.bsu.edu.az/sdg-reports
2. https://sdg.bsu.edu.az/university-policies