Section	Information
1. Program Name	Bachelor's Degree in Information Technology
2. Short Description	The Information Technology (IT) program covers the theoretical and practical aspects of data collection, processing, storage, and transmission in the modern digital world. Students gain knowledge and skills in programming, computer networks, database management, cybersecurity, artificial intelligence, cloud technologies, and systems integration. IT specialists are prepared to design and manage information systems, automate business processes, develop and apply software solutions, and support the digital transformation of organizations. Graduates of this program are highly sought after in both the public and private sectors, educational and research institutions, and international companies.
3. Program Objectives	• **Professional Knowledge Formation** – equipping students with fundamental and applied knowledge in programming languages, algorithms, computer networks, database management, artificial intelligence, and cybersecurity. • **Development of Analytical and Creative Thinking** – enhancing critical and creative thinking skills for designing, modeling, and optimizing complex information systems. • **Application of Practical Skills** – developing the ability to apply IT solutions in real business and production processes, software development, and information system management. • **Digital Transformation and Innovation** – providing knowledge and skills for implementing innovative solutions in organizations through modern technologies (cloud computing, big data, AI, IoT, etc.). • **Commitment to Professional Ethics and Sustainability** – training specialists who adhere to information security, copyright laws, and ethical principles, while contributing to sustainable development goals.
4. Teaching Process	The IT program combines traditional teaching methods with modern, innovative approaches. Alongside lectures and seminars, students engage in hands-on lab work, participate in real projects, and collaborate in group assignments to develop teamwork skills. This approach equips students not only with theoretical knowledge but also with creativity, innovative thinking, and practical problem-solving abilities—transforming them into IT specialists ready to thrive in a rapidly evolving digital world.
5. Program Courses	The program consists of **240 credits**. Students take both core and elective courses each year.

	Core Courses: Linear Algebra and Analytic Geometry, Mathematical Analysis, Differential Equations, Discrete Mathematics, Probability Theory and Mathematical Statistics, Physics, Fundamentals of Information Technology, Basics of Programming, Modern Programming Languages, Computer Architecture, Data Structures and Algorithms, Database Systems, Operating Systems, Multimedia Technologies, Information Security, Human-Computer Interaction, Computer Networks, Artificial Intelligence, Web Systems and Technologies, IT Project Management, Civil Defense. **Elective Courses:** Python Programming, Programming and Problem Solving, Object-Oriented Programming, Soft Computing Technologies, Corporate Information Systems, Mobile Application Development for Enterprises, Business Information Systems, Global Economic Information Systems, Computer Graphics, 3D Graphics and Animation, Software Quality and Testing, Introduction to Website Development, Fundamentals of Decision-Making, Strategic Management of Information Systems, Information System Development, Computer-Aided Design, Internet of Things (IoT), Cloud Technologies, Mobile Robotic Systems, Fundamentals of Electronics, Robotics, Signal Processing, Digital Systems, E-Commerce System Security, Office Software, Parallel Programming, General Purpose Application Packages, Applied Software Packages, Web Programming, Software Engineering, Algorithm Design and Analysis, C Programming Language, Mobile Programming, Secure Programming, Applied Programming, Systems Programming, Neural Networks, Software Design, Comparative Programming Languages, Intelligent Systems, Communication Tools, Communication System Structure, Modern Telecommunication Systems, Communication Engineering.
6. Sustainable Development & Social Responsibility	The IT program integrates the UN Sustainable Development Goals (SDGs). Students work on technology projects aimed at developing environmentally responsible IT solutions, ensuring digital equality, promoting energy efficiency, and mitigating climate change. This approach shapes them into highly qualified IT professionals who are also socially responsible leaders supporting sustainable development.
7. Career Opportunities	Graduates can work in government agencies, private companies and startups, local and international IT centers, as well as in banking, telecommunications, and manufacturing industries. They may

	specialize in software development and management, computer network administration, cybersecurity, database management, artificial intelligence, and digital transformation. Career positions include IT Manager, System Administrator, Programmer, Project Manager, Data Analyst, and other professional roles.
8. Further Education	Graduates may pursue master's and doctoral studies in IT, artificial intelligence, cybersecurity, software engineering, data science, innovation, and business management. This enables them to engage in research and strengthen their position as competitive professionals in both local and international labor markets.
9. Additional Information	• Language of Instruction: Azerbaijani • Duration: 4 years (full-time) • Degree Awarded: Bachelor's in Information Technology