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## ASOIU Strategic Plan (2023–2028)

### 1. Vision and Mission

#### **Vision**

To be a leading state university in Azerbaijan, recognized for excellence in engineering, research, and innovation—particularly in oil, gas, and industrial fields—and to make significant contributions to national and global development.

#### **Mission**

- Cultivate skilled specialists, engineers, researchers, and leaders for Azerbaijan’s energy and industrial sectors.
- Expand international collaborations and scientific research to address both regional and global technological challenges.
- Drive sustainable development of Azerbaijan’s economy through innovative teaching, cutting-edge engineering solutions, and transformative research.

### 2. Strategic Goals (2023–2028)

## **Goal A: Modernize Education to Meet Contemporary Demands**

### **1. Curriculum Innovation**

- Enhance competency-based curricula for Industry 4.0 and digitalization.
- Embed bilingual (Azerbaijani-English) and lab-based industry projects to produce job-ready graduates.

### **2. Flexible Learning Formats**

- Implement distance and hybrid education models to widen access.
- Develop continuous education programs for engineering professionals (lifelong learning).

## **Goal B: Strengthen the Management System (Digital Transformation)**

### **1. Digital Platforms & Data-Driven Governance**

- Implement integrated e-platforms (for student records, HR, research).
- Introduce Big Data analytics for institutional performance measurement.

### **2. Quality Assurance & Continuous Improvement**

- Align with international engineering accreditation (e.g., ABET).
- Conduct peer reviews and external audits to maintain academic and research quality.

## **Goal C: Enhance Academic-Pedagogical Staff**

### **1. Faculty Development**

- Provide training in modern teaching methods, e-learning, and emerging technologies.
- Offer competitive benefits to attract top local and international talent.

### **2. Performance-Based Incentives**

- Reward research outputs, grants, and industry collaborations.
- Expand global faculty exchange to stay updated on international engineering trends.

## **Goal D: Stimulate and Reward Teaching Excellence**

### **1. Faculty Incentives**

- Recognize outstanding faculty via “Mükəmməl Mühazirəçi” (Excellent Lecturer) awards and financial bonuses.
- Launch a university-wide teaching certification program.

## **2. Student Scholarships & Support**

- Increase merit-based scholarships, internships, and industry-sponsored grants.
- Provide top-performing students with additional research opportunities in industrial R&D.

## **Goal E: Internationalization & Reputation**

### **1. Global Collaborations & Exchanges**

- Develop student/faculty exchange programs and joint research projects with renowned institutions.
- Invite international experts for advisory roles in curriculum and quality assessment.

### **2. Accreditations & Rankings**

- Pursue international accreditations (ABET, ISO) for select engineering programs.
- Strengthen visibility through strategic partnerships, aiming for improved standing in major global rankings (THE, QS, etc.).

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## **3. Core Initiatives**

### **1. Graduate Career Advancement & Industry Partnerships**

- Career Development Center linking students to local/international employers.
- Collaborative R&D with industry (oil & gas, renewables, IT, etc.) for real-world experience.
- Alumni mentorship network for professional guidance.

### **2. Research & Innovation Ecosystem**

- Multi-disciplinary research centers (energy, renewables, advanced manufacturing).

- Technology park for startups, spin-offs, and entrepreneurial ventures.
- Innovation competitions and hackathons to foster hands-on problem-solving.

### **3. Modern Infrastructure & Lab Upgrades**

- Modernize engineering labs with state-of-the-art equipment.
- Implement “smart campus” (IoT, digital administration) for improved efficiency.
- Develop high-performance computing resources for advanced engineering research.

### **4. Financial Diversification & Sustainability**

- Secure private sector and philanthropic grants for R&D, especially in engineering.
- Launch professional certificates/executive courses for alternative revenue.
- Foster international R&D collaborations to broaden funding sources.

### **5. Enriched Student Experience**

- Expand extracurricular programs (clubs, seminars, cultural events).
- Strengthen student services (career counseling, academic advising).
- Encourage student input in curriculum and quality reviews.

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## **4. Timeline and Milestones (2023–2028)**

### **2023 (Year 1)**

- **Q2 2023**
  - Finalize competency-based updates for top engineering programs;
  - Launch a pilot digital platform for student records and basic data analytics.
- **Q4 2023**
  - Begin targeted faculty training in e-learning tools and industry-relevant teaching methods.
  - Establish at least two new partnerships with international universities for joint research and student exchanges.

## **2024 (Year 2)**

- **Q2 2024**

- Conduct first internal peer-review cycle for improved quality assurance in engineering curricula.
- Enhance HPC (High-Performance Computing) infrastructure to support at least two major research projects.

- **Q4 2024**

- Roll out new hybrid/distance learning courses in core engineering areas.
- Initiate technology park development plan, including space allocation and initial funding strategies.

## **2025 (Year 3)**

- **Q2 2025**

- Submit all key engineering program for formal accreditation; complete any necessary ISO certifications for administrative processes.
- Expand faculty performance-based incentives (bonuses for publications, grants, industrial collaborations).

- **Q4 2025**

- Upgrade laboratories with advanced equipment aligned with Industry 4.0 standards.
- Evaluate first cycle of digital governance, including Big Data analytics for institutional performance.

## **2026 (Year 4)**

- **Q2 2026**

- Launch technology park, incubating the first cohort of engineering and industrial startups/spin-offs.
- Strengthen alumni mentorship network—target 30% alumni engagement in mentorship or guest lectures.

- **Q4 2026**

- Initiate cross-border R&D collaboration with at least two international institutes, targeting co-publications and patent filings.

## 2027 (Year 5)

- **Q2 2027**

- Conduct a formal mid-term review of all strategic KPIs (faculty PhD ratio, publication impact, graduate employability).
- Expand HPC capacity and “smart campus” solutions; achieve 50% e-administration coverage.

- **Q4 2027**

- Strengthen position in targeted global rankings (e.g., Times Higher Education or QS subject rankings for Engineering).
- Enhance diversity of revenue streams: secure 25% or more of total budget from non-state sources (grants, partnerships, exec education).

## 2028 (Year 6)

- **Q2 2028**

- Maintain or expand ABET accreditations across additional engineering programs.
- Establish a “Center of Excellence” for a high-impact research area (e.g., green energy, advanced manufacturing).

- **Q4 2028**

- Demonstrate a fully functional e-governance framework using data analytics for strategic decision-making.
- Publish a comprehensive progress report on all strategic initiatives, including updated global ranking positions, key industry collaborations, and financial sustainability metrics.

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## 5. Key Performance Indicators (KPIs)

### 1. Academic Quality

- programs with international accreditation
- Student satisfaction ratings (surveys, focus groups).

### 2. Faculty Excellence

- 80% PhD-qualified faculty.

- 6000 of high-impact publications, grants, and industry collaborations.

### 3. **Infrastructure & Labs**

- Amount of newly modernized lab space; HPC capacity utilization.
- Implementation level of “smart campus” solutions.

### 4. **Graduate Employability**

- Percentage of graduates employed within 6–12 months.
- Quality of employer feedback (satisfaction surveys).

### 5. **Financial Diversification**

- Ratio of external (non-state) funding to total budget.
- Value/number of industry-funded research projects and professional courses.

### 6. **Internationalization & Rankings**

- Number of exchange programs, cross-border research projects; ratio of international students/faculty.
- Improvement in global rankings (THE, QS, etc.), particularly in engineering categories.

### 7. **Industrial Engagement**

- collaborative R&D projects with energy and industrial partners.
- Patents, prototypes, and spin-offs emerging from ASOIU research.

## 6. **Governance and Oversight**

- **Rectorate / Steering Committee:** Provides strategic oversight, ensures alignment with national priorities, and tracks key milestones.
- **Elmi Şura (Academic Council):** Guides curriculum reforms, research directions, and faculty development strategies.
- **Administrative Departments:** Implement day-to-day operations, compile performance data, and adjust processes as needed.
- **Stakeholder Engagement:** Solicits regular feedback from students, faculty, industry, and government to refine goals and maintain relevance.

## Conclusion

By **2028**, ASOIU aims to solidify its reputation as a **leading research-intensive and industry-aligned institution** within Azerbaijan and across the region. The plan's milestones—from enhanced curricula and digital transformation to accreditation and international partnerships—will position ASOIU at the forefront of engineering education, fostering innovations that catalyze both economic growth and societal progress.