

# Decision of the FIBAA Accreditation and Certification Committee



14<sup>th</sup> Meeting on June 14, 2024

## PROGRAMME ACCREDITATION

<b>Project Number:</b>	23/024
<b>Higher Education Institution:</b>	Azerbaijan State Oil and Industry University (ASOIU)
<b>Location:</b>	Baku, Azerbaijan
<b>Study programme:</b>	<ol style="list-style-type: none"><li>1. Bachelor of Science - Business Informatics</li><li>2. Bachelor of Science - Industrial Engineering</li><li>3. Bachelor of Science - Computer Engineering</li><li>4. Operations Management</li><li>5. Computer Information Systems</li></ol>
<b>Type of accreditation:</b>	re-accreditation

The FIBAA Accreditation and Certification Committee has taken the following decision:

According to § 7 (6) in conjunction with § 9 (1) of the FIBAA General Terms and Conditions within the framework of procedures for the award of the FIBAA Quality Seal for Programmes from January 1, 2021, the study programmes are reaccredited.

Period of Accreditation: July 15, 2023 until July 14, 2030

The FIBAA Quality Seal is awarded.



## Assessment Report

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**Higher Education Institution:**

Azerbaijan State Oil and Industry University (ASOIU),  
Azerbaijan

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**Bachelor programmes:**

1. Bachelor of Science - Business Informatics
2. Bachelor of Science - Industrial Engineering
3. Bachelor of Science - Computer Engineering

**Master programmes:**

4. Operations Management
5. Computer Information Systems

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**Qualification awarded on completion:**

1. BSc in Business Informatics
2. BSc in Industrial Engineering
3. BSc in Computer Engineering
4. Master of Operations Management (MBA)
5. Master of Business Administration (MBA)

# General information on the study programmes

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## **Brief description of the study programmes:**

### 1. Business Informatics (BI)

Business informatics is concerned with the development and employment of IT and communications technology-based solutions to resolve business problems, as well as with the analysis and assessment of the suitability of new information technologies for application in practical business environments. Business informatics places less emphasis on the acquisition of pure hardware and programming expertise and allows students to focus more on developing their abilities to create IT-based solutions and to work collaboratively to implement solutions in company and corporate environments. In addition to introducing students to the fundamentals of information processing, bachelor programme in business informatics aims to teach students the analytical skills required to solve problems in business economics. The interdisciplinary character of business informatics provides students with numerous options to pursue specialist interests during their degree studies and in their subsequent careers.

### 2. Industrial Engineering (IE)

Industrial engineers combine technical expertise and economic judgment together. It is not just an addition of information on branches of technology and methodological expertise in economics but integrated thinking in the analysis of problems and in solving tasks in industry and economy. Industrial engineers are intended to create all connections between the various specific working and thinking of scientists, engineers in specific disciplines, computer scientists, economists, lawyers, and other specialists. The need for a universal professional image results from the division of labour processes in industry, trade, and service.

### 3. Computer Engineering (CE)

CE is a bachelor programme focusing on the relationship between computer hardware and software systems. Graduates are prepared to evaluate systems and design efficient IT solutions. The Bachelor in Engineering Technology in Computer Engineering Technology degree provides students with the opportunity to develop strengths in the design, implementation, integration, and support of computer-based and network systems that are critical to the achievement of enterprise, project, research, and business goals. In this increasingly interconnected world, graduates with the ability to understand, link, and integrate computer hardware, software, and networks and who can evolve systems as needs change are in constant demand. This focused bachelor's degree includes courses in engineering graphics, network and data analysis, and software and hardware design and development. Specializations are available in cyber security, digital/embedded systems, and mobile and wireless communications technology.

### 4. Operations Management (OM)

Operations Management (OM) focuses on the management of resources and activities that produce and deliver goods and services for customers. OM can play a critical role in enhancing a company's competitive position by providing superior products and services. Operations Management is a major for students who wish to be involved in the management of the operations process, i.e., the process of manufacturing, service delivery, distribution, and

supply. The major in OM provides a framework for linking all functional areas with specific skills developed for OM. The major also provides an in-depth analysis of operations decisions such as new product development, project planning and control, supply chain analysis, quality assurance, project and process management techniques, and production systems planning.

#### 5. Computer Information Systems (CIS)

In today's competitive business environment, Information Technology plays a central role in developing strategies for competitive advantage. CIS is a four-year full-time programme providing students with the managerial and high-level technical skills necessary for effective business leaders. Business and organisational processes are increasingly dependent on and integrated with information systems and technologies. All aspects of major business operations are dependent upon information technologies, with business professionals increasingly dependent upon intricate networks of communication technologies. Many professions are dependent upon the creation, organisation, and communication of electronic information.

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#### **Type of all study programmes:**

BI: Bachelor programme

IE: Bachelor programme

CE: Bachelor programme

OM: Master programme

CIS: Master programme

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#### **Projected study time and number of ECTS credits / national credits assigned to the study programme:**

BI: 4 years/ 8 semesters - 242 ECTS

IE: 4 years/ 8 semesters - 240 ECTS

CE: 4 years/ 8 semesters - 241 ECTS

OM: 2 years/ 4 semesters - 120 ECTS

CIS: 2 years/ 4 semesters - 120 ECTS

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#### **Mode of study:**

All programmes: Full-time

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#### **Didactic approach:**

All programmes: Study programme with obligatory class attendance

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#### **Double/Joint Degree programme:**

All programmes: No

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#### **Scope (planned number of parallel classes) and enrolment capacity:**

BI: No parallel courses; Enrolment capacity of 25 per year

IE: No parallel courses; Enrolment capacity of 25 per year

CE: No parallel courses; Enrolment capacity of 30 per year

OM: No parallel courses; Enrolment capacity of 40 per year

CIS: No parallel courses; Enrolment capacity of 15 per year

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**Programme cycle starts in:**

All programmes: Fall semester

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**Initial start of the programme:**

BI: 2009

IE: 2001

CE: 2009

OM: 1998

CIS: 1999

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**Type of accreditation:**

All programmes: Re-accreditation

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**For re-accreditation: last accreditation period:**

All programmes: March 23, 2018 – end of spring semester 2023

(Provisional extension until the end of spring semester 2024)

# Procedure

A contract for the re-accreditation of the programmes Business Informatics (Bachelor of Science); Industrial Engineering (Bachelor of Science); Computer Engineering (Bachelor of Science); Operations Management (Master of Business Administration); Computer Information Systems (Master of Business Administration); was made between FIBAA and Azerbaijan State Oil and Industry University on April 13, 2023. On December 13, 2023, the HEI submitted self-evaluation reports, which included a detailed description of the programmes and further documents in order to prove that the criteria for programme accreditation are met.

At the same time, FIBAA appointed a review panel<sup>1</sup>. The HEI has agreed with the chosen experts. The panel consisted of:

## **Prof. Dr- Karin Gräslund**

Hochschule RheinMain Wiesbaden Business School

Professor of Business and Financial Informatics

(Financial Information Management, Business Informatics, Controlling & Finance, Blockchain Technology in Finance and Digitalization in SMEs, SAP (ERP & BI, HANA, Simple Finance or S/4HANA), Integrated Operational Finance on Premise and on Demand, Sourcing and Organisation of Operational Financial Services, Enterprise Performance Management, Digital Finance, Big Data and Intelligent Technologies)

## **Prof. Inga Juknyte-Petreikiene**

Mykolas Romeris University

Head of Academic Affairs Centre, Researcher at Life-Long Learning Laboratory

(Study Fields of Education Sciences and Study Field of Management, especially International Double or Joint Degree Study Programmes)

## **Prof. Ivan Kisel**

Goethe University Frankfurt am Main

Professorship for Software for High-Performance Computing

(Computer Science, Software for Supercomputers, Artificial Neural Networks, High-Energy Physics, Heavy Ion Physics)

## **Ilja Kogan**

Wayfair GmbH, Berlin, Germany

Senior Product Manager

(Global Operations, e-Commerce, Project Management, Business Administration, Economics, Business Informatics, Logistics, Digital Management, Trade Management, IT and digital Analytics, Big Data, Agile)

## **Sophia Pascher**

Berlin School of Economics and Law

Student International Business Management (B.A.)

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<sup>1</sup> The panel is presented in alphabetical order.

**Prof. Dr. Frank Schultmann**

Karlsruhe Institute of Technology

Chair of Business Administration, in particular, Production Management and Logistics  
(Business Administration, Production Management, Logistics)

**Prof. Dr. habil Herweg Winkler**

Brandenburg University of Technology Cottbus Senftenberg

Holder of the Chair of Production Management and Head of the Industrial Engineering and Management Degree Program

(Industrial Engineering, Business Administration, Business Informatics,  
Industrial Management, Logistics, Sustainability, Digitalization, Production Management)

FIBAA project manager:

Priv.-Doz. Dr. Marco Haid

The assessment is based on the self-evaluation report, amended by further documents, as requested by the panel, and an online conference. The online conference took place on February 27-28, 2024, via the video conferencing tool *Zoom*. At the end of the online conference, the panel has given a short feedback on its first impressions to representatives of the HEI.

The assessment report based on this was delivered to the HEI for comment on May 21, 2024. The statement on the report was given up on May 30, 2024. It has been taken into account in the report at hand.

## Summary

The bachelor programmes “Business Informatics”, “Industrial Engineering” and “Computer Engineering” as well as the master programmes “Operations Management” and “Computer Engineering” offered by the Azerbaijan State Oil and Industry University (ASOIU) fulfil with few exceptions the FIBAA quality requirements for bachelor and master programmes and can be reaccredited by the Foundation for International Business Administration Accreditation (FIBAA) for seven years starting on July 15, 2023, and finishing on July 14, 2030. The programme is in accordance with the national and the European Qualification Frameworks and the European Standards and Guidelines in their applicable version, valid as of the time of the opening of the procedure, and in accordance with the Bologna Declaration.

The quality requirement that has not been fulfilled – External evaluation by alumni, employers and third parties (5.2.3) – is not an asterisk criterion and therefore do not lead to a condition. The measures the HEI takes to solve the identified problem are to be considered during the re-accreditation.

The panel members identified several areas where the programmes could be further developed:

- The HEI should create a strategic plan outlining how the proportion of foreign students can be increased. (see chapter 3.4.2).
- The HEI should take measures to enhance the international composition of the faculty. (see chapter 3.4.3).
- The HEI should name and describe specific projects to accompany each international cooperation (see chapter 4.3.1).
- The HEI should further develop their documents and include a quality assurance manual (see chapter 5.1).
- The HEI should carry out an external stakeholder (e.g. alumni, employers, other social partners, etc) evaluation of each programme separately (see chapter 5.2.3).

The measures that the HEI takes in order to implement the recommendations of the panel members will have to be considered during the re-accreditation.

There are two criteria in which the programmes exceed the quality requirements:

- Positioning of the study programme within the HEI's overall strategic concept (see chapter 1.3.3),
- Student support by the faculty (see chapter 4.1.6).

For the overall assessment of the programme, please refer to the quality profile at the end of this report.



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# Information

## Information on the Institution

Being the pioneer oil and gas educational school across Europe and Asia, the Azerbaijan State Oil Academy (now Azerbaijan State Oil and Industry University (ASOIU)) was founded in November 1920. During its activities, ASOIU played a special role in developing national education. Many other higher education institutions have been established based on the ASOIU. Covering several scientific institutes and 18 scientific research labs, ASOIU provides education to both local students and international students.

ASOIU offers undergraduate, master's, and postgraduate degrees. This higher educational school acted under different names in various periods. Founded as the Azerbaijan Polytechnic Institute, it continued its life under the name of Azerbaijan Oil Institute, then Azerbaijan Industrial Institute, Azerbaijani Oil and Chemistry Institute, Azerbaijan State Oil Academy and quite recently (2015) was renamed into Azerbaijan State Oil and Industry University. Today the graduates of the Academy work in over 70 countries in high-level positions.

Now, there are seven faculties in the ASOIU that train highly qualified specialists in the oil industry. A multistage educational system is put in place: at the bachelor stage, students are trained on 53 specialities and at the masters, 50 specialities. ASOIU trains highly qualified scientific staff; for this purpose, there is post-graduate and doctorate departments in ASOIU as well. Since its establishment, the Azerbaijan State Oil and Industry University, primarily aiming to educate self-confident, highly qualified, dedicated and determined individuals, turned into the largest higher education institution in Azerbaijan (see self-evaluation report, p. 8).

Nearly 9,000 students and 1,000 employees in research, teaching and administration are the most valuable resources of the University. Throughout its rich history, the ASOIU has prepared more than 100,000 engineers, approximately 2,000 candidates of sciences and over 250 doctors of sciences. Nearly 140,000 students have been educated at the University to date. More than 50 graduates of ASOIU are academicians and corresponding members of the Academy of Sciences, more than 150 graduates are the Heroes of Socialist Labour of former Soviet Union, and approximately 70 people were awarded the title of laureate of the State Prize (see self-evaluation report, p. 8).

The University`s infrastructure consists of:

- Three educational buildings
- Huge library (with 1 million books)
- Information Computing Center
- Publishing house
- Dormitory
- Student Polyclinic and Hospital
- Sports Complex
- Recreation Complex in Nabran
- Internship center in Dashkesan

- Research Institutes
- 32 Research laboratories
- "Industry Institute of retraining and improvement of professional skills

For the economic development of Azerbaijan and other countries, ASOIU's departments and laboratories research mainly in the following directions:

- Geology, investigation, exploration, and development of onshore and offshore oil and gas fields
- Geological, hydro-geological, geological engineering and eco-geological problems of Azerbaijan
- Offshore and onshore oil and gas drilling, field development, product collection, transportation and oil-field equipment installation issues
- The establishment of new reliable constructions for oil and chemical equipment, scientific bases of forecasting technological stability and longevity of machine parts, dynamics and strength of machines
- Invention and research of new chemical substances and materials, alternative technologies and processes
- Increase in efficiency of power systems, equipment, elements and their complex automation
- Efficient use of water resources and environmental protection
- Development and management methods of fuel and energy complex, chemical and mechanical engineering industries in market economy,
- Research, development and application of state-of-the-art management, informatics and control-measuring instruments of automation of production and service sectors in the fuel-energy complex.

There are seven faculties at the University:

- Faculty of Geological Exploration – Since 1920, the training of specialists in geology and prospecting for oil and other natural resources deposits has begun in the mountain-field department of the “Oil-Industrial faculty”.
- Faculty of Oil and Gas Production –The scientific staff of the laboratories is involved in the development and working out such important problems for Oil Industry as drilling technology of the deep horizontal and deviated wells, optimisation of the oil and gas fields development, enhanced oil and gas recovery methods, projecting, construction and exploitation of oil and gas pipelines and storage pits, optimal field location of exploitation surface facilities, accumulation and delivering of well product without loss and so on.
- Faculty of Chemical Technology - “Investigation of rational using of oil-refining residues” , “Obtaining of ‘ftalids’”, “Investigation and synthesis of homogeneous organic compounds”, “Compositional materials on the base of polymer mixtures and highly-filled polymers”, “Elaboration of effective methods of obtaining new heteroatom unsaturated organic compounds and their usage in different spheres”, “Synthesis of complexes on the base of transitional metals and their investigation in different reactions of synthesis”.
- Faculty of Oil Mechanical Engineering - Scientific and practical problems of oil production equipment dynamic, strength, stability and reliability, automatization, and optimisation are handled by the faculty.

- Faculty of Power Engineering - The scientific research works carried out at the faculty are the increase of efficiency and complex automation of power systems, electrical tools and their elements; the efficient utilization of water resources and environment protection.
- Faculty of Information Technologies and Control - Scientific research activity of the departments and problem laboratories includes the fundamental and applied works in modern fields of Automation and Control, Information-measurement Technology and Metrology, Informatics and Computing Technology.
- Faculty of Economics and Management - Scientific research work concerning the following main economic problem solutions are being carried out at the faculty: Industrial complex macro and microeconomic problems solutions methods at the market conditions; Economic problems of Azerbaijan machine-building industry development at the market economy conditions; Republic fuel-energy complex foreign economy relations development conception.

All programmes at ASOIU have been approved by the Ministry of Education of the Republic of Azerbaijan and is audited by the Chamber of Accounts of the Republic of Azerbaijan.

### **International Cooperation**

External relations of the ASOIU are coordinated by the International Cooperation Office and International Students Dean Office of the University.

Currently, the University has direct cooperation agreements with over 58 universities/ organisations from more than 25 countries. In the frames of existing agreements, the University realises students and staff mobility and mutual scientific projects (see elf-evaluation report, p. 10)

### **Student mobility**

Student mobility is realised in several directions. With the Erasmus+ International Credit Mobility, ASOIU students gain the opportunity to study for a short period in leading universities in Europe. Furthermore, the Mevlana programme creates opportunities for academic mobility with Turkish universities.

### **International Organisations**

The ASOIU's membership in regional and international organisations creates frames for the improvement of the quality of education paves the way for the implementation of projects and reforms.

The ASOIU is the member of the following international associations:

- European Universities Association
- Black Sea Basin Universities Association
- Eurasian Silk Way Universities Consortium
- International Association of University Presidents
- Caucasus University Association
- DAAD (German Academic Exchange Service)
- Erasmus+ programme
- Korea International Cooperation Agency
- International Associations of Universities
- IEEE Computational Intelligence Society

- CISCO Networking Academy
- Oracle Academy
- International Federation of Red Cross and Red Crescent Societies
- Auto Cad Design Academy
- Azerbaijan-UK Alumni Association
- AIESEC Alumni International

## **Further development of the programme, implementation of recommendations from previous accreditation**

### **Business Informatics (BI)**

#### **Recommendations**

##### ***Study Workload Feasibility***

The 2018 FIBAA Report indicated that the programme meets the requirements for study workload feasibility. Consequently, the programme continuously strives to improve the feasibility of its workload. The education duration is four years, equivalent to 240 ECTS credits, with a total student workload of 7,200 hours. This workload calculation ensures students have ample time to complete various learning activities, including scheduled classes, exam preparation, individual and group work, projects, seminars, homework, assignments, research, and lab work. The workload is divided into a series of learning activities, each with an estimated number of hours. For example, a five ECTS course comprises in-class lectures, seminars, office hours, individual or group work, and exams, amounting to a total workload of 150 hours. Approximately 40 per cent of this workload constitutes in-class activities, while 60 per cent is spent outside class. Regular monitoring of students' actual workload through evaluations ensures that adjustments can be made to keep the workload balanced and effective for deep learning.

##### ***Academic Qualification of Faculty***

The 2018 FIBAA Report affirmed that the programme meets the requirements regarding the academic qualifications of faculty. To enhance educational quality, the programme recruits instructors with international experience. About 80 % of the staff hold a PhD, reflecting a strong emphasis on academic qualifications during the recruitment process.

Preference is given to lecturers with international education and industrial experience, ensuring they bring diverse perspectives and expertise to the program. This approach helps in maintaining high educational standards and preparing students for global industrial challenges.

##### ***Evaluation by Students***

Regular course evaluations are conducted at the end of each semester. The results are discussed in the BA Programs' Scientific Council meetings, where decisions are made, minutes are issued, and the outcomes are communicated to both students and faculty.

This systematic approach ensures that feedback is consistently collected and addressed, fostering an environment of continuous improvement. It also demonstrates the program's commitment to transparency and responsiveness to student needs.

### ***External Evaluation by Alumni, Employers, and Third Parties***

The 2018 FIBAA Report indicated that the programme initially did not meet the requirements for external evaluation, as this process was ongoing. Subsequent accreditations and reaccreditations provided FIBAA with detailed reports on external evaluations, addressing this gap.

The programme has since implemented surveys to gather feedback from alumni, employers, and other external parties. This feedback is crucial for strategic quality assurance and helps in refining the programme to better meet the needs of all stakeholders.

**Table 1: Statistical Data of the programme – BI\***

APPENDIX 4 Azerbaijan State Oil and Industry University, Statistical Information						
BA Programs - Business Informatics						
		2018-19	2019-20	2020-21	2021-22	2022-23
# Study Places		25	25	25	25	25
# Applicants	∑	25	25	25	25	24
	f	15	12	8	9	8
	m	10	13	17	16	16
Application rate		100.00%	100.00%	100.00%	100.00%	96.00%
# First-Year Student	∑	25	25	25	25	24
	f	15	12	8	9	8
	m	10	13	17	16	16
Rate of female students		0.6	0.48	0.32	0.36	0.33333333
# Foreign Students	∑	0	0	0	2	0
	f	0	0	0	0	0
	m	0	0	0	2	0
Rate of foreign students		0	0	0	0.08	0
Percentage of occupied study places		100.00%	100.00%	100.00%	100.00%	96.00%
# Graduates	∑	18/20	23/25	22/25	23/25	25/25
	f	7	7	8	12	12
	m	11	16	14	11	13
Success rate		90.00%	92.00%	88.00%	92.00%	100.00%
Dropout rate		10.00%	8.00%	12.00%	8.00%	0.00%
Average duration of study		8 semester	8 semester	8 semester	8 semester	8 semester
Average grade of final degree		3.00	3.00	3.00	3.00	2.50

\*2022/23: The first part of the statistical table contains information on admittance for 2022/2023 and the rest are graduates' information for the same academic year which includes the data of students admitted 4 years ago.

## **Industrial Engineering (IE)**

### **Recommendations**

See also the recommendations listed in the chapter Business Informatics (BI)

#### ***Observing and Reducing Dropouts***

The panel recommended monitoring and analysing dropout rates and implementing measures to reduce them. Initially, statistical information was incorrectly prepared, giving the impression of high dropout rates. In reality, the programmes have minimal dropouts, typically 2-3 students moving abroad or participating in exchange programmes. The programme management provides academic counselling, tutoring, and early warning systems to support at-risk students.

Students are encouraged to engage in extracurricular activities and career fairs, which contribute to their satisfaction and retention. The university also offers psychological services for mental and emotional well-being, ensuring a supportive environment for students to complete their studies.

#### ***Encouraging English Language Skills Development***

The programmes are conducted in English, necessitating the development of language skills among instructors. The university has partnerships with the British Council of Azerbaijan to provide English language courses for teachers. Additionally, collaboration with the Fulbright Teaching Excellence and Achievement Programme further enhances instructors' language and teaching skills.

This commitment to language development ensures that instructors can effectively teach in English, maintaining high educational standards and improving the overall learning experience for students.

#### ***Providing Evaluation Results to Students***

At the end of each semester, course evaluations are conducted, and results are discussed in the BA Programs' Scientific Council meetings. Decisions are made, minutes are issued, and the outcomes are communicated to students and faculty.



This regular procedure ensures that students are informed about evaluation results and quality assurance measures, fostering a culture of transparency and continuous improvement.

#### ***Involving External Parties in Quality Assurance***

The programme has started preparing surveys for each programme based on FIBAA's recommendations. These surveys target student satisfaction, alumni feedback, and external evaluations. This strategic involvement of external parties enhances the quality assurance process and provides valuable insights for programme development.

This approach aligns with best practices in higher education, ensuring that the programmes remain relevant and responsive to the needs of students and the job market.

**Table 2: Statistical Data of the programme – IE\***

Azerbaijan State Oil and Industry University BA Programs / ZU Program / Industrial Engineering		 				
BA PROGRAM - Industrial Engineering						
		2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
# Study Places			25	25	25	25
# Applicants	∑	12	24	25	25	24
	f	2	9	9	12	14
	m	10	15	16	13	10
Application rate			96.00%	100.00%	100.00%	96.00%
# First-Year Student	∑	12	24	25	26	24
	f	2	9	9	12	14
	m	10	15	16	14	10
Rate of female students		0.17	0.38	0.36	0.46	0.58
# Foreign Students	∑	0	0	0	1	0
	f	0	0	0	0	0
	m	0	0	0	1	0
Rate of foreign students		0	0	0	0.04	0
Percentage of occupied study places			96.00%	100.00%	104.00%	96.00%
# Graduates	∑	20/20	25/25	25/25	11/12	24/24
	f	9	8	10	2	9
	m	11	17	15	11	15
Success rate		100.00%	100.00%	100.00%	91.67%	100.00%
Dropout rate		0.00%	0.00%	0.00%	8.33%	0.00%
Average duration of study		8 semester	8 semester	8 semester	8 semester	8 semester
Average grade of final degree		3.00	3.00	3.00	2.50	3.00

\*2022/23: The first part of the statistical table contains information on admittance for 2022/2023 and the rest are graduates' information for the same academic year which includes the data of students admitted 4 years ago.




## Computer Engineering (CE)

### Recommendations

See recommendations above in the chapters Business Informatics (BI) and Industrial Engineering (IE).

**Table 3: Statistical Data of the programme – CE\***

 <b>FIBAA</b>		<b>APPENDIX 4</b> <b>Azerbaijan State Oil and Industry University, Statistical Information</b>				
		BA Programs - Computer Engineering				
		2018-19	2019-20	2020-21	2021-22	2022-23
# Study Places		25	25	30	30	30
# Applicants	Σ	25	25	30	30	30
	f	9	14	4	8	10
	m	16	11	26	22	20
Application rate		100,00%	100,00%	100,00%	100,00%	100,00%
# First-Year Student	Σ	25	25	30	30	30
	f	9	14	4	8	10
	m	16	11	26	22	20
Rate of female students		0,36	0,56	0,133333333	0,266666667	0,333333333
# Foreign Students	Σ	0	1	0	0	0
	f	0	0	0	0	0
	m	0	1	0	0	0
Rate of foreign students		0	0,04	0	0	0
Percentage of occupied study places		100,00%	100,00%	100,00%	100,00%	100,00%
# Graduates	Σ	22/25	23/25	22/25	25/25	24/25
	f	8	10	6	9	12
	m	14	13	16	16	12
Success rate		88,00%	92,00%	88,00%	100,00%	96,00%
Dropout rate		12,00%	8,00%	12,00%	0,00%	4,00%
Average duration of study		8 semester	8 semester	8 semester	8 semester	8 semester
Average grade of final degree		3,50	3,50	3,50	3,50	3,50

\*2022/23: The first part of the statistical table contains information on admittance for 2022/2023 and the rest are graduates' information for the same academic year which includes the data of students admitted 4 years ago.

## Operations Management (OM)

### Recommendations

#### ***Observing and Reducing Dropouts***

The panel identified a need to monitor and analyse dropout rates in the MBA programmes. Dropouts are often due to personal reasons, such as work overload or relocating abroad. Some students return to complete their studies after a break.

The programme management is attentive to these issues, offering flexible options and support to help students balance their studies with personal and professional commitments. This approach helps in reducing dropout rates and ensuring students can successfully complete their MBA programmes.

### ***Encouraging English Language Skills Development***

Instructors are required to develop their English language skills as the programmes are conducted in English. The university supports this by providing English language courses through its partnership with the British Council of Azerbaijan and the Fulbright Teaching Excellence and Achievement Program.

This ensures that instructors can deliver high-quality education in English, which is essential for maintaining the program's international standards and enhancing the learning experience for students.

### ***Refreshing Library Resources***

The panel recommends updating the local library's collection to provide students with current literature. The library undergoes annual updates to meet the needs of instructors and students, with recent acquisitions including over 180 new books and an additional 200 books on order.

These updates ensure that students have access to the latest resources in their field, supporting their academic and professional development. The library also offers online access to various databases, enhancing the availability of research materials.

### ***Providing Evaluation Results to Students***

Course evaluations are conducted at the end of each semester, and the results are discussed in the BA Programs' Scientific Council meetings. Decisions are made, minutes are issued, and the outcomes are communicated to students and faculty.


This systematic process ensures that students are aware of evaluation results and quality assurance measures, promoting transparency and continuous improvement in the MBA programmes.

### ***Involving External Parties in Quality Assurance***

The programme has started preparing surveys to involve external parties more strategically in the quality assurance process. These surveys focus on student satisfaction, alumni feedback, and external evaluations.

By incorporating feedback from external stakeholders, the programme can better align with industry needs and improve its overall quality, ensuring that graduates are well-prepared for their careers.

**Table 4: Statistical Data of the programme – OM\***

APPENDIX 4 Azerbaijan State Oil and Industry University, Statistical Information					
 <b>FIBAA</b>					
OPERATIONS MANAGEMENT PROGRAM					
	2018-19	2019-20	2020-21	2021-22	2022-23
# Study Places	25	25	10	10	20
# Applicants	Σ	24	2	10	9
	f	17	0	6	5
	m	7	2	4	4
Application rate	96,00%	8,00%	100,00%	90,00%	60,00%
# First-Year Student	Σ	23	2	11	10
	f	16	0	7	5
	m	7	2	4	5
Rate of female students	0,70	0	0,64	0,5	0,79
# Foreign Students	Σ	2	3	2	1
	f	1	1	1	0
	m	1	2	1	1
Rate of foreign students	0,09	1,5	0,18	0,1	0,21
Percentage of occupied study places	92,00%	8,00%	110,00%	100,00%	70,00%
# Graduates	Σ	25	22	7	13
	f	6	14	4	7
	m	19	8	3	6
Success rate	104,17%	91,67%	350,00%	130,00%	77,78%
Dropout student	1	3	1	3	2
Dropout rate	4,00%	13,64%	14,29%	23,08%	28,57%
Average duration of study	4 semester	4 semester	4 semester	4 semester	4 semester
Average grade of final degree	2,50	3,00	3,50	3,50	2,50


\*2022/23: The first part of the statistical table contains information on admittance for 2022/2023 and the rest are graduates' information for the same academic year which includes the data of students admitted 4 years ago.

## Computer Information Systems (CIS)

### Recommendations

See recommendations listed above in the chapter Operations Management (OM).

**Table 5: Statistical Data of the programme – CIS\***

		2018-19	2019-20	2020-21	2021-22	2022-23
<b>APPENDIX 4</b>						
<b>Azerbaijan State Oil and Industry University, Statistical Information</b>						
						
<b>COMPUTER INFORMATION SYSTEMS</b>						
# Study Places		20	10	10	10	20
# Applicants	∑	17	6	6	9	16
	f	5	1	1	5	9
	m	12	5	5	4	7
Application		85.00%	60.00%	60.00%	90.00%	80.00%
# First-Year Student	∑	16	6	6	9	16
	f	5	1	1	5	9
	m	11	5	5	4	7
Rate of female students		0.31	0.17	0.17	0.56	0.56
# Foreign Students	∑	1	2	2	1	0
	f	0	0	0	0	0
	m	1	2	2	1	0
Rate of foreign students		0.06	0.33	0.33	0.11	0.00
Percentage of occupied study places		80.00%	60.00%	60.00%	90.00%	80.00%
# Graduates	∑	26	11	8	6	5
	f	8	1	3	0	2
	m	16	10	5	6	3
Success rate		136.84%	64.71%	133.33%	100.00%	55.56%
Dropout student		4	3	0	1	1
Dropout rate		15.38%	27.27%	0.00%	16.67%	20.00%
Average duration of study		4 semester	4 semester	4 semester	4 semester	4 semester
Average grade of final degree		3,00	2,50	3,50	3,50	3,50

\*2022/23: The first part of the statistical table contains information on admittance for 2022/2023 and the rest are graduates' information for the same academic year which includes the data of students admitted 4 years ago.

## Appraisal

Based on the self-evaluation report and insights gained through the panel interview rounds, the experts had no concerns regarding the implementation of recommendations from previous accreditation.

The development of the statistical data was also considered positively by the experts. All programmes have a constant and relatively high application rate. In terms of gender, the students

are largely balanced. With the exception of OM, the dropout rate is at a very low level, and the average duration of study is also in line with the planned values.

# Programme Description and Appraisal in Detail

## 1. Objectives

### 1.1 Objectives of the study programme (Asterisk Criterion)

#### **Business Informatics (BI)**

The Programme of Bachelor of Sciences Business informatics (BI) was established in 2009 in ASOIU as a cooperation programme together with Siegen University. Preparation of the programme is conducted taking into consideration the main features of Azerbaijan education standards and curricula used at Siegen University, Germany. The Business Informatics course programme is designed on a highly interdisciplinary basis. Students acquire knowledge of informatics and business science, in addition to social sciences, foreign language and communication studies related to electronic commerce and the use of information and communication technologies (ICT).

The BSc with a major in Business Informatics provides an emerging discipline that combines various aspects of business management, information technology, and informatics. The goal of the major is to integrate computer science and business administration into one field fully.

The main aim of the modules is to provide a sufficient methodological and fundamental spectrum for successful professional activity in Business Informatics projects.

The programme focuses on gaining skills and abilities to work both in project teams and participating in case study analysis, assignments, and presentations. Besides, the programme aims to obtain the abilities necessary for task management at the operational level. The main objective of Business Informatics is to educate students with interdisciplinary knowledge of informatics and business science. Having completed their studies, students may integrate into employment in both economic and non-economic spheres.

Hence, the basic objective of the Business Informatics higher professional study programme is to provide professionals with key knowledge of computer science and information and business science, as well as prepare them for the growing and changing demands of the business environment and modern society.

The objectives of the programme are:

- to provide graduate students with a high-quality education in both informatics and business management fields and enable the graduates to earn management and technical positions in state and non-state organisations, business, and other institutions.
- to provide students the ability to effectively solve managerial and technical problems related to planning, organizing, and controlling in all areas of business.
- Taking into account that programme is designed to also prepare students for senior management roles, it is essential that graduates should also be able to demonstrate relevant personal and interpersonal skills that include cognitive skills of critical thinking, analysis and synthesis as well as the capability to identify assumptions, evaluate statements in terms of

evidence, to detect false logic or reasoning, to define terms adequately and make an appropriate generalization if needed.

Learning outcomes of the programme:

Successful graduates should be able to demonstrate a range of cognitive and intellectual skills as well as techniques which are specific to managerial and technical problems. On the successful completion of the whole course, students have to:

- get analytical and problem-solving skills for business analysis and data management as well as for making decisions in non-standard and uncertain situations.
- be able to impart methodical and social key qualifications such as communication and teamwork, presentation and moderation skills and the skills to use modern information technologies.
- be taught the knowledge and skills valuable in the area of the interface of engineering and business administration.
- acquire an understanding of the relationships between product development, product manufacturing and product use in economic and environment-related fields.
- be able to combine theory and practice to analyse issues based on methodical research methods as well as have an understanding of applicable techniques and methods and their limitations.
- be able perform their knowledge and understanding in use of databases and other information sources needed for their work.
- be able to work both individually and as a member of a team to organise projects effectively and perform in compliance with deadlines and responsibility and get a base for ethics, leadership, economics.
- get a base for critical thinking, analysing, evaluating, modelling, simulating and optimising methods.
- be able to apply the experiments according to the state of their knowledge, to plan and perform, to interpret the data and to draw appropriate conclusions.
- get the ability to share their knowledge in different areas, taking into account business management fields in order to apply responsible environmental and safety requirements and their own responsibility to deepen an awareness of the non-technical implications of engineering activity.
- understand how global competitive environments are changing business practice.

The Business Informatics course programme is designed on a highly interdisciplinary basis. Students acquire knowledge of informatics and business science, in addition to social sciences, foreign language and communication studies related to electronic commerce and the use of information and communication technologies (ICT). The faculty successfully develops activities that deepen the students' competencies by organising lectures, workshops, and presentations by significant experts from practice. The main objective of Business Informatics is to educate students with interdisciplinary knowledge of informatics and business science.

The students of this field of study gain advanced knowledge and skills in economics and can assert themselves in the sphere of economic application (banks, economic departments of local authorities, enterprises, central economic institutions, computer centres, and research

institutions). Graduates should be capable of advanced abstract thinking, which is necessary for formulating and problem solving, and they can continue their studies in corresponding postgraduate studies at different economic schools or work in the economic, financial or informatics spheres.

### **Industrial Engineering (IE)**

The Partnership Programme of “Preparation of Bachelors with New Technologies” was founded in 2001 between the two educational institutions – Siegen University of Germany and Azerbaijan State Oil Academy (now Azerbaijan State Oil and Industry University) to serve an aim of collaboration programmes to develop Bachelors of Emerging Technologies.

The programme in industrial engineering offers students a base of traditional engineering courses, such as work design, human-machine systems, probability, statistics, and engineering economy, while emphasising such contemporary areas as simulation modelling, engineering database systems, quality assurance, logistics and supply chain management, operations research, and facilities planning. Industrial engineers work in manufacturing firms, hospitals, banks, public utilities, transportation, government agencies, insurance companies, and construction firms.

Among the projects they undertake are design and implementation of a computer-integrated supply chain or manufacturing system; facilities planning for a variety of industries; design of a robotics system in a manufacturing environment; long-range corporate planning; development and implementation of a quality-control system; simulation analyses to improve processes and make operational decisions; design of healthcare operations to enhance patient safety; and improve efficiency, productivity, and development of computer systems for information control.

The objectives of the industrial engineering programme are to produce graduates who will have successful careers as industrial engineers, especially in the fields of logistics and supply chain engineering, as well as quality and maintenance engineering, think independently and communicate effectively as team members and team leaders, practice engineering considering global, ethical and social factors, recognise and understand professional and ethical responsibility as well as engage in continuing education and development in their professional field.

Learning outcomes: Successful graduates should be able to demonstrate a range of cognitive and intellectual skills as well as techniques, which are specific to managerial and technical problems. On the successful completion of the whole course, students will be able to:

- acquire basic knowledge in the fields of industrial engineering and an understanding of the relationships between product development, product manufacturing and product use in economic and environment-related fields and get problem-solving skills needed for making decisions in non-standard and uncertain situations.
- understand important concepts and designing and applying analytical models in manufacturing and service operations, including financial services, possess engineering drawing skills as a means of accurately and clearly communicating ideas, instructions, design, build, and testing a system, component, or process to meet required needs.



- get the simultaneous acquisition of scientific, cultural, and linguistic knowledge and competency to engage in engineering activities in an international field.
- penetrate products, processes, and methods of industrial engineering disciplines, combine theory and practice to analyse engineering issues based on methodical research methods, and understand applicable techniques and methods.
- analyse and evaluate methods, optimise and use application-oriented solutions based on specified analyses of processes and apply adequate methods of modelling, simulation, design, and implementation.
- gain a road understanding of improving various environments, from streamlining health-care systems to rethinking supply chains and the online user experience in the era of artificial intelligence, improve the way people interact with technologies and systems and help organisations run safely, efficiently, and profitably.
- understand project management, risk management, and change management concepts, as well as awareness of the importance of innovation and entrepreneurship for sustainable economic development.
- make rational decisions based on ethical argumentation and think critically to find innovative and effective solutions for inter-divisional, qualitative, and quantitative problems.
- gain advanced mathematical foundation, effective use of modern information technologies and be able to conduct literature research and use specialist data for their work.
- understand the concept of the engineering profession through exposure to professional societies, the need for lifelong learning, and professional ethics; effectively cooperate with others in different situations, in international environments, across several disciplines and in a constructive manner.

The programme with major in Industrial Engineering combines technical expertise and economic judgment together. It is not just an addition of information on branches of technology and methodological expertise in economics, but integrated thinking in the analysis of problems and in solving tasks in industry and economy.

### **Computer Engineering (CE)**

The Computer Engineering programme especially focuses on the relationship between computer hardware and software systems. provides depth in the areas of Computer Engineering fundamentals, software engineering, modern and digital technology. Graduates are prepared to evaluate systems and design efficient IT solutions. The Bachelor in Computer Engineering provides students with the opportunity to develop strengths in the design, implementation, integration, and support of computer-based and network systems that are critical to the achievement of enterprise, project, research, and business goals.

In this increasingly interconnected world, graduates with the ability to understand, link, and integrate computer hardware, software, networks, and telecommunication systems and who can evolve systems as needs change are in constant demand. This focused bachelor's degree includes courses in engineering graphics, network and data analysis, and software and hardware design and development. Specialisations are available in cyber security, digital/embedded systems, and mobile and wireless communications technology.

Following graduation, degree holders can pursue a more advanced programme or gain entry-level employment. Graduates of the computer engineering programme will obtain the skills to analyse, design and implement creative solutions to world challenges, typically using computer hardware, software, systems and applications.

The objectives of the Programme are:

- to provide graduate students with a high-quality education to be competent computer engineers who are knowledgeable, skillful and able to solve engineering problems with modern approach.
- to engage in professional development activities to adapt to evolving technological challenges and their application.

Learning outcomes of the programme are:

On the successful completion of the whole course students have to:

- design, conduct, analyse and interpret results of computer engineering experiments;
- be able to combine theory and practice to analyse issues based on database systems and programming languages; as well as have an understanding of applicable techniques and methods;
- acquire a base for simulating, modeling software tools;
- apply the techniques, skills, and tools of modern engineering effectively in the practice of computer engineering;
- get analytical and problem-solving skills for data analysis as well as for making decisions in standard and uncertain situations;
- understand how global competitive environments are changing in practice.

### **Operations Management (OM)**

The “Master of Business Administration (MBA)” programme at the ASOIU was founded in 1998 in accordance with the joint project “Partnership to Develop the Master of Business Administration Programme and Faculty capabilities” at the Azerbaijan State Oil Academy (now Azerbaijan State Oil and Industry University) in partnership with the Georgia State University/Robinson Business School of the USA. The MBA Programme with a major in Operations Management provides a general introduction to operations and process management and explains how the operations function fits within the organisation overall, as well as teaches qualities critical to operations-management professionals, including leadership, self-confidence, motivation, decisiveness, flexibility, sound business judgment and determination.

MBA with a major in Operations Management (OM) focuses on the management of resources and activities that produce and deliver the goods and services for customers. OM can play a critical role in enhancing a company’s competitive position by providing superior products and services.

Operations Management is a major for students who wish to be involved in the management of the operations process, i.e., the process of manufacturing, service delivery, distribution, and supply. The major in OM provides a framework for linking all functional areas with specific skills developed for OM. The major also provides in-depth analysis of operations decisions such as new product development, project planning and control, supply chain analysis, quality assurance, project and process management techniques, and production systems planning.

The objectives of the MBA programme are:

- to provide graduate students with a high-quality education in business management that will enable the graduates to earn management positions in state and non-state organisations, business, and other institutions.
- to provide students with the ability to effectively and efficiently solve managerial problems related to planning, organizing, and controlling all areas of business.
- Given that the OM Programme is designed to prepare students for senior management roles, it is essential that graduates should also be able to demonstrate relevant personal and interpersonal skills that include cognitive skills of critical thinking, analysis and synthesis, as well as the capability to identify assumptions, evaluate statements in terms of evidence, to detect false logic or reasoning, to identify implicit values, to define terms adequately and to generalise appropriately.

Learning Outcomes of the Master of Business Administration programme

Successful graduates should be able to demonstrate a range of cognitive and intellectual skills together with techniques specific to business and management:

- analytical skills applying business analysis, data management and diagnostic problem-solving skills to make decisions in non-standard situations in an autonomous way.
- effective problem-solving and decision making using appropriate quantitative and qualitative skills including identifying, formulating, and solving business problems.
- Leadership and team membership skills are needed for implementing and coordinating organisational activities and managing change.
- an understanding of how global competitive environments are changing business practice.
- the ability to integrate business knowledge and management techniques to aid planning and control in a changing environment.
- the ability to create, evaluate and assess a range of options together with the capacity to apply ideas and knowledge to a range of situations in conditions of limited knowledge or uncertainty.
- effective communication, oral and in writing, using a range of media that are widely used in business, including the preparation and presentation of business reports.
- interpersonal skills of effective listening, negotiating, persuasion and presentation.
- numeracy, mathematical and quantitative skills including statistical data analysis, interpretation, and extrapolation; management science skills as support to the decision-making processes in an organisation the use of models of business problems and phenomena.
- effective use of communication and information technology for business applications.
- effective self-management in terms of time, planning and behavior, motivation, self-starting, individual initiative, and enterprise.
- effective performance, within a team environment, including leadership, team building, influencing.
- project management skills.
- ability to conduct research into business and management issues, either individually or as part of a team for projects/dissertations/presentations. This requires familiarity with and an

evaluative approach to a range of business data, sources of information and appropriate methodologies, and for such to inform the overall learning process.

### **Computer Information Systems (CIS)**

The “Master of Business Administration (MBA)” programme at the ASOIU was founded in 1998 in accordance with the joint project “Partnership to Develop the Master of Business Administration Programme and Faculty capabilities” at the Azerbaijan State Oil Academy (now Azerbaijan State Oil and Industry University) in partnership with the Georgia State University/Robinson Business School of the USA.

The Master of Business Administration (MBA) with major in Computer Information Systems (CIS) provides students with the managerial and high-level technical skills necessary for effective business leaders.

All aspects of major business operations are dependent upon information technologies, with business professionals increasingly depending upon intricate networks of communication technologies. Many professions are dependent upon the creation, organisation, and communication of electronic information.

The objectives of the MBA CIS Programme are:

- To provide graduate students with the opportunity to contribute to society as broadly educated, expressive, ethical, and responsible citizens with proven expertise.
- To provide graduate students to apply knowledge of information technology to produce effective designs and solutions for specific problems, to use current technologies, tools and software systems, and apply best practices to develop real-world solutions for specific problems, to conduct research using qualitative, quantitative and mixed methods.
- Students are equipped with the newest networking technologies via special emphasis on wireless networking and optical networking have acquired the computational skills necessary to solve theoretical and practical problems for further professional development and for meeting future changes in IT.
- It is designed to provide knowledge and skills in management, economics, finance, statistics, accounting, computer information systems, and various other areas of business.

Learning outcomes of the MBA CIS Programme are:

- Identify and discuss professional, individual, organisational, societal, and regulatory implications of information systems and technology.
- Have advanced knowledge of research principles and methods in Information Systems
- An ability to use current techniques, skills, and tools necessary for Information Technology.
- An ability to apply knowledge of computing and mathematics appropriate to Information Technology.
- An understanding of professional, ethical, legal, security, and social issues and responsibilities related to Information Systems.
- An understanding of processes that support the delivery and management of Information Systems within a specific application environment.

- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program’s discipline.
- demonstrate the ability to participate effectively in the planning and execution of team-based projects.
- leadership, and team membership skills needed for implementing and coordinating organisational activities and managing change.
- applying appropriate quantitative and qualitative effective problem-solving and decision-making methods for formulating and solving information systems and technology problems

## Appraisal:

The qualification objectives of the programmes are explained and convincingly presented in relation to the target group, targeted professional field and societal context of the discipline. The programmes have clear objectives aimed at developing skills and knowledge relevant to their respective fields. They embrace academic proficiency, comprehensive employability (e.g., integration of computer science and business administration, solid engineering knowledge), as well as the development of the individual student’s personality.

The subject-specific and extra-curricular qualification objectives and skills to be acquired correspond with the aspired level at graduation. They take into account the requirements of the national qualification framework.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.1*	Objectives of the study programme (Asterisk Criterion)			X		

## 1.2 International orientation of the study programme design (Asterisk Criterion)

### **Business Informatics (BI)**

Business Informatics delivers an integrated experience to prepare students for knowledge on the international level, and therefore, the programme design takes into account the required international aspects that assure the graduates’ employability, which is an important aspect of the Business Informatics curriculum. The curriculum, as indicated in the objectives, also emphasises international focus on the courses that provide students with the necessary information in Introduction to economics (EC1101), Introduction to Management Information Systems (MIS1101), Mathematics for Business Informatics (MATH1102), Probability and Statistical Methods (MATH1108), Design Internship (COMP2101) and skills to handle international tasks contributing to the students’ employability. In addition, supporting course materials, such as case studies, used by instructors are also preferred in the international environment. The language of instruction is English.

### **Industrial Engineering (IE)**

IE allows students to get an integrated experience in creating a leadership basis on the international level, and so the programme is developed considering the international aspects that assure the graduates' competitiveness in the employment process. That is one of the main aspects of the programme's curriculum. It is reflected in both compulsory and elective courses on Industrial Engineering speciality, such as Manufacturing Technology and Product Development - Joining and Bonding Technology (TECH 4107), Quality Engineering (MGS 4102), Manufacturing and Service Systems - Design Project (TECH 4101), Energy Management (TECH 4108), Introduction to Environmental and Value Chain Management (MGS 3106), Accounting - Cost Accounting Systems (ACCT 2101) and others. All these courses provide students with the necessary skills to handle international tasks, which contributes to their employability. In addition, supporting course materials, such as case studies, used by instructors are also preferred in the international environment, and the language of instruction is English.

### **Computer Engineering (CE)**

The Computer Engineering programme offers students an integrated experience in establishing a leadership foundation at the international level. The curriculum is designed with a focus on international perspectives to enhance graduates' competitiveness in the job market, making it a pivotal aspect of the programme's structure. It's reflected in both compulsory and elective courses, on Computer Engineering speciality, such as: Programming with C and Python language (SPTC-B07), Database management systems (SPTC-B23), Web programming and design (SPTC-B24), Computer networking (SPTC-B10), Computer graphics and visualization (SPTC-B17), Introduction to Internet of Things and Sensor Networks (SPTEC-B15), Computing data warehousing and Data Mining (SPTEC-B18), Fundamentals of distributed systems with cloud computing (SPTEC-B04) and others. All of these courses equip students with the essential skills required to tackle international responsibilities, thereby enhancing their employability. Furthermore, course materials, including preferred case studies, are sourced from an international context, aligning with English-language instruction to further enrich students' learning experiences.

### **Operations Management (OM)**

The programme's international dimension, especially including international questions in certain modules and teaching material, is clearly helpful in promoting students' skills in handling the international dimension in the business world. MBA programmes deliver an integrated experience to prepare students for international level, and therefore, the programme design takes into account the required international aspects that assure the graduates' employability, which is an important aspect of the MBA programme curriculum. The curriculum, as indicated in the objective, also emphasises international focus of the courses, both compulsory and elective: MBA 8165 Leadership and Organisational Behavior, MBA 8000 Managing the Global Economy, MBA 8820 Global Competitive Strategy, and others. These courses provide students with the necessary skills to handle international tasks, contributing to the students' employability. In addition, supporting course materials, such as case studies, used by instructors are also preferred in the international environment. The language of instruction is English.

### **Computer Information Systems (CIS)**

The curriculum aims to foster international focus of the courses, both compulsory and elective: MBA 8000 Managing the Global Economy, MBA 8040 Decision making, MBA 8165 Leadership and Organisational Behavior, MBA 8820 Global Competitive Strategy, and others. These courses furnish students with essential skills for managing international responsibilities, thereby enhancing their employability. Additionally, instructors prefer to utilize supporting course materials, such as case studies, sourced from an international context. Moreover, the language of instruction is English, facilitating a comprehensive learning experience.

### **Appraisal:**

The programme design appropriately takes into account the required international aspects, with respect, too, to its graduates' employability. The panel members highlight positively that lecturers possess international experience, thus providing valuable international perspectives. In the panel's opinion, however, the international mobility of lecturers could be increased.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.2*	International orientation of the study programme design (Asterisk Criterion)			X		

## **1.3 Positioning of the study programme**

### **Positioning of the study programme in the educational market**

#### **Business Informatics (BI)**

As the curriculum of the **BI** covers the main areas of technology and is based on Siegen University, Germany Economical Informatics programme, and almost similar to Business Informatics programmes at accredited universities in foreign countries, it is based on the requirements of the international market (see self-evaluation report, p. 16). The language of study is English, which also contributes to its international positioning.

#### **Industrial Engineering (IE)**

According to the University, the curriculum of **IE** covers almost all sides of today's business engineering studies worldwide and meets the international similar programs' accredited curricula, it seen that the programme correctly responds to the international market's requirements. The language of study is English, which contributes to its international positioning.

#### **Computer Engineering (CE)**

CE encompasses nearly all facets of contemporary business engineering studies on a global scale and meets the international similar programs' accredited curricula, it seen that the programme correctly responds to the international market's requirements. The language of study is English, which also contributes to its international positioning.

### **Operations Management (OM) and Computer Information Systems (CIS)**

As the curriculum of the MBA programme covers the main areas of business is based on the GSU, USA MBA program, and is almost similar to MBA programmes at accredited universities in foreign countries, it is based on the requirements of the international market. The language of study is English, which also contributes to its international positioning.

### **Positioning of the study programme on the job market for graduates (“employability”)**

#### **Business Informatics (BI)**

The employability of the BI graduates constitutes 70 % as the learning outcomes of the BI contributes to positioning the programme on the local and international job markets and Master programmes. Most of the students studying at the BI find jobs in different areas to the end of their graduation from the programme. The programme provides employers with individuals with necessary managerial and leadership/decision-making/problem-solving skills to apply efficiently to the business environment today.

Graduates from the Business Informatics programme also possess necessary computer and communication skills that help them quickly adapt to any work environment. They are also effective team members knowledgeable in the major business areas. Therefore, graduates are readily employable in both private and public sectors. Graduates find employment in various business-related areas such as marketing, sales, accounting, banking and financial services, business services, and public organisations.

#### **Industrial Engineering (IE)**

The employability of IE graduates constitutes 90 % of the learning outcomes and contributes to the positioning of the programme on the job market, both local and international. Students that graduate from the programme have a significant advantage over the rest and find jobs in the different areas of engineering, business, and management. The programme provides the labour market with a staff that has the necessary engineering, managerial, decision-making, and problem-solving skills.

IE graduates are equipped with essential computer and communication skills, facilitating their seamless adaptation to diverse work environments. With adeptness in teamwork and comprehensive knowledge across key business and engineering domains, they emerge as highly employable professionals sought after by both private and public sectors.

#### **Computer Engineering (CE)**

The employability of CE graduates constitutes 90 % of the learning outcomes and contributes to the positioning of the programme on the job market, both local and international. Students that graduate from the programme have a significant advantage over the rest and find jobs in the different areas of engineering, business, and management. The programme provides the labour market with staff with the necessary engineering, managerial, decision-making, and problem-solving skills.



Graduates of the programme are equipped with essential computer and communication skills, enabling them to swiftly adapt to any professional setting. With a strong aptitude for teamwork and comprehensive expertise in key business and engineering domains, they are highly sought after and readily employable across both private and public sectors.

### **Operations Management (OM) and Computer Information Systems (CIS)**

The employability of the MBA graduates constitutes 90 % as the learning outcomes of the MBA programme contribute to positioning of the programme on the job market, both local and international. Mostly jobless students studying at the MBA Programme find jobs in different areas to the end of the graduation from the programme. The programme provides employers with individuals with necessary managerial and leadership/decision-making/problem-solving skills to apply efficiently to the business environment today.

Programme graduates possess important computer and communication skills, facilitating seamless adaptation to various work environments. Their effectiveness as team players, coupled with expertise in crucial business and engineering fields, renders them highly employable in both private and public sectors. Many graduates find employment in various business-related areas such as marketing, sales, accounting, banking and financial services, business services, and public organisations.

### **Positioning of the study programme within ASOIU's overall strategic concept**

#### **All programmes:**

The Azerbaijan State Oil and Industry University, following the constitutional principles of the Republic of Azerbaijan, is a higher education institution working based on the general objectives, basic principles, and requirements of the national higher education system, which includes international values.

The ASOIU performs its mission following the principles, responsibilities, duties, application procedures listed below:

- The Azerbaijan State Oil and Industry University, in accordance with its objectives, aims to contribute to society through education, learning, and research at the highest international levels of excellence.
- Aims to focus on deep disciplinary knowledge, problem-solving, leadership, and interpersonal skills; make scientific studies and educational quality reach to internationally advanced level, establish an environment where research, creativity and innovation can flourish;
- Aims to develop the social, cultural and academic relations between the international community and Azerbaijan community in accordance with the principles of contemporary civilization principles as well as increasing the level of international relations.
- ASOIU provides opportunities to produce scientific research and publish findings, as well as arranges educational and scientific facilities such as seminars, conferences, etc.
- Carries out all kinds of research and investigation to provide opportunities for cooperation with joint partnerships institutions.

### **Business Informatics (BI)**

The BI fits into the university vision and mission in that by serving a diverse student population and teaching in English. The programme is positioned in the international community. Also, the Business Informatics curriculum has been established and based on the Siegen University of Germany based on a cooperation programme. Furthermore, due to the international student population, students in class are able to participate in discussions with individuals from different cultural backgrounds and points of view, thus making them more knowledgeable about performing in organisations at the national and international levels.

### **Industrial Engineering (IE) and Computer Engineering (CE)**

The vision and mission of programmes integrate with the university's, and by teaching students English, the HEI is positioning itself in the international community. The ability of local students to have a discussion with international students widens their skills and knowledge and raises their plank to the international level. The staff also provides training and seminars for the public and private organisations, such as ministries, government departments, and various forms of businesses.

### **Operations Management (OM)**

The MBA programme aligns with the university's vision and mission by catering to a diverse student body and offering instruction in English, thereby positioning itself within the international community. Additionally, the MBA curriculum is structured in collaboration with Georgia State University in the USA. Moreover, the presence of an international student cohort fosters vibrant class discussions, exposing students to varied cultural perspectives and preparing them for the global workplace environment.

### **Computer Information Systems (CIS)**

The MBA programme fits into the university vision and mission in that by serving a diverse student population and teaching in English, the programme is positioned in the international community. Also, the MBA curriculum has been established based on the Georgia State University of the USA based on a joint programme. Furthermore, due to the international student population, students in class are able to participate in discussions with individuals from different cultural backgrounds and points of view, thus making them more knowledgeable about performing in organisations at the national and international levels.

Members of staff also provide training/seminar activities offered to public and private organisations. Such organisations include ministries, hotels, and private organisations.

### **Appraisal:**

The reasons given for the positioning in the educational market of this study programme are plausible and well described by the HEI.

The arguments in support of graduate employability on the basis of the stated qualification objectives are convincingly presented. The future fields of employment for graduates are plausibly set forth.

The study programmes qualification goals constitute the core of the HEI's or faculty's strategy as a technical, international-oriented HEI, and are sustainably implemented.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.3	Positioning of the study programme					
1.3.1	Positioning of the study programme in the educational market			X		
1.3.2	Positioning of the study programme on the job market for graduates („Employability“)			X		
1.3.3	Positioning of the study programme within the HEI's overall strategic concept		X			

## 2. Admission

### Admission requirements (Asterisk Criterion)

#### All programmes

Students come from two sources:

- Local students who are citizens of the Republic of Azerbaijan
- Students from other countries (international students).

#### Transfer regulations

The transfer of students from Higher Education Institutions across the country and abroad is carried out in accordance with the rules adopted by the Ministry of Education of Azerbaijan. These rules are listed online<sup>2</sup>. The main principles of the student transfer system from one higher education institution to another are displayed on the website.

#### Business Informatics (BI), IE and CE

##### Admission requirements for Local Students:

Admission at the Business Informatics is based on the Unified National Exams: Azerbaijan citizens holding secondary school certificates are required to pass the entrance examination organised by the State Students Admission Commission (now State Examination Centre based on the Presidential decree #13 as of October 24, 2013, established to arrange entrance exams in conformity with international standards) of the Republic of Azerbaijan and obtain a passing mark.

This exam is held once a year from April through July. Depending on the results of the exams, successful students are then admitted to the universities in the programmes of their choice.

##### Enrollment Requirements:

- Secondary school graduation certificate (original and copy)
- National student application form
- Results of the entrance exams
- Copy of national ID Card (6 copies)
- Health Certificate (original and copy)
- Colour photo – 10 pieces (3x4)
- Autobiography (original and copy)
- Copy of the military service card (male applicants only);
- Receipt of full payment of the education fee.

##### Admission requirements for International Students:

Admissions for international students are managed by the Azerbaijan State Oil and Industry University International Cooperation Office and international Students Dean Office. Students are admitted without passing the centralized examination of Azerbaijan. The applicants apply directly to the University electronically and get registered for the programme.

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<sup>2</sup> <https://transfer.edu.az/az/usage>

#### Enrollment Requirements:

- Secondary school graduation certificate(original and copy)
- Electronic application form
- Copy of passport
- Autobiography (original and copy)
- Proof of English language proficiency: IELTS - 5
- Colour photo – 10 pieces (3x4)
- Receipt of full payment of the education fee

International students are required to complete and submit an application form<sup>3</sup>. International students' applications are reviewed by the Foreign Students Department, and the admission officers review all applications on the basis of the admission requirements. Eligible students receive a Conditional Acceptance Letter and are required to pay their first-semester tuition fees. Upon payment, applicants will receive an official acceptance letter.

The tuition fee for international students for Business Informatics is 2500 USD per year, and for local students it is 2500 Azerbaijan Manats.

### **Operations Management (OM) and Computer Information Systems (CIS)**

#### **Admission requirements for Local Students:**

Admission to the MBA (Master of Business Administration) Programme is based on the Unified National Exams: Azerbaijan citizens holding a bachelor graduation diploma are required to pass the entrance examination organised by the State Students Admission Commission of the Republic of Azerbaijan and obtain a passing mark.

The graduate admission rules are listed later in this report. This exam is held once a year from April through July. Depending on the results of the exams, successful students are then admitted to universities in the programmes of their choice.

#### Enrollment Requirements:

- Bachelor graduation diploma (original and copy)
- National student application form
- Results of the unified graduate exams
- Copy of national ID Card (6 copies)
- Copy of work experience certificate
- Health Certificate (original and copy)
- Colour photo – 10 pieces (3x4)
- Biography (original and copy)
- Copy of the military service card (male applicants only);
- Receipt of full payment of the education fee.

#### **Admission requirements for International Students:**

Admissions for international students are managed by the Azerbaijan State Oil and Industry University International Cooperation Office and International Students Dean Office. Students are

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<sup>3</sup> <https://mba.edu.az/>

admitted without passing the centralized examination of Azerbaijan. The applicants apply directly to the University electronically and get registered for the programme.

**Enrollment Requirements:**

- Bachelor graduation diploma (original and copy)
- Electronic application form
- Copy of passport
- Copy of work experience certificate (at least 2 years of experience is required)
- Biography (original and copy)
- Proof of English language proficiency (TOEFL 80)
- Colour photo – 10 pieces (3x4)
- Receipt of full payment of the education fee.
- Motivation letter

International students are required to complete and submit an application form<sup>4</sup>.

International students' applications are reviewed by the Foreign Students Department, and the admission officers review all applications on the basis of the admission requirements. Eligible students receive a Conditional Acceptance Letter and are required to pay their first-semester tuition fees. Upon payment, applicants will receive an official acceptance letter. The tuition fee for international students for MBA programme is 6000 USD, and for local students, it is 6000 Azerbaijan Manats.

**Counselling for prospective students:**

**All programmes**

The counseling process aims to assist prospective students in making informed decisions about their educational goals, programme choices, and future career paths. The university is paying great attention to the counseling process, therefore arranging related activities to help future students: the university members are visiting different high schools and colleges in different districts of Azerbaijan to inform students about the various academic programmes offered by the university, including their curriculum, requirements, and potential career paths. They also distribute programme brochures to prospective students. Academic advisors also provide guidance based on student's interests, academic backgrounds, and career interests. They can explain the differences between various programmes, their admission criteria, and the opportunities they offer for academic and professional development.

The University also arranges necessary counselling services for students admitted in the programme.

The objective is to contribute to the personal, physical, cultural, and social development of students in the educational environment; provide necessary information and guidance for prospective

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<sup>4</sup> <https://mba.edu.az/>

students; support students in their transfer to business life; encourage their social responsibility and impart skills that will help them add further to both themselves as individuals and to society.

### International Student Office

The ASOIU Foreign Student Department has been established to facilitate the international students' (non-Azeri speaking students) application process to ASOIU and ensure that these students receive support and guidance from registration through to graduation from the university. The Department aims to understand all student situations and maintain a friendly and understanding relationship with the students.

Representative Offices and Agencies: There are agents and representative offices in 22 foreign countries. The personnel working in these offices guide prospective students by advising them in regard to their choices about their area of study.

### Selection procedure

#### All programmes

All students are admitted to the University after they complete their secondary school graduation certificate successfully and obtain graduation diplomas. The selection procedure is developed by the State Examination Centre established by the Presidential Decree.

Admission to bachelor and master programmes is based on the Unified National Exams: Azerbaijan citizens are required to pass the entrance examination organised by the State Students Admission Commission of the Republic of Azerbaijan and obtain a passing mark.

State Examination Center of the Republic of Azerbaijan informs that the entrance exams are conducted centrally, testing logical thinking, informatics, and foreign language knowledge. The first level entrance exam is taken in February, the second one is in April. Candidates' potential is evaluated with a 100 point-system.

Then they have a chance to apply to 20 programmes from different universities during the speciality selection procedure. However, for a bachelor's degree, applicants may choose 15 programmes simultaneously.

The State Examination Center is responsible to make placement of applicants based on their speciality selection and total (maximum) grade from exams.

### Professional experience

#### Operations Management (OM) and Computer Information Systems (CIS)

For the MBA programmes in Operations Management and Computer Information Systems at the Azerbaijan State Oil and Industry University, typically, a minimum of two to three years of professional experience in a relevant field is required. Prospective applicants are expected to have

acquired practical work experience in management, technology, or related fields for at least two to three years post-graduation.

### **Ensuring foreign language proficiency (Asterisk Criterion)**

#### **All programmes**

The medium of instruction is English. The admission requirements indicate that applicants must pass exams for English language proficiency as well. examination and selection process are arranged by State Examination Centre. The applicants have to collect minimum 40 points out of 100 points from English exam which is similar to IELTS exam structure. Furthermore, MBA students take courses in business communication to complete the study programme successfully. Extra curricula activities like debates, competitions, and so on. are very helpful for this purpose as well. Those students whose level of written English and communication skills is below the required standards are offered English courses arranged by the BA programmes that provide English reading, writing, and communication skills.

### **Transparency and documentation of admission procedure and decision (Asterisk Criterion)**

#### **All programmes**

The admission to the Master programmes is arranged in the centralized form by the State Students Admission Commission of the Republic of Azerbaijan (now The State Examination Centre established by the Presidential Decree to organise admission procedure and decisions based on transparent criteria). The details of the admission requirements are communicated on the Commission's website. The results of the selection are published on the website as well. Admission policies are published in the centre's promotional catalogues and on the website<sup>5</sup>.

### **Appraisal:**

The admission requirements are defined and comprehensible. The national requirements are presented and taken into account. Through various organisations (for example, Student Trade Union Committee) and events, interested parties are addressed and the values and messages of the university are communicated. Applicants can directly turn to a student counselling service (e.g. International Student Office), or to whatever other helpdesk at the HEI, for clarification of specific questions, of personal aptitude, of career perspectives.

The selection procedure is transparent and ensures that qualified students are admitted.

The required professional experience must correspond to the defined qualification profile of entrants and the study programme's objectives. Certified proof of this experience must be shown at the time of the admission. For the MBA programmes, this translates into at least two years of professional experience after the first higher education qualification.

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<sup>5</sup> <https://dim.gov.az/en/activities/exams/2220/>



The admission requirements (required language proficiency level or required result in a concrete language test) or preparatory language courses ensure that students are able to successfully complete the study programme (courses, additional literature, utilisation of counselling services and extracurricular activities). The panel members positively highlight that the students have an excellent command of English. They also note that the Azerbaijani language is very difficult and suggest that international students should be well-supported and prepared.

The admission procedure is described, documented, and accessible for interested parties. The admission decision is based on transparent criteria and is communicated in writing.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
2.1*	Admission requirements (Asterisk Criterion)			X		
2.2	Counselling for prospective students			X		
2.3*	Selection procedure (if relevant)			X		
2.4(*)	Professional experience (if relevant; Asterisk Criterion for master programmes that require professional experience)			X		
2.5*	Ensuring foreign language proficiency (Asterisk Criterion)			X		
2.6*	Transparency and documentation of admission procedure and decision (Asterisk Criterion)			X		

### 3. Contents, structure and didactical concept of the programme

#### 3.1 Contents

##### Logic and conceptual coherence (Asterisk Criterion)

##### All programmes

The curriculum represents the qualification goals of the study program, ensuring that all students are exposed to the necessary theories and approaches. Additionally, the module contents are well-balanced and logically connected in that the curriculum has been structured in a way so that students do not face any difficulties when moving from one semester to the next. Some courses require prerequisites, and students must first take the prerequisite course before proceeding to the next dependent course.

##### Business Informatics (BI)

The Bachelor programme in Business Informatics specialty is a part of consecutive modules leading to the first independent academic degree (Bachelor of Science) within eight semesters. The curriculum of the bachelor's degree course basically consists of three balanced and equivalent module columns: Business economics, Informatics, and specific core areas of economic informatics. Therefore, the bachelor's degree programme focuses on the aspects of professional qualification, as well as the practical orientation into the professional world.

The IT and business courses provide comprehensive knowledge of the projects in the region. The students of this field of study get advanced knowledge and skills in economics and can assert themselves in the sphere of economic application (banks, economic departments of local authorities, enterprises, central economic institutions, computer centres and research institutions).

Graduates should be capable of advanced abstract thinking, which is necessary for formulating and problem solving, and they can continue their studies in corresponding postgraduate studies at different economic schools or work in the economic, financial or informatics spheres. The programme Business Informatics is taught in the following modules: Accounting and Finance, Investment and Financing, Practical Training of Programming, Introduction to Business Informatics, Business Application Systems, Modeling of Application Systems, Logistics,

Implementation and use of Application Systems, Introduction to IT Security, Object orientation and functional programming, Software Engineering and Database Systems, Discrete Mathematics for Computer Science and so on.

The programme is built on:

- Compulsory courses within the framework of which theoretical and practical knowledge in the field of computer sciences and informatics is obtained, with an emphasis on the use of ICT in business processes.

- Compulsory courses within which basic theoretical and practical knowledge in the field of economy and management is gained, in conjunction with the use of ICT.
- Compulsory courses within which basic theoretical and practical knowledge of social sciences is obtained in conjunction with business informatics.

Nowadays, information and communication technologies penetrate all sectors of companies, both in business and society, as well as in technology. The modules of the Bachelor programme are, therefore, thoroughly and fundamentally designed, and they cover the broadest possible spectrum of tasks and issues in Business Informatics.

**Table 6: Curriculum of the programme - BI**

		HRS	ECTS	Prerequisites	Semester
ENGL 1101	Business English	4	6	none	1
MATH 1102	Mathematics for Business Informatics	4	7	none	1
ECON 1101	Introduction to Economics	3	6	none	1
MIS 1102	Introduction to Business Informatics	3	6		1
COMP 1101	Algorithms and Data Structures	6	4	none	1
ENGL 1102	Business Communication and Professional Development	3	6	ENGL 1101	2
MIS 1101	Management Information Systems	3	6	none	2
MATH 1101	Discrete Mathematics for Computer Science	4	7	none	2
MATH 1103	Probability and Statistical Methods	3	6	none	2
MGT 1101	IT Project Management	3	6		2
COMP 2101	Design Internship	3	6	none	3
ACCT 2101	Financial Accounting	3	6	none	3
COMP 2105	Software Engineering	3	6	none	3
ECON 2105	Microeconomics for Business	3	6	none	3
	Elective	3	6		3
ACCT 2102	Cost and Managerial Accounting	3	6	ACCT 2101	4
ECON 3101	Macroeconomics for Business	3	6	ECON 2105	4
FIN 2101	Investment and Financing	3	6	ACCT 2102	4
COMP 2103	Object orientation and functional programming	3	6	COMP 2105	4

COMP 2104	Modelling of Application Systems	3	6	none	4
MGS 3101	Production	3	6	none	5
COMP 3101	Database Systems	3	6	none	5
COMP 3102	Design of Application Systems	3	6	none	5
LGLS 3101	Legal and Ethical Environment of Business	3	6	none	5
	Elective	3	6		5
COMP 3103	Implementation and use of Application Systems	3	6	none	6
COMP 3104	Practical training of Programming	4	6	none	6
MGS 3102	Logistics	3	6	none	6
COMP 4103	Data Communications and Networking	3	6	COMP 2105	6
	Elective	3	6		6
ECON 4101	Economic analysis	4	6	none	7
COMP 4101	Introduction to IT Security	3	6	none	7
COMP 4102	Data Analysis	3	6	none	7
MATH 4101	Research Methodology for Business Informatics	3	6	none	7
	Elective	3	6		7
	Elective	6	3		8
MGS 4101	Practice	12		none	8
BW 4101	Bachelor Thesis	12			8

### Elective Courses

NEW CODE	COURSE NAME	ECTS	HRS	PREREQUISITES
CIS 5001	Enterprise Systems	6	3	none
CIS 5002	Information and Communication Architecture	6	3	none
MGT 5001	Human Resources Management	6	3	none
BUS 5001	Electronic Business Government	6	3	none

BUS 5002	Theory of Computation for Business Informatics	6	3	none
BUS 5003	Electronic Business Development	6	3	none
CIS 5003	Human Computer Interaction	6	3	none
CIS 5004	Information Security	6	3	none
CIS 5005	Data Mining	6	3	none
FLC 5001	Fuzzy Logic	6	3	none
NLC 5001	Introduction to Natural Language Processing	6	3	none
CIS 5006	Soft Computing	6	3	none

The core courses provide students with the necessary information (such as Introduction to economics, Introduction to Business informatics, Mathematics for Business Informatics), Probability and Statistical Methods, Design Internship followed by the functional Economical Information courses.

### **Industrial Engineering (IE)**

The curriculum adequately reflects the qualification objectives of the study programme the main theories and approaches that must be passed by students. All these are covered within the programme's curriculum, which is presented below. The structure of the curriculum is built so that students do not face any difficulties while passing from one semester to the next one. The first three semester students pass a number of general courses on engineering, economics, and finance, which are the ground for the Industrial Engineering specialty, they are, Introduction to Economics, Analysis and Linear Algebra, Statics, Computer Science, Material Technology, Accounting, and so on. Beginning from the fourth semester students are taught the courses which are closer to their specialty, such as, Introduction to Electrical Engineering, Product Development and Engineering Design, Fundamentals of Industrial Engineering, Systems Modeling and Simulations, Production, Macroeconomics, Cost Accounting Systems, and so on.

Elective courses are offered beginning from the third semester when students have developed a strong business and engineering foundation and are confident about their speciality and field interests. Seventh-semester students are required to begin their bachelor thesis (dissertation) work, which includes identifying a topic, choosing a scientific supervisor, and beginning the theoretical part of the work. The last eighth semester students work in deep contact with their scientific supervisors and implement all the works related to the completion of the dissertation work.

**Table 7: Curriculum of the programme - IE**

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
ENGL 1101	Technical English I	5	3	NONE
ECON 1101	Introduction to Economics	6	3	NONE
MATH 1101	Mathematics A: - Analysis I and Linear Algebra	6	4	NONE
TECH 1103	Technical assurance: - Introduction to the Technical View	6	3	NONE
COMP 1101	Computer Science: - Introduction to Computer Science I	6	3	NONE
TOTAL SEMESTER ECTS		29		

**2<sup>nd</sup> SEMESTER**

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
ENGL 1102	Technical English II	5	3	ENGL 1101
TECH 1102	Materials Technology: - Materials Technology I	6	4	NONE
TECH 1101	Engineering Mechanics A: - Statics	6	4	NONE
MATH 1102	Mathematics B: - Analysis II and Differential Equations	6	4	MATH 1101
COMP 1102	Computer Science: - Introduction to Computer Science II	6	3	COMP 1101
TOTAL SEMESTER ECTS		29		

**3<sup>rd</sup> SEMESTER**

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
TECH 2102	Materials Technology: - Materials Technology II	6	4	TECH 1102
TECH 2101	Engineering Mechanics B: - Theory of Stretch Materials Elastatics	6	4	TECH 1101
TECH 2103	Construction: - Machine Elements I	5	3	NONE
ACCT 1101	Accounting I: - Accounting and Financial Statements	4	3	NONE
MGS 2101	Ethics in Engineering	5	3	NONE
	Elective	4	3	NONE
TOTAL SEMESTER ECTS		30		

**4<sup>th</sup> SEMESTER**

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
SPTC-B23	Occupational health and safety	4	3	NONE

TECH 2104	Engineering Mechanics C: - Dynamics	5	4	TECH 1101 TECH 2101
TECH 2105	Electronics: - Introduction to Electrical Engineering	5	4	NONE
TECH 2106	Construction: - Machine Elements II	5	3	TECH 2103
TECH 2107	Manufacturing Technology and Product Development	5	3	NONE
ACCT 2101	Accounting II: - Cost Accounting Systems	4	3	ACCT 1101
	Elective	4	3	NONE
<b>TOTAL SEMESTER ECTS</b>		<b>32</b>		

### 5<sup>th</sup> SEMESTER

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
TECH 3101	Ergonomics: - Fundamentals of Industrial Engineering	4	3	NONE
MATH 3101	Fundamentals of Statistics: Probability and Statistics	6	4	MATH 1101 MATH 1102
TECH 3102	Fluid / Thermodynamics: - Introduction to Fluid and Thermodynamics	5	4	NONE
COMP 3101	Systems Modeling and Simulation	6	4	NONE
TECH 3103	Labouratories: - Metrology Labouratory	5	3	NONE
	Elective	4	3	NONE
<b>TOTAL SEMESTER ECTS</b>		<b>30</b>		

### 6<sup>th</sup> SEMESTER

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
MGS 3101	Business Processes: - Production	6	4	NONE
TECH 3105	Labouratories: - Equipment Labouratory	5	3	NONE
ECON 3101	Economics I: - Microeconomics	5	3	ECON 1101
MK 3101	Marketing	6	3	NONE
	Elective	4	3	NONE
	Elective	4	3	NONE
<b>TOTAL SEMESTER ECTS</b>		<b>30</b>		

7<sup>th</sup> SEMESTER

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
MGS 4101	Production: - International Production and Investment Management	5	3	NONE
ECON 4101	Economics II: - Macroeconomics	5	3	ECON 3101
MGS 4102	Quality Engineering	5	3	NONE
TECH 4101	Manufacturing and Service Systems -Design Project	6	4	NONE
MGS 4103	Investment and Financing	5	3	NONE
	Elective	4	3	NONE
TOTAL SEMESTER ECTS		30		

8<sup>th</sup> SEMESTER

CODES	COURSE NAME	ECTS	HOURS	Prerequisites
TECH 4102	Industrial Practice	18		
BW 4101	Bachelor work with final presentation	12		
TOTAL SEMESTER ECTS		30		

TOTAL ECTS 240

## Electives:

CODES	COURSE NAME
MGS 3105	Basics of Entrepreneurship and SME Management
TECH 3106	Material Mechanics
TECH 4104	Structural Mechanics
TECH 4105	Forming Processes
TECH 4106	Applied Fluid Dynamics
TECH 4107	Joining and Bonding Technology
TECH 4108	Energy Management
MATH 4109	Fuzzy logic and Control Systems
NLP 3101	Introduction to Natural language processing
CIS 1201	Soft computing
TECH 3107	Simulation in Metal Forming
MGS 3107	Logistics



**Computer Engineering (CE)**

The curriculum for Computer Engineering use general structure of the curriculum designed by the Azerbaijan Ministry of Education. Programme curricula are based on the following modules: Compulsory courses (33 modules) and elective courses (9 modules).

The humanitarian core courses are offered first (such as foreign language), followed by the speciality professional training courses (advanced computer architecture, computer networks, digital systems, etc.) and elective courses. Elective courses are offered mostly in the fourth, fifth, sixth and seventh semesters once students have developed a strong technical foundation and are more confident of their area of main interest based on which they select elective courses.

Each semester, a variety of electives are offered, giving students a wider range of choices. Students can continue their further scientific education with their diploma thesis.

**Table 8: Curriculum of the programme - CE**

FIRST YEAR I. SEMESTER					
	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	HC-B02.1	Technical English 1	6	3	NONE
2.	SPTC-B01.1	Engineering mathematics 1	5	3	NONE
3.	SPTC-B03	Physics	5	4	NONE
4.	SPTC-B04	Fundamentals of Computer Engineering	6	3	NONE
5.	SPTC-B14	Data structure and algorithms	7	4	NONE
TOTAL SEMESTER CREDITS/ECTS			29		

**FIRST YEAR II. SEMESTER**

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	HC-B02.2	Technical English 2	6	3	HC-B02.1
2.	SPTC-B01.2	Engineering mathematics 2	5	4	SPTC-B01.1
3.	SPTC-B07	Programming with C and Python language	7	4	SPTC-B04
4.	SPTC-B11	Operating systems	6	4	SPTC-B04
5.	SPTC-B18	Multimedia technologies	6	3	SPTC-B04
TOTAL SEMESTER CREDITS/ECTS			30		

**SECOND YEAR III. SEMESTER**

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTC-B02	Probability and statistics	5	3	SPTC-B01.2
2.	SPTC-B09	Advanced computer architecture	6	4	SPTC-B04
3.	SPTC-B23	Database management systems	6	4	SPTC-B14
4.	SPTC-B24	Web programming and design	6	3	SPTC-B07
5.	SPTC-B08	Fundamentals of electronics	5	3	NONE
TOTAL SEMESTER CREDITS/ECTS			28		

### SECOND YEAR IV. SEMESTER

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTC-B12	Digital systems	7	4	NONE
2.	SPTC-B10	Computer networking	6	4	SPTC-B09
3.	SPTC-B17	Computer graphics and visualization	7	4	SPTC-B04
4.	SPTEC-B10	Digital Signal Processing	6	3	SPTC-B02
5.		ELECTIVE	6	3	NONE
TOTAL SEMESTER CREDITS/ECTS			32		

### THIRD YEAR V. SEMESTER

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTC-B13	Information security	6	4	NONE
2.	SPTC-B16	Software engineering	6	4	SPTC-B07.2, SPTC-B14
3.	SPTC-B22	Internet technologies	6	4	SPTC-B10
4.	SPTC-B15	Automatic control	6	4	NONE
5.		ELECTIVE	6	3	NONE
TOTAL SEMESTER CREDITS/ECTS			30		

### THIRD YEAR VI. SEMESTER

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTC-B05	Telecommunication systems and wireless networks	6	3	SPTC-B10
2.	AI1101	Artificial intelligence	6	3	NONE
3.	SPTEC-B15	Introduction to Internet of Things and Sensor Networks	4	3	SPTC-B10
4.	SPTC-B19	Electronic circuits	4	3	SPTC-B08
5.	SPTEC-B18	Computing data warehousing and Data Mining	6	3	SPTC-B23
6.		ELECTIVE	5	3	NONE
TOTAL SEMESTER CREDITS/ECTS			31		

### FORTH YEAR VII. SEMESTER

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTEC-B04	Fundamentals of distributed systems with cloud computing	5	3	NONE
2.	SPTEC-B14	Fundamentals of decision-making systems	6	3	NONE
3.	SPTC-B20	Design Project	12	4	SPTC-B16
4.		ELECTIVE	4	3	NONE
5.		ELECTIVE	4	3	NONE
TOTAL SEMESTER CREDITS/ECTS			31		

### FORTH YEAR VIII. SEMESTER

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.		Practice	18		
2.		Bachelor thesis including its defense	12		
TOTAL SEMESTER CREDITS/ECTS			30		

TOTAL ECTS CREDITS: 241
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### Elective Courses

	CODE	COURSE NAME	ECTS	HOURS	Prerequisites
1.	SPTEC-B01	Mobile and parallel computer systems	5	3	SPTC-B09
2.	SPTEC-B03	Programming of mobile devices	4	3	SPTC-B07.2
3.	AI2101	Fundamentals of Industrial revolution 4.0	6	3	AI1101
4.	SPTEC-B12	Introduction to Natural Language Processing	6	3	AI1101
5.	FLS 3101	Fuzzy Logic and control systems	6	3	AI1101
6.	SPTEC-B08	Introduction to Embedded System Design	5	3	SPTC-B16
7.	SPTEC-B16	Life security	4	3	NONE
8.	SPTEC-B17	Civil defense	4	3	NONE
9.	SPTC-B21	Ethics in Engineering	5	3	NONE

### **Operations Management (OM)**

Elective courses are offered mostly in the second year once students have developed a strong business foundation and are more confident of their area of main interest based on which they select elective courses. Each semester, a variety of electives are offered, giving students a wider range of choices.

**Table 9: Curriculum of the programme - OM**

		<u>HRS</u>	<u>ECTS</u>	<u>Prerequisites</u>	<u>Semester</u>
Core courses					
MBA 7025	Statistical Business Analysis	3	6	None	I
MGS 8730	Project Management	3	6	None	I
MBA 8015	Strategic Business Communication	3	6	None	I
MBA 8025	Financial Statement Analysis	3	6	None	I
MGS 8760	Quality Management	3	6	None	I
MBA 8040	Data Driven Decision Making	3	6	MBA 7025	II
MBA 8115	Managerial Accounting and Control Systems	3	6	MBA 8025	II
MBA 8125	Digital Innovation	3	6	None	II
MBA 8165	Leadership and Organisational Behavior	3	6	None	II

MBA 8135	Corporate Finance	3	6	MBA 8025	III
MGT 8710	Managing Logistics and Supply Chains	3	6	MBA 8730, MBA 8115 MGS 8760	III
MBA 8155	Operations Management	3	6	MBA 7025 MBA 8040	III
MBA 8643	Business Research Methods	3	6	MBA 7025, MBA 8040	III
MS 8075	Master Thesis		21		IV
MBA 8030	Legal Environment: Ethics and Corporate Governance	3	7	None	

Electives					
MGS 8710	Operations Planning	3	7	None	
MGS 8740	Operations Strategy	3	7	None	
MGT 8770	Service Operations Management	3	7	None	
MGS 8030	Knowledge Management	3	7	None	
IB 8690	Global Operations Management	3	7	None	
CIS 1201	Soft Computing	3	7	None	
FLS 3101	Fuzzy Logic and Control Systems	3	7	None	
NLP 3101	Natural Language Processing	3	7	None	
MBA 8000	Managing in the Global Economy	3	7	None	
MBA 8145	Marketing Management	3	7	None	
MBA 8820	Global Competitive Strategy	3	7	None	

### **Computer Information Systems (CIS)**

Business and organisational processes are increasingly dependent on and integrated with, information systems and technologies. All aspects of major business operations are dependent upon information technologies, with business professionals increasingly dependent upon intricate networks of communication technologies. Many professions are dependent upon the creation, organisation, and communication of electronic information. The global economy has become a knowledge and information economy where products and services can be developed and delivered digitally.

The **CIS** emphasises an effective use of information technology to enable a competitive advantage for both individuals and organisations. Integrated courses that highlight the integral role information technology plays in every sector will prepare you to be a successful leader. **MBA CIS** Programme offers small class sizes and an evening class schedule to help working professionals balance their busy lives while also enjoying an enriched learning environment and deeper relationship building.

The **CIS** provides students with the managerial and high-level technical skills necessary for effective business leaders. Students in the MBA Programme with a Computer Information Systems Concentration learn how technology has changed the way business operates and how to harness the power of technology in various business management settings.

Elective courses are offered mostly in the second semester once students have developed a strong business foundation and are more confident in their area of main interest based on which they select elective courses. Each semester, a variety of electives are offered, giving students a wider range of choices.

**Table 10: Curriculum of the programme - CIS**

**FIRST YEAR I. SEMESTER**

CODE	COURSE NAME	ECTS	HOURS	PREREQUISITES
MBA 7025	Statistical Business Analysis	6	3	None
CIS 8000	Information Technology Project Management	6	3	None
MBA 8015	Strategic Business Communication	6	3	None
MBA 8025	Financial Statement Analysis	6	3	None
CIS 8040	Fundamentals Database Management Systems	6	3	None
<b>TOTAL SEMESTER CREDITS/ECTS</b>		<b>30</b>		

**FIRST YEAR II. SEMESTER**

CODE	COURSE NAME	ECTS	HOURS	PREREQUISITES
MBA 8040	Data Driven Decision Making	6	3	MBA 7025
MBA 8115	Managerial Accounting and Control Systems/ Analytics Experience	6	3	MBA 8000, MBA 8025
MBA 8125	Digital Innovation	6	3	MBA 8000, MBA 8025
CIS 8080	Information Systems Security and Privacy	6	3	
	<b>ELECTIVE</b>	<b>7</b>	<b>3</b>	
<b>TOTAL SEMESTER CREDITS/ECTS</b>		<b>31</b>		

### SECOND YEAR III. SEMESTER

CODE	COURSE NAME	ECTS	HOURS	PREREQUISITES
CIS 8060	Supply Chain Management	6	3	MBA 8125
MBA 8145	Marketing Management	6	3	MBA 8000, MBA 8025
MBA 8155	Operations Management	6	3	MBA 8000, MBA 8025
MBA8643	Business Research Methods	6	3	None
	ELECTIVE	7	3	
TOTAL SEMESTER CREDITS/ECTS		31		

### SECOND YEAR IV. SEMESTER

CODE	COURSE NAME	ECTS	HOURS	PREREQUISITES
	ELECTIVE	7	3	
MS 8075	Master Thesis	21		
TOTAL SEMESTER CREDITS/ECTS		28		
TOTAL:		120		

Electives: Six courses

CODE	COURSE NAME	ECTS	HOURS	PREREQUISITES
CIS 1201	Soft Computing	7	3	None
CIS 8010	Process Innovation	7	3	MBA 8125
CIS 8085	Information and Information Systems Security Risk Management	7	3	None
CIS 8090	Enterprise Architecture	7	3	None
CIS 8672	Integrated Process Platforms for Innovation	7	3	None
MBA 8000	Managing in the Global Economy	7	3	None
MBA 8030	Legal Environment: Ethics and Corporate Governance	7	3	None
MBA 8135	Corporate Finance	7	3	MBA 8000, MBA 8025
MBA 8165	Leadership and Organisational Behavior	7	3	MBA 8000, MBA 8025
MBA 8820	Global Competitive Strategy	7	3	MBA 8115, MBA 8125, MBA 8135, MBA 8145, MBA 8155, MBA 8165
FLS 3101	Fuzzy Logic and Control Systems	7	3	None
NLP 3101	Introduction to Natural Language Processing	7	3	None

## **Rationale for degree and programme name (Asterisk Criterion)**

### **Business Informatics (BI)**

The name of the programme is Bachelor of Joint Programme Azerbaijan State Oil and Industry University and Siegen University on partnership programme “Preparation of bachelors with new technologies”. The previous name of the programme was "Economical Informatics"; during the initial accreditation process with the recommendation of the FIBAA Commission it was renamed to "Business Informatics". Contents of the curriculum and the programme objectives are in conformity with the degree and programme name.

### **Industrial Engineering (IE)**

The name of the programme is “Preparation of Bachelors with New Technologies” and the qualification awarded at the end of the student’s studies is Bachelor of Industrial Engineering.

### **Computer Engineering (CE)**

The name of the programme is Bachelor in Computer Engineering, and the qualification awarded at the end of the student’s studies is Bachelor in Computer Engineering.

### **Operations Management (OM)**

The name of the programme is Master of Business Administration, and the qualification awarded at the end of the student’s studies is Master of Business Administration (MBA).

### **Computer Information Systems (CIS)**

The name of the specialty is Computer Information Systems and the qualification awarded at the end of the student’s studies is Master of Business Administration (MBA).

## **Integration of theory and practice (Asterisk Criterion)**

### **All programmes**

Lecturers use different teaching methods, such as simulations in excel spreadsheets, in-class discussions, case studies, brainstorming; team presentations/projects, papers to interrelate theory and practice systematically. For instance, in-class discussions improve the communication skills of students and students can express their thoughts and ideas and have the necessary environment to discuss, criticize and share ideas. Brainstorming helps students to generate creative ideas through intensive discussion.

Case studies improve the students’ analytical thinking and enhance teamwork. The lecturers use real-life business situations to connect practice and theory based on their private sector experience.

### **Industrial Engineering (IE)**

Case studies improve students' analytical thinking abilities and enhance their teamwork competence. The lecturers, along with the students, analyse real business cases to connect practice and theory.

### **Interdisciplinary thinking**

#### **All programmes**

Interdisciplinary thinking is one of the important aspects of all programme's objectives that aim to establish distinct educational benefits that are critical thinking, self-confidence, self-efficacy, problem-solving, creativity, and so on., based on the interdisciplinary learning.

#### **Business Informatics (BI)**

A variety of interdisciplinary courses are offered in the programme (some compulsory and some electives) to enlarge the learning experience of Business Informatics students, allowing for interdisciplinary thinking.

These courses include Introduction to Business Informatics (MIS 1102), Algorithms and Data Structures (COMP 1101), Management Information Systems (MIS 1101), Software Engineering (COMP 2105), Cost and Managerial accounting (ACCT 2102), Investment and Financing (FIN 2101), Object orientation and functional programming (COMP 2103), Modeling of Application Systems (COMP 2104), Database Systems (COMP 3101), Production (Marketing Management) (MGS3101), Design of Application Systems (COMP 3102),

Implementation and use of Application Systems (COMP 3103), Practical training of Programming (COMP 3104), Introduction to IT Security (COMP 4101).

#### **Industrial Engineering (IE)**

Numerous interdisciplinary courses are offered in the programme to enlarge the learning experience of Industrial Engineering students, allowing for interdisciplinary thinking. These courses include ACCT 1101 Accounting and Financial Statements, ACCT 2101 Cost Accounting, MATH 3101 Probability and Statistics, MGS 4101 International Production and Investment Management, MGS 2101 Ethics in Engineering.

#### **Computer Engineering (CE)**

A lot of interdisciplinary courses are offered in the Bachelor Computer Engineering programme (some compulsory and some electives) to enlarge the learning experience of students, allowing for interdisciplinary thinking. These courses include SPTC-B15 Operation Research, SPTC-BO6 Production Economics and management.

#### **Operations Management (OM)**

A variety of interdisciplinary courses are offered in the MBA programme (some compulsory and some electives) to enlarge the learning experience of MBA students allowing for interdisciplinary



thinking. These courses include MBA 8135 Corporation Finance, MBA 8025 Financial Statements Analysis, MBA 7025 Statistical Business Analysis, MBA 8040 Data Driven Decision-making, MBA 8165 Leadership and Organisational behavior.

### **Computer Information Systems (CIS)**

A variety of interdisciplinary courses are offered in the MBA programme (some compulsory and some electives) to enlarge the learning experience of MBA students, allowing for interdisciplinary thinking. These courses include CIS 8040 Fundamentals Database Management Systems, MBA 8025 Financial Statements Analysis, MBA 7025 Statistical Business Analysis, MBA 8040 Decision-making, CIS 8080 Information Systems Security and Privacy.

### **Ethical aspects**

#### **Business Informatics (BI)**

During the eight semesters, the coursework is organised within the ethical aspects in learning outcomes of different courses. For example, in Legal and Ethical Environment of Business course, the topics related to the identification legal and ethical problems in the business environment, effective communication about legal and ethical concepts and issues, recognising potential legal risks and ethical problems that managers face and how law can be used to minimise those risks, development of framework for analysing ethical issues in business using various models of ethics and justice, or in Introduction to IT Security course the topics related to Legal, Ethical, and Professional Issues in Information Security and so on. Also, the course Research Methodology for Business Informatics empowers students with the knowledge, skills, and research ethics they need to start a research project, make appropriate decisions regarding the strategies and approaches they select to address their research problems and give valid justifications for their choices.

#### **Industrial Engineering (IE)**

Industrial engineers, like all other professions, require integrity and honesty in their jobs. Codes of ethics enable them to be accountable for their actions. They act as guiding principles for determining what is right or wrong. Industrial engineers have a direct and vital impact on the quality of life for all people. Accordingly, the services provided by engineers require honesty, impartiality, fairness, and equity, and must be dedicated to the protection of public health, safety, and welfare. All industrial engineering graduates learn ethical aspects from these subjects: Ethics in Engineering (MGS 2101), Occupational health and safety (SPTC-B23), International Production and Investment Management (MGS 4101), Quality Engineering (MGS 4102).

#### **Computer Engineering (CE)**

During the eight semesters, the coursework is organised within the ethical aspects of learning outcomes of different courses. For example, in Ethics in Engineering course the topics related to the identification of ethical problems in computer engineering, effective communication about legal and ethical concepts and issues, and in Information Security course, the topics related to professional issues in data security and so on.

### **Operations Management (OM)**

Throughout the eight semesters, the curriculum focuses on integrating ethical considerations into the learning outcomes of various courses. For instance, in the Legal and Ethical Environment of Business course, students delve into topics such as identifying legal and ethical challenges in the business realm, effective communication regarding these concepts, recognising potential legal risks and ethical dilemmas faced by managers, and understanding how law can mitigate these risks. Similarly, in the Leadership and Organisational Behaviour course, students explore legal, ethical, and professional issues within organisations, while in the IB 8690 Global Operations Management course, ethical dilemmas in global business are thoroughly examined.

### **Computer Information Systems (CIS)**

Ethical principles are ideals that should support both teaching and studies. During the four semesters, the coursework is organised within the ethical aspects of learning outcomes of different courses. For example, in the Strategic Business Communication course the topics describe the influence of cultural, ethical, and technological context on spoken, written and nonverbal methods of communication. The course Leadership and Organisational Behavior explains to students how managers and organisations are responding to the problem of employee ethical dilemmas. The Corporate Finance course also analyses ethical issues in finance sector. The course Legal and Ethical Environment of Business course topics related to the identification legal and ethical problems in the business environment, effective communication about legal and ethical concepts and issues, recognising potential legal risks and ethical problems that managers face and how law can be used to minimize those risks, development of framework for analysing ethical issues in business using various models of ethics and justice.

### **Methods and scientific practice (Asterisk Criterion)**

#### **All programmes**

Methodological competencies and scientific practice are thoroughly trained. Students are equipped with the necessary skills for research-oriented work and for applying those skills in the respective vocational fields. The programmes create necessary environments where students are encouraged to express different opinions in different cases and improve their critical thinking skills as a result.

#### **Business Informatics (BI)**

As part of their studies, students are required to conduct different types of course assignments, for example, individual and group projects and assignments, presentations, discussions, case studies, teamwork, etc. This enables students to develop their ability to do scientific research, acquire presentation skills, and use scientific methods in the learning process. Bachelor Thesis is required to complete a bachelor's degree in business informatics. To enhance their scientific research qualifications, must complete the course MATH 4101 "Research Methodology for Business Informatics" which aims to advance their understanding of research, the methods of research, and how research findings can be used to improve the understanding of the environment and the development of suitable solutions.

### **Industrial Engineering (IE)**

Students are required to conduct different course assignments, for instance, individual and group projects and assignments, presentations, discussions, case studies, teamwork, which enable students to develop their ability to do scientific research, acquire presentation skills, and use scientific methods in the learning process.

### **Computer Engineering (CE)**

As part of their studies, Bachelor Computer Engineering students are required to conduct different types of course assignments, for example, individual and group projects and assignments, presentations, discussions, case studies, teamwork, enabling students to develop their ability to do scientific research, acquire presentation skills, and use scientific methods in the learning process. The Bachelor Computer Engineering programme creates necessary environments where students are encouraged to express different opinions in different cases and improve their critical thinking skills as a result.

### **Operations Management (OM)**

Research is one of the most important activities of the university academic staff. Conducting research at the university ensures continuous improvement by the application of up-to-date scientific findings, modern methods, and pedagogical technologies to the educational process.

As part of their studies, MBA students are required to conduct different course assignments, such as individual and group projects and assignments, presentations, discussions, case studies, teamwork. These all enable students to develop their ability to do scientific research, acquire presentation skills, and use scientific methods in the learning process. The MBA programme creates necessary environments where students are encouraged to express different opinions in different cases and improve their critical thinking skills as a result.

A master's thesis is required to complete a master's degree in OM. To enhance their scientific research qualifications, students must complete the course MBA 8643 "Business Research Methods" which aims to advance their understanding of research, the methods of research, and how research findings can be used to improve the understanding of the environment and the development of suitable solutions. The prerequisites for this course are MBA 7025 Statistical Business Analysis, MBA 8155 Operations Management.

### **Computer Information Systems (CIS)**

Students are equipped with the necessary skills for research-oriented work and for applying those skills in the respective vocational fields. As part of their studies, MBA CIS Programme students are required to conduct different types of course assignments, such as individual and group projects and assignments, presentations, discussions, case studies, teamwork.

These all enable students to develop their ability to do scientific research, acquire presentation skills, and use scientific methods in the learning process. The MBA programme creates necessary environments where students are encouraged to express different opinions in different cases and improve their critical thinking skills as a result. Research is one of the most important activities of the university academic staff. Conducting research at the university ensures continuous

improvement through the application of up-to-date scientific findings, modern methods, and pedagogical technologies to the educational process.

### **Examination and final thesis (Asterisk Criterion)**

#### **All programmes**

All exams, as they are defined for the courses, aim to ascertain the intended learning outcomes in accordance with the desired qualification level. They also examine the students' ability to deeply reflect on scientific problems and to apply scientific methods. Students are given feedback, which, if necessary, is linked to advice on the learning process. Exams are competence-oriented, which means that emphasis on problem-oriented questions are given.

Exams for each course are prepared in accordance with the course's content and learning objectives, and exams are designed to assess the students' ability to apply theoretical aspects covered in the coursework throughout the semester.

Exams are competence-oriented, and exam questions aim to put more emphasis on problem-oriented questions related to transfer skills and critical thinking.

The University takes cheating and plagiarism seriously, and disciplinary action will be taken against any student suspected of being involved in any sort of cheating and/or plagiarism. The disciplinary action takes the form of warnings or limited suspension. The plagiarism is checked by Turnitin.

Bachelor Thesis examines the students' ability to deeply reflect on scientific problems and to apply scientific methods. Students are given feedback, which, if necessary, is linked to advice on the learning process. The final theses/projects comply with the standards for international publications.

**Table 11: Bachelor thesis evaluation criteria**

	<b>Criteria</b>	<b>Explanation</b>	<b>Points (100)</b>
1.	<b>Relevance</b>	how the student addresses research questions or problem statement	10
2.	<b>Originality</b>	creativity of the work, new ideas, approaches, novelty, or solutions	<u>10</u>
3.	<b>Methodology</b>	research method, data collection tools, analysis, and interpretation	<u>10</u>
4.	<b>Data analysis</b>	simulations/modeling	<u>40</u>
5.	<b>Ethical considerations</b>	avoidance of plagiarism, proper citation, conformity with ethical standards in research	<u>10</u>
6.	<b>Presentation</b>	English language skills, answer to questions of the Commission, findings, critical thinking, contribution to the field, compliance with formatting	<u>20</u>

**Table 12: Master thesis evaluation criteria**

	Criteria	Explanation	Points (100)
1.	<b>Research questions</b>	The student can formulate a research question	10
2.	<b>Heuristics</b>	The student selects good and relevant sources. The student critically analyses the consulted sources	<u>20</u>
3.	<b>Methodology</b>	The student can select an appropriate methodology and apply it	<u>10</u>
4.	<b>Scientifically substantiated answer</b>	The student demonstrates problem-solving abilities in the execution of the thesis.	<u>50</u>
5.	<b>Writing and presentation skills</b>	The thesis is written in an academic style. The thesis is clearly structured and formally correct.	<u>10</u>

**Business Informatics (BI)**

Students of the BA Programmes study for a total of 15 weeks in a semester. During a semester, students have two exams: midterm and final exam. Midterm exams are held during the 7th or 8th week of the semester, and final exams are held after the 15th week of study.

Final Exam schedule is established by the programme for each course and announced at least one month before the start of the exam week. An open-book exam is applied in Business Informatics. It allows them to refer to the students notes and other course materials while they are taking the exam. Open-book exams are designed to test their ability to analyse, evaluate or synthesize knowledge rather than the ability to recall facts or information.

**Computer Engineering (CE)**

A wide variety of test formats are used during the exams. The final theses are evaluated based on previously published and coherently applied criteria, rules, and procedures. By working on their thesis, students improve their ability to do scientific work, which is very important in achieving the programme objectives.

**Operations Management (OM)**

An open-book exam is applied in OM. It allows you to refer to the students' notes and other course materials while they are taking the exam.

Open-book exams are designed to test their ability to analyse, evaluate or synthesize knowledge rather than the ability to recall facts or information. Exams for each course are prepared in accordance with the course's content and learning objectives, and exams are designed to assess the students' ability to apply theoretical aspects covered in the coursework throughout the semester. The final theses/projects are evaluated based on previously published and coherently applied criteria<sup>6</sup>, rules, and procedures.

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<sup>6</sup> [https://mba.edu.az/mba/uploads/yeni/2023\\_guideline\\_for\\_bachelor\\_diploma\\_thesis.pdf](https://mba.edu.az/mba/uploads/yeni/2023_guideline_for_bachelor_diploma_thesis.pdf);  
[https://mba.edu.az/mba/uploads/mba\\_thesis\\_docs/2021-2022\\_guideline\\_for\\_master\\_diploma\\_thesis\\_writing.pdf](https://mba.edu.az/mba/uploads/mba_thesis_docs/2021-2022_guideline_for_master_diploma_thesis_writing.pdf)

## **Computer Information Systems (CIS)**

Open-book exams are designed to test their ability to analyse, evaluate or synthesize knowledge, rather than the ability to recall facts or information.

The final theses are evaluated based on previously published and coherently applied criteria<sup>7</sup>, rules, and procedures (Turnitin). By working on their thesis, students improve their ability to do scientific work, which is very important in achieving the programme objectives.

### **Appraisal:**

The curriculum adequately reflects the qualification objectives of the study programmes. The contents of the courses are well-balanced, logically connected and oriented towards the intended learning outcomes. The areas of specialisation or optional electives enable students to acquire additional competencies and skills. The contents of the programme take into account the students' prior professional experience and refer to it. The panel members positively highlight that the programmes are well-founded, organised and structured.

The degree and programme name correspond to the contents of the curriculum and the programme objectives.

Theoretical questions are, where possible, explained by means of practical examples and in the view of the panel members good and interesting projects.

There is evidence that the programme qualifies for interdisciplinary thinking.

Ethical implications (for example, those of economical or juridical ways of thinking and acting) are appropriately communicated.

Students acquire methodological competencies and are enabled to do scientific work on the required level. The panel positively highlight the lecturers' motivation to integrate it in the lecturers.

All exams, as they are defined for the courses, are suited in format and content to ascertain the intended learning outcomes. The requirements are in accordance with the desired qualification level. The exams are characterised by a wide variety of test formats.

The final theses are evaluated based on previously published and coherently applied criteria, rules, and procedures.

The students prove, especially in their thesis, their ability to do scientific work and the achievement of the study programme's qualification objectives.

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<sup>7</sup> [https://mba.edu.az/mba/uploads/yeni/2023\\_guideline\\_for\\_bachelor\\_diploma\\_thesis.pdf](https://mba.edu.az/mba/uploads/yeni/2023_guideline_for_bachelor_diploma_thesis.pdf);  
[https://mba.edu.az/mba/uploads/mba\\_thesis\\_docs/2021-2022\\_guideline\\_for\\_master\\_diploma\\_thesis\\_writing.pdf](https://mba.edu.az/mba/uploads/mba_thesis_docs/2021-2022_guideline_for_master_diploma_thesis_writing.pdf)

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.1	Contents					
3.1.1*	Logic and conceptual coherence (Asterisk Criterion)			X		
3.1.2*	Rationale for degree and programme name (Asterisk Criterion)			X		
3.1.3*	Integration of theory and practice (Asterisk Criterion)			X		
3.1.4	Interdisciplinary thinking			X		
3.1.5	Ethical aspects			X		
3.1.6*	Methods and scientific practice (Asterisk Criterion)			X		
3.1.7*	Examination and final thesis (Asterisk Criterion)			X		

## 3.2 Structure

Projected study time	<p>BI - 4 years, 8 semesters          IE - 4 years, 8 semesters          CE - 4 years, 8 semesters          OM - 2 years, 4 semesters          CIS - 2 years, 4 semesters</p>
Number of credits (national credits and ECTS credits)	<p>BI - 242 ECTS credits          IE - 240 ECTS credits          CE - 241 ECTS credits          OM - 120 ECTS credits          CIS - 120 ECTS credits</p>
Workload per credit	<p>BI - approx. 30 hours per ECTS          total 7260 hrs          900-930 hours per semester          (30X31 ECTS; 30X30 ECTS)</p> <p>IE - 30 hours per ECTS credit          870-960 hours per semester</p> <p>CE - 30 hours per ECTS credit          870-960 hours per semester</p> <p>OM - approx.30 hours per ECTS credit          180-210 hours per course          840/960 hours per semester</p> <p>CIS - approx.30 hours per ECTS credit          180-210 hours per course          840/930 hours per semester (30hrs x 28 ECTS; 30hrs x 31 ECTS)</p>
Number of courses	<p>BI - 33 compulsory, 5 elective          IE - 35 compulsory, 6 elective          CE - 33 compulsory, 5 elective          OM - 16          CIS - 16</p>
Time required for processing the final thesis/project and awarded credits	<p>BI - not mentioned</p> <p>IE - The final thesis requires 12 ECTS credits which is equal to 12 x 30HRS = 360 hours</p> <p>CE - The final thesis requires 12 ECTS credits which is equal to 12 x 30HRS = 360 hours</p>



	OM - 630 hours-21 ECTS credits CIS - 630 hours – 21 ECTS points
Number of contact hours	BI - 180 (final theses require 12 ECTS) 12X15 hours= 180 hours IE - 7200 hours for eight semesters (30 HRS X 240 ECTS) CE - 7230 hours for eight semesters (30 HRS X 241 ECTS) OM - 3600 hours for 4 semesters CIS- 3600 hours for 4 semesters

### **All programmes**

The calculation of ECTS credits for in-class activities may involve class hours, midterm and final exams, quizzes, case studies, discussions, and presentations, depending on the course requirements. Out-of-class activities include the preparation of assignments/homework, case studies, term papers/projects, independent studies, and self-studying. There are fifteen weeks of classes, including one week for midterm exams and final exams are usually conducted after the fifteen weeks of classes.

Each semester consists of 15 weeks in total (15 teaching weeks and a week for final exams).

### **Business Informatics (BI)**

The BI consists of 242 ECTS credits, each semester is made up of approx. 30 ECTS credits, and each academic year is made up of approx. 60 ECTS credits. A student is required to complete 242 ECTS credits in order to obtain the Business Informatics degree. Some courses have prerequisites, and students are first required to take the prerequisite course before proceeding to the next dependent course.

The workload is divided equally among the semesters, 30 - 31 ECTS per semester.

### **Industrial Engineering (IE)**

Programme curriculum consists of 240 ECTS credits. All the courses are compulsory to attend. To get a diploma, students must pass all 240 ECTS courses, including elective courses (six elective courses, four ECTS credits on each). Each semester amounts to approximately 30 ECTS credits, and each year on 60 ECTS credits as well. The workload is divided equally among the semesters, 29-32 ECTS per semester.

### **Computer Engineering (CE)**

Programme curriculum consists of 241 ECTS credits. All the courses are compulsory to attend. To get a diploma, students must pass all 241 ECTS courses, including elective courses (5 elective courses, 4 or 5 or 6 ECTS credits on each). Each semester amounts to approximately 30 ECTS credits, and each year on 60 ECTS credits as well. The workload is divided equally among the semesters, 28-32 ECTS per semester.

### **Operations Management (OM)**

The MBA programme consists of 120 ECTS credits, 78 of which are compulsory courses and the remaining 21 ECTS credits are elective courses, and 21 ECTS credits are for Master thesis. Each semester is made up of approx. 30 ECTS credits, and each academic year is made up of approx. 60 ECTS credits. A student is required to complete 120 ECTS credits in order to obtain an MBA degree. Most of the required courses are 6 ECTS credits each, which equates to 3 lecture hours per week. All the elective courses are 7 ECTS credits. Each course is conducted once a week.

Some courses have prerequisites, and students are first required to take the prerequisite course before proceeding to the next dependent course. The workload is divided equally among the semesters, 28 - 31 ECTS credits per semester.

### **Computer Information Systems (CIS)**

The MBA programme consists of 120 ECTS credits, 78 of which are compulsory courses the remaining 21 ECTS credits are elective courses, and 21 ECTS are for Master thesis. Each semester is made up of approx. 30 ECTS credits, and each academic year is made up of approx. 60 ECTS credits. A student is required to complete 120 ECTS credits to obtain the MBA degree. Most of the required courses are 6 ECTS credits each which equates to 3 lecture hours per week. All the elective courses are seven ECTS credits. Each course is conducted once a week. Some courses have prerequisites, and students are first required to take the prerequisite course before proceeding to the next dependent course.

The workload is divided equally among the semesters, 27 - 32 ECTS credits per semester.

### **Study and exam regulation (Asterisk Criterion)**

#### **All programmes**

The assessment of student performance for each course is done by the course instructor. Student course performance is evaluated by using different assessment methods, which include mid-term exam, final exam, assignments, term papers, quizzes, and in-class activities. In the evaluation process students are given a mark which is out of 100 (an accumulation of mid-term exam mark, final exam mark, quiz mark, presentation/paper/assignment mark, etc.) and then at the end of the semester the cumulative average mark of the student is converted to a letter grade by the course instructor.

Letter grades are organised on a 4.00-point grading scale. The letter grades and their equivalent grade point are given below:

**Table 13: Letter Grades**

Percentage	Course Grade	Coefficient
90-100	AA	4.00
85-89	BA	3.50
80-84	BB	3.00
75-79	CB	2.50
70-74	CC	2.00
65-69	DC	1.50
60-64	DD	1.00
50-59	FD	0.50
49 and below	FF	0.00

For the courses attended, students are granted success grades, i.e., one of the letter grades above for each course they attend. Passing grades range from AA to FD; and FF is a failing grade. Grades AA, BA, BB, CB, and CC are varying levels of unconditional “Pass” status for the successful score. Grades DC, DD and FD indicate the “Conditional Pass” status, where the student with these grades is regarded as successful given that the Cumulative Grade Point Average (CGPA) is equal to or above 2.00. The grade FF indicates “Fail”, and the student is required to repeat the course in the proceeding semester.

### **Feasibility of study workload (Asterisk Criterion)**

#### **All programmes**

All methods of assessment are specified in the course syllabi, which are distributed or made available to all students at the beginning of each semester. At the end of each semester, students are also requested to fill out a course and instructor evaluation questionnaire/survey.

The feedback received from students provides information to assess whether students are able to manage the study workload and provides grounds to make necessary changes/improvements to courses or the curriculum. There is also a suggestion box located outside of the programme student administration office. Students have the opportunity to express their concerns, if any, in regard to courses, curriculum, or any other issues. Changes and improvements in the curriculum are made based on the evaluation results.

## **Equality of opportunity**

### **All programmes**

The ASOIU serves an internationally diverse student body. It is very sensitive towards issues related to discrimination and works towards providing an environment that encourages a dynamic multicultural educational environment. The University ensures gender equality and non-discrimination in the relationship between faculty and students. Students with disabilities, as well as students in special hard family conditions with single or ill parents or students with problems, are provided with necessary assistance throughout the programme and examinations.

### **Appraisal:**

The programme structure supports the smooth implementation of the curriculum and helps students to reach the defined learning outcomes. The programme consists of courses and assigns credits per course on the basis of the necessary student workload. Practical components, if existent, are designed and integrated in such a way that credits can be acquired. The course descriptions provide detailed descriptions of intended learning outcomes and the information defined in the ECTS Users' Guide. The panel suggests expanding the number of elective courses and highlights the positive aspect of the good structure.

There are legally binding study and exam regulations which contain all necessary rules and procedures and take into account, where applicable, national requirements. The study programme is designed so that students can study for a certain time at other HEIs or do internships without any extension of their overall study time. The recognition of degrees and periods of study at other HEIs is regulated in accordance with the Lisbon Recognition Convention; the recognition of periods of practical work is also clearly defined. The final grade is supplied with an ECTS grading table.

The feasibility of the study programme's workload is ensured by a suitable curriculum design, by a plausible calculation of workload, by an adequate number and frequency of examinations, by appropriate support services as well as academic and general student counselling.

When reviewing the workload, the HEI also takes into account evaluation findings, including student feedback and the programme's success rate.

The HEI ensures gender equality and non-discrimination. Students with disabilities are provided with affirmative actions concerning time and formal standards/requirements throughout the programme and examinations. Students in special circumstances, such as single parents, foreign students, students with a migration background and/or from so-called non-academic backgrounds, are particularly assisted.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.2	Structure					
3.2.1*	Modular structure of the study programme (Asterisk Criterion)			X		
3.2.2*	Study and exam regulations (Asterisk Criterion)			X		
3.2.3*	Feasibility of study workload (Asterisk Criterion)			X		
3.2.4	Equality of opportunity			X		

### 3.3 Didactical concept

#### **Logic and plausibility of the didactical concept (Asterisk Criterion)**

##### **Business Informatics (BI), OM and Computer Information Systems (CIS)**

The objective of the programmes is to provide graduate students with a high-quality education in business management that will enable the graduates to earn management positions in state and non-state organisations, businesses, and other institutions. For this purpose, the programmes aim to provide the necessary knowledge, skills, and abilities needed to become an effective entrepreneur and manager.

The curricula have been designed to introduce students to the major functional areas of business management, marketing, production/operation management, finance, accounting, legal environment, and organisational behaviour. The didactical concept of the study programmes is oriented towards the programme objectives. Such methods include in-class discussions, case studies, term projects (individual and group), brainstorming or presentations. Each method is individually oriented towards developing the student's knowledge and understanding. For instance, the case-study/exercises methods helps to improve the student's critical thinking and decision-making; in-class presentations enable student's to develop their abilities in the preparation and delivery of course-related topics; brain-storming enables students to develop their ability in the identification of innovative solutions to business-related problems/issues; group projects teach students how to work as part of team and teaches them how to distribute tasks and responsibilities in an equitable manner; class discussions help instructors measure the students level of understanding of topics discussed.

##### **Industrial Engineering (IE) and Computer Engineering (CE)**

The objectives of the programmes are to provide graduate students with a high-quality education in business engineering, management, and economy, that will enable the graduates to earn management and engineering positions in state and non-state organisations, business and other institutions. For these purposes the programme aims to provide the necessary knowledge, skills, and abilities needed to become an effective engineer, entrepreneur, and manager. The curriculum has been designed to introduce students to the functional areas of major business engineering, such as industrial engineering, production and operations management, environmental management.

Faculty members are encouraged to use a variety of teaching methods and encourage interactive learning to promote learning and to accomplish the objective outcomes of the programme. Such methods, as mentioned before, include in-class discussions, case studies, term projects (individual and group), brainstorming, presentations. Each method is individually oriented towards developing the student's knowledge and understanding. For instance, the case-study/exercise methods helps to improve the student's critical thinking and decision-making; in-class presentations enable student's to develop their abilities in the preparation and delivery of course-related topics; brain-storming enables students to develop their ability in the identification of innovative solutions to business engineering related problems/issues; group projects teach students how to work as

part of team and teaches them how to distribute tasks and responsibilities in an equitable manner; class discussions help instructors measure the students level of understanding of topics discussed.

### **Course materials (Asterisk Criterion)**

#### **All programmes**

The majority of course instructors who teach in the MBA programme use international editions of European or American textbooks. All courses have a main textbook, however, additional references and/or study materials are also recommended by some instructors. The textbooks are available in the Programme library. The case studies and similar exercises conducted in class are also available in the textbooks or other sources which students are directed towards or are provided with in class by the course instructors.

#### **Guest lecturers**

#### **All programmes**

All programmes give importance to the invitation of guest speakers/lecturers, especially from the industry, in order to give students a better understanding of the application of theory to practice. Invited lecturers/guest speakers are listed below:

Guest lecturers were invited to the following courses:

- Production/Operations Management
- Marketing Management
- Organisational Behavior
- Managerial Accounting and Control
- Decision Science
- Business Applications of SoftComputing
- International Business Environment
- Policy and Strategy International Marketplace
- Managerial Economics
- Business English
- Business Communication
- International Relations & Globalization
- Law & Ethics Environment of Business
- Legal & Ethics Environment of Business
- Legal International Relations & Globalization
- Business Communication and Professional development
- Marketing Intelligence
- Strategic Management
- Relationship in International Marketing
- Consumer Behavior
- Behavioural Science
- German
- Leadership and Organisational Behavior
- Buyer Behavior

- Digital Innovation
- Business Telecommunication and Networks
- Digital signal processing
- Control engineering
- Marketing analysis with big data
- Applied machine learning
- Computer mathematics
- Managing IT Projects
- Management of Information Systems

## **Lecturing tutors**

### **All programmes**

Academic advisers /tutors services are required to assist students studying with the credit system in higher education institutions. Tutors are mainly masters and doctorate students. They are appointed with the order of the Rector. Tutors work with students starting from the first year until graduation.

Activities carried out by tutors include:

- act as a key point of contact for students with regular meetings throughout the student's programme;
- build a relationship to help students become part of the learning and teaching community;
- provide academic guidance based on the activities plan of the university;
- help students think beyond the course and encourage them to actively participate in university life;
- prepare time schedules for lectures, exam schedules, distribute auditoriums;
- help instructors when conducting tutorials;
- prepare students' personal folders;
- encourage students to actively participate in the work of students' scientific society to improve their creativity and independent researching skills and provide necessary advice;
- offer personal support on a range of topics that might include academic difficulty, emotional and social problems, illness or a traumatic life event;
- provide support for international students;
- assisting in the arrangement of guest speaker;
- collaborate with students, parents, instructors, administrators to determine student needs and problems and assist them accordingly;
- implementing other tasks assigned by the BA Programmes Management.

## **Appraisal:**

The didactical concept of the study programme is described, plausible, and oriented towards the programmes' objectives. It allows for the application of different teaching and learning methods, such as, for instance, case studies or practical projects. Students are encouraged to take an active role in creating the learning process.



The accompanying course materials are oriented towards the intended learning outcomes and correspond to the required qualification level. They are up to date and digitally accessible for the students. They are user-friendly and encourage students to engage in further independent studies.

Guest lecturers are invited and contribute to the students' qualification process with their special experience, either from professional practice or scientific work, but also, for example, from culture and politics. Although the panel members appreciate the number of guest lecturers, they suggest inviting more international guest lecturers.

Lecturing tutors support the students in the learning process and help them develop competencies and skills.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.3 Didactical concept					
3.3.1* Logic and plausibility of the didactical concept (Asterisk Criterion)			X		
3.3.2* Course materials (Asterisk Criterion)			X		
3.3.3 Guest lecturers			X		
3.3.4 Lecturing tutors			X		

### 3.4 International outlook

#### **International contents and intercultural aspects (Asterisk Criterion)**

##### **All programmes**

Internationality is an important aspect of the programmes' curricula. The programmes function in an internationally diverse environment, which provides an opportunity to students to study in a multicultural environment and acquire necessary skills. According to the University, the curricula also emphasise courses with an international focus and international content (compulsory and elective courses), as set out in the objectives.

#### **Internationality of the student body**

##### **All programmes**

A diverse range of students study at ASOIU. According to the University, thousands of highly qualified personnel with higher education have been prepared for foreign countries in the past years at ASOIU. Here, along with students from Turkey, Pakistan, India, Afghanistan, Jordan, Iraq, Syria, Russia, China, Bangladesh, Israel, Sudan, Morocco, Palestine, Algeria, Egypt, Turkmenistan, Georgia, Sri Lanka, Ukraine, Uzbekistan, Nepal, Mongolia, citizens of Namibia, Kazakhstan, Yemen, etc. have received higher education.

**Table 14: Number of international students**

Year	MBA Operations Management	MBA CIS	BSc Business Informatics	BSc Industrial Engineering	BSc Computer Engineering	Total
2017/2018	1	1	-	1	-	3
2018/2019	1	1	2	4	-	8
2019/2020	1	2	1	1	1	6
2020/2021	2	1	1	-	-	4
2021/2022	1	1	4	2	-	8
2022/2023	3	0	4	1	1	9
2023/2024	2	2	-	-	-	4

### **Internationality of faculty**

#### **All programmes**

The majority of the faculty members are from Azerbaijan, and some of them graduated from famous universities of the world, for instance, in the USA, Great Britain, Russia, Norway:

- Operations Management: 15 teachers out of 24 graduated abroad.
- Computer Information Systems: 16 teachers out of 25 graduated abroad.
- Industrial Engineering: 25 teachers out of 41 graduated abroad.
- Business Informatics: 27 teachers out of 43 graduated abroad.
- Computer Engineering: 23 teachers out of 42 graduated abroad.

Some members of staff attend international conferences held in different countries to enhance their qualifications and publish academic articles in internationally recognised journals. There are also some foreign teachers with extensive international academic and professional experience who are sometimes invited to deliver lectures in the programmes.

### **Foreign language contents**

#### **All programmes**

The language of instruction of the programmes is English. Lecturers/instructors deliver lectures in English and recommend the course reading materials in English as well.

Harvard Kennedy School added Azerbaijan State Oil and Industry University to their list of institutions where English is the medium of instruction. This is a significant recognition for the university that proves that the programmes taught meet international quality standards where English is the medium of instruction. This recognition opens global opportunities for the Azerbaijan State Oil and Industry University and its students can significantly benefit from it. It can attract international students and faculty and improve academic collaborations, exchanges, and access to resources available within Harvard's network.

## Appraisal:

International contents are an integral part of the curricula. Students are thus prepared for the challenges in an international working environment. Through practical examples, students are enabled to act in an intercultural environment. The panel members note that the international diversity among students holds great potential for further development. Considering the international orientation of the HEI, the panel **recommends** that the HEI should create a strategic plan outlining how the proportion of foreign students can be increased.

The international composition of the faculty (teachers from different countries; teachers with international academic and professional experience) promotes the acquisition of international competencies and skills. The measures taken are goal-oriented. From the panel members' perspective, increasing the international diversity of the faculty is crucial. They **recommend** that the HEI should take measures to enhance the international composition of the faculty. Examples include promoting exchange programmes and increasing participation in international conferences.

The proportion of foreign language courses and required foreign language materials corresponds with the qualification objectives of the study programme.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.4	Internationality				
3.4.1*	International contents and intercultural aspects (Asterisk Criterion)		X		
3.4.2	Internationality of the student body		X		
3.4.3	Internationality of faculty		X		
3.4.4	Foreign language contents		X		

## 3.5 Multidisciplinary competences and skills (Asterisk Criterion)

### **Business Informatics (BI)**

Students acquire leadership, communication, and public speaking skills, as well as cooperation and conflict-handling skills from the courses in the **BI** programme. Additionally, students develop these skills in the in-class presentations, discussions, brain-storming, and group-work conducted as part of the courses. The acquisition of leadership/public-speaking skills as well as conflict-handling skills is ensured through the courses Introduction to economics (ECON1101), Mathematics for Business Informatics (MATH 1102), Probability and Statistical Methods (MATH 1103), Design Internship (COMP 2101), Financial accounting (ACCT 2101), Software Engineering (COMP 2105), Microeconomics for Business (ECON 2105), Object orientation and functional programming (COMP 2103), Modeling of Application Systems (COMP 2104) etc. Additionally, students develop these skills in the in-class presentations, discussions, brainstorming, and teamwork conducted as part of the courses.

### **Industrial Engineering (IE) and Computer Engineering (CE)**

Students acquire engineering, management, leadership, communication, and public speaking skills, as well as cooperation and conflict handling from the courses at ZU Programme<sup>8</sup>. Additionally, students develop these skills in the in-class presentations, discussions, brainstorming, and group work conducted as part of the courses. Leadership, communication, and public speaking skills are acquired through courses such as Technical/Business English, which provide business communication skills and /or Ethics in Engineering.

### **Operations Management (OM)**

The acquisition of leadership/public-speaking skills as well as conflict-handling skills is ensured through the courses MBA 8165 Leadership and Organisational Behavior; MBA 8000 Managing the Global Economy; MBA 8030 Legal Environment: Ethics and Corporate Governance; MBA 8820 Global Competitive Strategy; communication skills through MBA 8015 Strategic Business Communication. Additionally, students develop these skills in the in-class presentations, discussions, brainstorming, and teamwork conducted as part of the courses.

### **Computer Information Systems (CIS)**

The acquisition of leadership/public-speaking skills as well as conflict-handling skills is ensured through the courses MBA 8040 Decision making; MBA 8155 Operations Management; MGS 8730 Project Management, MBA 8165 Leadership and Organisational Behavior; MBA 8025 Financial Statements Analysis; MBA 8000 Managing the Global Economy; MBA 8030 Legal Environment: Ethics and Corporate Governance; MBA 8820 Global Competitive Strategy; communication skills through MBA 8015 Strategic Business Communication. Additionally, students develop these skills in the in-class presentations, discussions, brainstorming, and team-work conducted as part of the courses.

## Appraisal:

The students acquire communication and public-speaking skills as well as cooperation and conflict-handling skills in accordance with the course descriptions. This is supported by suitable didactical and methodological measures.

The acquisition of further multidisciplinary competencies, such as leadership skills and broad contextual knowledge, is ensured.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.5* Multidisciplinary competences and skills (Asterisk Criterion)			X		

<sup>8</sup> The partnership programme “Preparation of Bachelors with New Technologies” was established in 2001 between two educational institutions – Siegen University of Germany and Azerbaijan State Oil Academy (now Azerbaijan State Oil and Industry University). The programme served the aim of developing a Bachelor of Emerging Technologies. Since then, the programmes prepared based on the curricula of Siegen University have been called ZU Programs.

### 3.6 Skills for employment / Employability (Asterisk Criterion)

#### **Business Informatics (BI), Operations Management (OM) and Computer Information Systems (CIS)**

The objective of the programmes is to educate future managers and entrepreneurs by imparting major functional business skills to manage any business activity. The programmes aim to provide the knowledge, skills, and abilities needed to become an effective entrepreneur and manager in a variety of organisational settings, both national and international. The curricula have been designed to introduce students to the major functional areas of business, marketing management, operations management, corporate finance, financial statements, the legal environment of business, and organisational behaviour.

The possession of these major business functional areas improves the employability of students. The language of instruction is English, which also improves students' employability. The internationality of the programme provides students with the knowledge to perform in national as well as international organisational settings, thus also improving employability.

#### **Industrial Engineering (IE)**

The objective of the programme is to produce graduates who will have successful careers as industrial engineers, especially in the fields of logistics and supply chain engineering, as well as quality and maintenance engineering, think independently and communicate effectively as team members and team leaders, practice engineering considering global, ethical and social factors, recognise and understand professional and ethical responsibility as well as engage in continuing education and development in their professional field.

The provision of students with high-quality education in both technical and business management fields, the strong link between theory and practice, and the international content of the curriculum improve the employability of the programme students. The language of instruction is English, which also improves students' employability. The internationality of the programme provides students with the knowledge to perform in national as well as international organisational settings, thus also improving employability.

#### **Computer Engineering (CE)**

The objectives of the programme are to produce graduates who will have successful careers as computer engineers as team members and team leaders, practice engineering considering global, ethical and social factors, recognise and understand professional and ethical responsibility, as well as engage in continuing education and development in their professional field.

The provision of students with high-quality education in both technical and business management fields, the strong link between theory and practice, and the international content of the curriculum improve the employability of the programme students. The language of instruction, English, also improves students' employability. The internationality of the programme provides students with the knowledge to perform in national as well as international organisational settings, thus also improving employability.

## Appraisal:

The promotion of employability – for instance, through the integration of theory and practice and through the promotion of multidisciplinary competencies and skills as well as international content – runs as a common thread of the study programmes through all their courses.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.6* Skills for employment / Employability (Asterisk Criterion)			X		

## 4. Academic environment and framework conditions

### 4.1 Faculty

#### Structure and quality of faculty in relation to curricular requirements (Asterisk Criterion)

##### All programmes

The programme consists of both full-time and part-time staff members with diverse backgrounds and experience. Full-time staff members are all required to actively participate in the development, design, and improvement of the curriculum. Part-time staff members are representatives of the private and public sector with extensive practical experience.

To further qualify university teachers, Azerbaijan State Oil and Industry University implements the following measures:

- The university offers training programmes for teachers to improve their subject knowledge, pedagogical skills, and proficiency in English. For this purpose, faculty members are regularly sent abroad to different universities that ASOIU has collaborated, through exchange programmes, research projects, conferences, and workshops to improve their qualifications, personal development, and cultural experiences. The university arranges English language proficiency courses for teachers with the British Council in Azerbaijan.
- The university conducts regular workshops and seminars focusing on teaching and learning to help teachers stay updated with the latest educational trends, technologies, and best practices. These workshops can also provide opportunities for teachers to share experiences and learn from each other.
- The university provides support to teachers for further education, such as PhD degrees or certifications in education, to improve their qualifications and expertise in their respective fields.
- The university encourages faculty to engage in research activities and motivates them by making additional payments to publish scholarly articles and books to contribute to their professional growth and enhance the university's academic reputation.
- About 30-35 were sent to Georgia State University.

By implementing these measures, Azerbaijan State Oil and Industry University aims to ensure that its teachers are continuously improving their qualifications, enhancing their teaching effectiveness, and contributing to the overall academic excellence of the institution.

## **Business Informatics (BI)**

**Table 15: Faculty Members - BI**

	<b>Academic Qualification</b>	<b>Faculty Employment Status</b>	<b>Teaching Hours /Weekly</b>	<b>Teaching Since</b>
1.	Prof. Dr	Full-time	4	1964
2.	Prof. Dr	Part-Time	12	1999
3.	Prof. Dr	Full-time	6	1992
4.	Prof. Dr.	Full-time	3	1976
5.	Assoc. Prof. PhD	Full-time	15	1975
6.	Assoc. Prof. PhD	Full-time	9	1982
7.	Assoc. Prof. PhD	Full-Time	9	1996
8.	Assoc. Prof. PhD	Full-Time	9	2001
9.	Assoc. Prof PhD	Full-Time	9	1996
10.	Assoc. Prof. PhD	Full-Time	3	1981
11.	Assoc. Prof. PhD	Full-Time	4	2003
12.	Assoc. Prof. PhD	Part-time	3	2006
13.	Assoc. Prof. PhD	Full-Time	3	2017
14.	Assoc. Prof. PhD	Full-Time	3	1992
15.	Assoc. Prof. PhD	Full-Time	6	2017
16.	PhD	Full-time	3	2014
17.	PhD	Full-time	15	2007
18.	PhD	Part-Time	6	2009
19.	PhD	Part-time	9	2011
20.	PhD	Part-time	3	2014
21.	PhD	Part-Time	6	2001
22.	PhD	Part-Time	3	2015
23.	PhD	Part-Time	3	2015
24.	PhD	Part-Time	3	2019
25.	PhD	Part-Time	3	2017
26.	PhD	Full-Time	9	2008
27.	PhD	Full-Time	6	2018
28.	PhD	Part-Time	3	2014
29.	PhD	Part-Time	9	2022
30.	PhD	Full-Time	3	2021
31.	PhD	Full-Time	3	2021
32.	PhD	Part-Time	3	2016
33.	PhD	Part-Time	3	2021
34.	PhD	Full-Time	6	
35.	MBA	Full-Time	9	2007
36.	MBA	Full-Time	9	2020
37.	MSc	Part-Time	6	2020
38.	MSc	Part-Time	3	2015
39.	MSc	Part-Time	6	2012
40.	MSc	Part-Time	6	2019
41.	MSc	Full-Time	3	2020
42.	Senior teacher	Full-Time	4	1983



## Industrial Engineering (IE)

Table 16: Faculty Members - IE

	Academic Qualification	Faculty Employment Status	Teaching Hours /Weekly	Teaching Since
1.	Prof.Dr.	Full-time	3	1964
2.	Prof.	Full-time	3	1996
3.	Prof.	Full-time	3	1991
4.	Prof.	Part-time	3	1999
5.	Prof PhD	Full-time	3	1976
6.	A/Prof	Full-time	4	1986
7.	A/Prof	Full-time	4	2005
8.	A/Prof	Full-time	9	1990
9.	A/Prof	Full-time	3	2011
10.	A/Prof	Full-time	4	1986
11.	A/Prof	Full-time	6	2000
12.	A/Prof	Full-time	4	1996
13.	A/Prof	Part-time	3	2005
14.	A/Prof	Part-time	3	1982
15.	PhD	Full-time	3	2017
16.	PhD	Full-time	3	2018
17.	PhD*	Part-time	3	2014
18.	PhD*	Part-time	9	2019
19.	PhD*	Part-time	4	2020
20.	PhD*	Full-time	3	2008
21.	PhD*	Full-time	3	2000
22.	PhD*	Full-time	3	2017
23.	PhD*	Part-time	3	2022
24.	PhD*	Part-time	3	2014
25.	PhD*	Part-time	3	2021
26.	MBA	Full-time	3	2007
27.	M.Sc	Full-time	3	2022
28.	M.Sc	Full-time	3	1987
29.	M.Sc	Part-time	3	2018
30.	M.Sc	Part-time	3	2020
31.	M.Sc	Part-time	3	2018

### **Computer Engineering (CE)**

The courses are taught by the professors of Azerbaijan State Oil and Industry University, who have received appropriate qualifications and are specialists working in various fields of local business. The majority of course/module instructors that teach at the programme use international editions of American and European textbooks. The staff is mainly trained abroad.

**Table 17: Faculty members - CE**

	<b>Academic Qualification</b>	<b>Faculty Employment Status</b>	<b>Teaching Hours /Weekly</b>	<b>Teaching Since</b>
1.	Prof.	Full-time	3	2009
2.	Prof.	Full-Time	3	2009
3.	Prof.	Part-Time	3	2020
4.	A/Prof.	Full-time	3	2009
5.	A/Prof.	Full-Time	3	2009
6.	A/Prof	Part-Time	3	2017
7.	A/Prof.	Full-Time	6	2009
8.	A/Prof.	Full-Time	3	2018
9.	A/Prof.	Full-Time	3	2009
10.	A/Prof.	Full-Time	3	2022
11.	A/Prof.	Full-Time	3	2018
12.	A/Prof.	Full-Time	3	2018
13.	A/Prof.	Full-Time	3	2018
14.	PhD	Part-time	3	2018
15.	PhD	Full-Time	7	2018
16.	PhD	Full-Time	3	2022
17.	PhD	Full-Time	4	2021
18.	PhD	Full-Time	3	2018
19.	PhDc	Part-Time	3	2020
20.	PhDc	Full-Time	3	2018
21.	PhDc	Full-Time	3	2019
22.	PhDc	Full-Time	3	2017
23.	PhDc	Full-Time	3	2021
24.	PhDc	Full-Time	3	2018
25.	MSc	Part-Time	3	2019
26.	MSc	Part-Time	3	2022
27.	MSc	Part-Time	3	2021
28.	MSc	Part-Time	3	2019
29.	MSc	Part-Time	3	2022
30.	MSc	Part-Time	3	2019
31.	MSc	Part-Time	3	2023

## **Operations Management (OM)**

**Table 18: Faculty Members - OM**

	Academic Qualification	Faculty Employment Status	Teaching Hours /Weekly	Teaching Since
1.	Prof. Dr.	Full-Time	9	1964
2.	Prof. Dr	Part-Time	12	1999
3.	Prof. Dr	Full-time	9	1992
4.	Assoc. Prof. PhD	Full-time	15	1975
5.	Assoc. Prof. PhD	Part-Time	3	2004
6.	Assoc. Prof. PhD	Full-Time	3	1981
7.	Assoc. Prof. PhD	Full-Time	18	1992
8.	Assoc. Prof. PhD	Full-Time	9	1996
9.	Assoc. Prof. PhD	Full-Time	9	2001
10.	Assoc. Prof PhD	Full-Time	9	1996
11.	PhD	Full- time	15	2007
12.	PhD	Part-Time	9	2006
13.	PhD	Part-time	3	2014
14.	PhD	Part-Time	3	2002
15.	MBA*	Part-Time	3	2008
16.	MBA	Full-Time	3	2007
17.	MBA*	Part-time	3	2005
18.	MSc*	Part-time	6	2014
19.	MSc*	Part-time	3	2001
20.	MSc	Part-Time	3	2014
21.	MBA	Part-time	3	2010

## **Computer Information Systems (CIS)**

The programme comprises both full-time and part-time staff members with diverse backgrounds and expertise. Full-time staff are mandated to actively engage in curriculum development, design, and enhancement. Part-time staff members represent the private and public sectors, bringing extensive practical experience to the programme.

**Table 19: Faculty Members - CIS**

No	Academic Qualification	Faculty Employment Status	Teaching Hours /Weekly	Teaching Since
1.	Prof. Dr.	Full-Time	3	1964
2.	Prof. Dr.	Full- time	3	1976
3.	Prof. Dr	Part-Time	3	1999
4.	Prof. Dr	Full-time	3	1992
5.	Assoc. Prof. PhD	Full-time	6	1958
6.	Assoc. Prof. PhD	Full-time	3	1982
7.	Assoc. Prof. PhD	Full-time	3	1975
8.	Assoc. Prof. PhD	Part-Time	3	2004
9.	Assoc. Prof. PhD	Full-Time	3	1981

10.	Assoc. Prof. PhD	Full-Time	9	1992
11.	Assoc. Prof. PhD	Full-Time	3	1996
12.	Assoc. Prof. PhD	Full-Time	6	2001
13.	Assoc. Prof PhD	Full-Time	6	1996
14.	Assoc. Prof PhD	Full-Time	3	2007
15.	Assoc. Prof PhD	Part-time	3	1977
16.	Assoc. Prof PhD	Full-time	3	1986
17.	PhD	Full- time	6	2007
18.	PhD	Part-Time	9	2006
19.	PhD	Part-time	3	2014
20.	PhD	Part-Time	3	2002
21.	PhD	Full-time	3	1981
22.	PhD*	Part-time	3	2010
23.	PhD*	Part-time	3	2005
24.	MBA	Full-Time	3	2007
25.	MSc*	Part-time	3	2013
26.	MSc	Part-Time	3	2014

### **Academic qualification of faculty (Asterisk Criterion)**

#### **Business Informatics (BI), Computer Engineering (CE), Operations Management (OM), Computer Information Systems (CIS)**

The tables above show that most of the faculty members have a PhD degree, and some of them have PhD studies in progress. While employing faculty members, the programmes give an advantage to academic qualification of the lecturers. Some part-time faculty members hold master's degrees; however, their contribution to the programmes is very important due to their industrial experience.

#### **Industrial Engineering (IE)**

About 80 % of the programme's staff have a PhD degree. One of the important criteria in staff recruitment and employment process is lecturer's academic qualification. The rest of the staff members are master's degree holders but their contribution to the teaching process on the programme is very important, as a rule, because of their industrial experience.

### **Pedagogical/didactical qualification of faculty (Asterisk Criterion)**

#### **All programmes**

As can be seen from the tables above (see chapter Structure and quality of faculty in relation to Curricular Requirements), the full-time faculty members possess several years of teaching experience.

## **Practical business experience of faculty**

### **Business Informatics (BI), Computer Engineering (CE), Operations Management (OM) and Computer Information Systems (CIS)**

The programmes are designed to position theory into practice. Therefore, the faculty members include full-time and part-time members from the industry. This provides the students with the advantage of experiencing the application of theory to practice because these part-time instructors bring with them their experience of business in the real world.

### **Industrial Engineering (IE)**

One of the major goals of the programme is to give students a set of practical knowledge applicable to industrial engineering fields. To achieve the goal the programme uses a practice of full-time and part-time lecturers' service. As part-time staff members work in various industry fields, their day-to-day activity is too close to practice, so they are the first providers of practical knowledge and experience to students.

## **Internal cooperation (Asterisk Criterion)**

### **All programmes**

Faculty members cooperate with each other when changes may be necessary in the curriculum. Also, members of staff conduct scientific research and write academic papers together. Furthermore, the organising of academic events such as conferences and the invitation of guest speakers are done in cooperation.

## **Student support by the faculty (Asterisk Criterion)**

### **All programmes**

Academic advisers' (tutors) staff units are organised in the programmes. The number of tutors is determined by the number of students (1 tutor for 100 students). As a rule, tutors serve all the students from the first year till the graduation year. Tutors have master's degrees and experience in higher education. Tutors are appointed by the order of the Rector based on the Programme Director's reference.

Students are assigned student advisors from the faculty members of staff. Student advisors are responsible for guiding students in their course selection and registration process and providing academic support when students require it. Due to student familiarity, student advisors also provide guidance in regard to career planning when students request it. Activities carried out by tutors include:

- act as a key point of contact for students with regular meetings throughout the student's programme;
- build a relationship to help students become part of the learning and teaching community;
- provide academic guidance based on the activities plan of the university;

- help students think beyond the course and encourage them to actively participate in university life;
- prepare time schedules for lectures, exam schedules, distribute auditoriums;
- help instructors when conducting tutorials;
- prepare students' personal folders;
- encourage students to actively participate in the work of students' scientific society to improve their creativity and independently researching skills and provide necessary advice;
- offer personal support on a range of topics that might include academic difficulty, emotional and social problems, illness or a traumatic life event;
- provide support for international students;
- Assisting in the arrangement of guest speaker
- collaborate with students, parents, instructors, administrators to determine student needs and problems and assist them accordingly;
- implementing other tasks assigned by the BA Programmes Management.

## Appraisal:

The structure and number of the faculty correspond to the programmes' requirements and ensure that the students reach the intended qualification objectives. The faculty's composition, consisting of full-time and part-time lecturers, guarantees that both the academic standards and the requirements of professional practice are fully satisfied.

The academic qualification of the faculty corresponds to the requirements and objectives of the study programme. The HEI verifies the qualifications of the faculty members by means of an established procedure. Specific measures for the further qualification of the faculty members are implemented.

The pedagogical and didactical qualification of the faculty correspond to the requirements and objectives of the study programme. The panel members positively highlight that the academic staff is very motivated and uses sound and creative didactical methods. The HEI verifies the qualifications of the faculty members by means of an established procedure. The HEI ensures that assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field. Specific measures for the further qualification of the faculty members are implemented.

The practical business experience of the faculty corresponds to the requirement of the programme to integrate theory and practice. This is supported by many teachers from the professional world.

The faculty members cooperate with each other for the purpose of tuning the courses towards the overall qualification objectives. Meetings of all those teaching in the programme take place regularly.

Student support is an integral part of the services provided by the faculty. It is offered on a regular basis and serves to help students study successfully. The faculty members are available for the students outside the specified office hours as well. The students are "fully content" with the

support they receive. The students and tutors have a very positive attitude and are obviously happy. The panel notes that the lecturers really make an effort.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.1	Faculty					
4.1.1*	Structure and quantity of faculty in relation to curricular requirements (Asterisk Criterion)			X		
4.1.2*	Academic qualification of faculty (Asterisk Criterion)			X		
4.1.3*	Pedagogical / didactical qualification of faculty (Asterisk Criterion)			X		
4.1.4	Practical business experience of faculty			X		
4.1.5*	Internal cooperation (Asterisk Criterion)			X		
4.1.6*	Student support by the faculty (Asterisk Criterion)		X			
4.1.7(*)	Student support in distance learning (only relevant and an Asterisk Criterion for blended-learning/distance learning programmes)					X

## 4.2 Programme management

### Programme Director (Asterisk Criterion)

#### All programmes

The programmes are managed by the Programme Director. The Programme Director coordinates the activities of everyone involved in the programme and ensures that the programme runs smoothly. More specifically, the director has the responsibility of:

- Responsible for training quality, organisation of educational, scientific, financial and economic activities and budget execution;
- Represents BA Programmes in the relationship with government agencies and organisations and other local and international organisations;
- Identifies BA programmes' administrative and functional management structure and staffing;
- Concludes labour contracts and other agreements with employees, organises their remuneration and professional development, sets out their authorities, approves job descriptions;
- Concludes contracts with students;
- Approves regulations governing the activities of the BA programmes and approve the internal disciplinary regulations;
- Identifies BA Programmes' international relations, controls its membership with foreign organisations, and representations;
- Distributes courses to faculty members;
- Deals with student issues that cannot be dealt with by the student advisors;

- Arranges meetings with members of staff to discuss programme issues and initiate any necessary changes;.
- Decides other questions related to the programme.

## Process organisation and administrative support for students and faculty

### All programmes

Administrative support for students: As mentioned before, all students are assigned a student advisor to provide guidance in any academic issues they may be facing. Students can also reach course instructors via e-mail. E-mail addresses are announced to students through the course syllabuses distributed at the beginning of each semester and also via the programme web page and Facebook group. The Foreign Students Department provides support to international students in regard to the admission and registration procedures.

The department, along with international students, also arranges events to help enhance the university's multicultural environment. The administrative staff consists of 28 employees. Each of them possesses personal computers and printers. The office space is supported by electronic services such as internet wi-fi.

### Appraisal:

The programme director coordinates the activities of everyone involved in the programmes and ensures that the programmes run smoothly.

Faculty members and students are supported by the administration in the organisation of the study programme. Sufficient administrative staff is available. Administrative staff can take enough time for students and teachers to receive support. Decision-making processes, authority, and responsibilities are clearly defined. Teachers and students are included in the decision-making processes in their areas of work.

The opportunities of electronic service support are used to supplement personal one-to-one counselling. The HEI offers the administrative staff opportunities for continuous professional development.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.2 Programme management					
4.2.1* Programme Director (Asterisk Criterion)			X		
4.2.2 Process organisation and administrative support for students and faculty			X		



## 4.3 Cooperation and partnerships

### Cooperation with HEIs and other academic institutions or networks

#### All programmes

ASOIU has cooperation agreements with more than 106 other higher educational institutions.

**Table 20: List of partner universities relevant for the programmes**

1.	Georgia State University, Atlanta, USA	Joint study programs
2.	Berkley Initiative on Soft Computing at the University of California, Berkeley, USA	Research and application
3.	Siegen University, Germany	Joint study programs, joint higher-level training for faculty PhD, research, and application
4.	Georgia Caucasus University	Triple degree MBA programme in Finance in partnership with Caucasus University, Georgia, Grenoble Ecole de Management, France, and ASOIU
5.	Grenoble Ecole de Management, France	Triple degree MBA programme in Finance in partnership with Caucasus University, Georgia, Grenoble Ecole de Management, France, and ASOIU
6.	Near East University, North Cyprus Turkish Republic	Exchange programs
7.	Webster University Thailand	Cooperation in education and research
8.	New York University, USA	MSc degree programme between the Ziclin School of Business at Baruch College and ASOIU
9.	Eastern Mediterranean University, Turkey	Research and application

### Cooperation with business enterprises and other organisations

#### All programmes

As mentioned before, the programmes give importance to the invitation of guest speakers, especially from the industry, in order to give students a different perspective and a better understanding of the application of theory to practice. As the information presented indicates, the guest speakers are mainly from the main business enterprises. The information presented by these speakers all contributes to the students' qualification and skills development.

#### Appraisal:

The scope and nature of cooperation with HEI, other academic institutions and networks relevant to the programme are plausibly presented. The agreements forming the basis of the cooperation are documented. All such activities contribute to the development of the students' qualification and skills. However, the panel criticises that cooperations are not always clearly presented and are, therefore, not fully plausible. Hence, the panel **recommends** that the HEI also names and describes specific projects that accompany each international cooperation to more clearly demonstrate the added value for the study programmes.

The scope and nature of cooperation with business enterprises and other institutions relevant to the programme are plausibly presented. The agreements forming the basis of the cooperation are documented. The cooperation is actively pursued and has a clear impact on the conception and implementation of the study programme. All such activities contribute to the development of the students' qualification and skills.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.3	Cooperation and partnerships					
4.3.1(*)	Cooperation with HEIs and other academic institutions or networks (Asterisk Criterion for cooperation programmes)			X		
4.3.2(*)	Cooperation with business enterprises and other organisations (Asterisk Criterion for educational and vocational programmes, franchise programmes)			X		

## 4.4 Facilities and equipment

### Quantity, quality, media and IT equipment of teaching and group rooms (Asterisk Criterion)

#### All programmes

The building is 500 m<sup>2</sup> and is located on the 2nd floor of the University (including classrooms, offices, labs, toilets, and corridors). The table below describes the programme classrooms and their IT equipment.

**Table 21: Description of the programme classrooms**

Classroom	Area (m <sup>2</sup> )	Student Capacity	Number of computers	Equipment of Teaching
Room 238-2	53 m <sup>2</sup>	48	17	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner/
Room 238-3	30 m <sup>2</sup>	32	16	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-4	30 m <sup>2</sup>	30	11	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner
Room 238-6	30 m <sup>2</sup>	28	9	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-7	43 m <sup>2</sup>	39	5	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-8	30 m <sup>2</sup>	28	3	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-14	41 m <sup>2</sup>	14	6 notebooks 1Pc	Whiteboard/ Computer/ Projector/ Internet connection/Labouratory Artificial Intelligence
Room 451	66 m <sup>2</sup>	77	1	Whiteboard/ Computer/ Projector
Room 451.1	38 m <sup>2</sup>	45	1	Whiteboard/ Computer/ Projector
Room 451.2	38 m <sup>2</sup>	45	1	Whiteboard/ Computer/ Projector
Room 451.3	56 m <sup>2</sup>	63	1	Whiteboard/ Computer/ Projector
Room 451.4	40 m <sup>2</sup>	45	1	Whiteboard/ Computer/ Projector

#### Access to literature

#### All programmes

The ASOİU library is 1245 m<sup>2</sup> in size. Library funds constitute about one million books. The Reading Hall is 217.5 m<sup>2</sup> in size and houses 80 readers. The Reading Hall is equipped with computers and an internet connection. Online access to a variety of databases is available, such as EBSCO, ISI Web of Science, Science Direct, TAYLOR and FRANCIS, Emerald, and ULAKBİM. The library is open every day, eight hours a day, from 9 a.m. through 7 p.m. 18 people are working in the library. They are available to students for support and advice eight hours a day.

## Appraisal:

Since an online conference was conducted, the panel was not able to visit the University on-site. Therefore, the panel was provided with descriptions of the University's premises and facilities, and their assessment was based on this evidence. According to that information, the teaching rooms and equipment provided by the learning facilities seem to be in line with the needs of the study programmes.

The quantity, quality, media and IT facilities of the teaching rooms meet the standards required for the programmes, even taking into account the resource needs of other study programmes. The rooms are properly equipped for disabled students and give them barrier-free access. Access to the internet via wireless LAN is provided free of charge. A sufficient number of group rooms is available.

The opening hours of the library take students' needs sufficiently into account. Access to the literature and journals as well as to digital media (e.g. electronic media, databases) is ensured. The literature expressly required for the study programme is available in the library and also kept up to date. The panel positively highlight that the HEI is well equipped with databases. However, they also note that more digital resources should be offered and that the students' cultural contexts should be taken into account when selecting content and offerings.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.4	Facilities and equipment					
4.4.1*	Quantity, quality, media and IT equipment of teaching and group rooms (Asterisk Criterion)			X		
4.4.2*	Access to literature (Asterisk Criterion)			X		

## 4.5 Additional services

### Career counselling and placement services

#### All programmes

The ASOİU Alumni and Career Center provides career counselling services in the University; besides the already mentioned ones, each student studying at the programmes is assigned a student advisor from among the staff members. Student advisors are responsible for guiding students in their course selection and registration process and provide academic support when students require it.

Students continue working with student advisors until the completion of their studies, therefore, student advisors are very familiar with their students. Due to student familiarity, student advisors also provide guidance in regard to career planning/counseling upon the request of students.

### Alumni activities

#### All programmes

The ASOIU Alumni and Career Center has set up a network among the programme graduates that allows the graduates to share their professional experience and has its own Facebook page, which informs about the Center's main activities, arranged training, seminars and conferences, labour fairs, career exhibitions, meetings with honourable alumni and other useful news/information for alumni. Therefore, the programmes are in constant contact with its graduates and graduates are kept up to date with the activities and developments of the university.

#### Appraisal:

Career counselling and placement services are offered to the students and graduates to promote their employability. The HEI provides sufficient resources.

An alumni organisation has been set up with the aim of developing an alumni network. Moreover, the HEI uses the network to recruit staff.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.5	Additional services					
4.5.1	Career counselling and placement service			X		
4.5.2	Alumni Activities			X		

## 4.6 Financing of the study programme (Asterisk Criterion)

#### All programmes

The programmes are self-financed. The programmes earn money from the students' fees only.

#### Appraisal:

The income related to the programme ensures that each cohort of students starting within the accreditation period can complete the study programme.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.6* Financing of the study programme (Asterisk Criterion)			X		

## 5. Quality assurance and documentation

### Quality assurance and quality development with respect to contents, processes, and outcomes (Asterisk Criterion)

#### All programmes

The University is committed to continuous improvement to ensure the delivery of high-quality education. Students, faculty, researchers, and other stakeholders are involved in the educational quality process.

The programmes are generally monitored in the following way:

- 1) Reviews of study programmes are carried out regularly by the university committees and Advisory Boards internally. Also, external accreditation agencies are contracted to assess the programme's effectiveness and compliance with standards;
- 2) Documents, procedures, curricula, syllabi, content, and design of courses are regularly evaluated and necessary updates are made;
- 3) Surveys are conducted on the programmes to collect data on teaching effectiveness (at the end of every semester), student satisfaction, alumni, and employee feedback (every two years) to monitor programmes' outcomes. After feedback collection from students, faculty, and other stakeholders through surveys, focus groups, and interviews data are analysed to identify strengths and weaknesses. As a result, necessary changes are made to the programs.
- 4) Necessary educational support resources like library, auditoriums, equipment, etc., are updated;
- 5) Research focus of education, international collaboration, recognition from international accreditation agencies, QS rankings, and the reputation of the faculty and graduates are also indicators of programme quality.

#### Instruments of quality assurance

##### Evaluation by students

#### All programmes

As students' feedback is an invaluable tool for assessing the quality of teaching and learning, at the end of each semester, students are asked to complete an online survey questionnaire for each of their courses to gain feedback in relation to the course and the course instructor which is carried out through the e-university e-uni.az. The students do not have access to the e-uni.az information if they do not fill out the online survey. The results are analysed and provided to the Programme Director and instructors.

This process provides feedback, resulting in improvements to the instructor's teaching quality and, if necessary, improvements in the respective course.

The programme takes the students' feedback seriously and makes changes if necessary. There are regular meetings with students where they can voice their issues and suggestions. The results of

the questionnaires are directly discussed with the students. The students are informed directly about the results of the questionnaires, and the teachers discuss possible improvements in the respective course with them.

### **Evaluation by faculty**

#### **All programmes**

At the end of each semester, the programme director holds an “end of semester evaluation meeting” in order to discuss the overall outcomes of the semester with course instructors. This meeting is the floor to discuss and identify issues and problems faced by the instructors and students, as well as to identify suitable solutions to the questions raised.

### **External evaluation by alumni, employers and third parties**

#### **All programmes**

The ASOIU Alumni and Career Center is in continuous contact with the alumni, so any information provided can be used to make improvements to the programme if it's needed. The input of the employers is very important for the further improvement of the degree programmes; therefore, they are involved in the quality assurance processes. For this purpose, the programme Advisory Board is established.

The advisory board consists of a group of professionals, employers, and experts of the relevant fields from outside the university (e.g., companies and governmental institutions) as well as students and alumni for further developing the degree programmes. For quality assurance, the BA Programmes of ASOIU carried out a survey on external evaluation of the programme by alumni, employers and third parties.

ASOIU values input from stakeholders and therefore established the Business Advisory Board of the BA Programmes. This group of business professionals assists the programme with issues of strategic importance. The Board includes representatives of local companies and institutions as well as alumni/students. The aim of the Advisory Board is to provide an independent, expert review and critique of the academic activities of the Bachelor Programmes to improve the quality of teaching, research, and services.

### **Programme description (Asterisk Criterion)**

#### **All programmes**

The programmes content and curricula are available and accessible from the programme's web page mba.edu.az as well as the Facebook page. The programmes content and curricula are also provided in promotional catalogues. Course plans, examination schedules, and examination rules are also announced online and on the programme's notice board, which is positioned at the programme



entrance. All relevant material is suitably documented and published, and easily assessable 24 hours a day, seven days a week.

### Information on activities during the academic year

#### All programmes

Activities during the academic year are also announced online through the programme website or Facebook page as well as via the programme notice board. Student advisors also make announcements online regarding the programme documents or/and the programme-related events and activities.

#### Appraisal:

A quality assurance and development procedure, which systematically and continuously monitors and develops the quality of the programme with respect to its contents, processes, and outcomes, has been set up. It takes into account the evaluation results and the analysis of student workload, success rate, and graduate employment, as well as the profile of the student population. Faculty members and students participate in the respective committees to plan and assess the quality assurance and development procedures. Responsibilities are clearly defined. The panel suggests enhancing transparency regarding the advisory board's operations and functions, clarifying its role and procedures to stakeholders for better understanding. Furthermore, the panel criticises the missing or underdeveloped assurance manual, which leads to opacity and insecurity. Hence, the panel **recommends** that the HEI further develops their documents and include a quality assurance manual, aligning its elements and procedures with European standard in quality assurance, encompassing all necessary components to ensure adherence to established standards and practices.

Evaluation by the students is carried out on a regular basis and in accordance with a prescribed procedure; the outcomes are communicated to the students and provide input for the quality development process. The panel notes that this feedback round should also be incorporated in the quality assurance manual (see above).

Quality control by the faculty is carried out on a regular basis and in accordance with a prescribed procedure; the outcomes are communicated and provide input for the quality development process. The panel suggest that also this feedback procedure should also be described in the quality assurance manual (see above).

An external evaluation is carried out on a regular basis and in accordance with a prescribed procedure; the outcomes are communicated and provide input for the quality development process. The panel criticises the fact that the external evaluation is only carried out for the HEI as a whole and not for the individual programmes. In their view, this means that specific feedback and, therefore, the opportunity to obtain important information is not possible. They, therefore, **recommend** that the HEI should carry out an external stakeholder (e.g. alumni, employers, other social partners, etc. evaluation of each programme separately.

The study programme's content, curriculum and examination scheme have been suitably documented and published (e.g. course plan and exam regulations).

The HEI regularly publishes current news and information – both quantitative and qualitative – about the study programme.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
5.1* Quality assurance and quality development with respect to contents, processes and outcomes (Asterisk Criterion)			X		
5.2 Instruments of quality assurance					
5.2.1 Evaluation by students			X		
5.2.2 Evaluation by faculty			X		
5.2.3 External evaluation by alumni, employers and third parties				X	
5.3 Programme documentation					
5.3.1* Programme description (Asterisk Criterion)			X		
5.3.2 Information on activities during the academic year			X		

# Quality profile

HEI: Azerbaijan State Oil and Industry University, Azerbaijan

## Bachelor / Master programme:

- Bachelor of Science - Business Informatics (undergraduate, full-time)
- Bachelor of Science - Industrial Engineering (undergraduate, full-time)
- Bachelor of Science - Computer Engineering (undergraduate, full-time)
- Master of Business Administration - Operations Management (postgraduate, full-time)
- Master of Business Administration - Computer Information Systems (postgraduate, full-time)

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
<b>1</b>	<b>Objectives</b>					
1.1*	Objectives of the study programme (Asterisk Criterion)			X		
1.2*	International orientation of the study programme design (Asterisk Criterion)			X		
1.3	Positioning of the study programme					
1.3.1	Positioning of the study programme in the educational market			X		
1.3.2	Positioning of the study programme on the job market for graduates („Employability“)			X		
1.3.3	Positioning of the study programme within the HEI's overall strategic concept		X			
<b>2</b>	<b>Admission</b>					
2.1*	Admission requirements (Asterisk Criterion)			X		
2.2	Counselling for prospective students			X		
2.3*	Selection procedure (if relevant)			X		
2.4(*)	Professional experience (if relevant; Asterisk Criterion for master programmes that require professional experience)			X		
2.5*	Ensuring foreign language proficiency (Asterisk Criterion)			X		
2.6*	Transparency and documentation of admission procedure and decision (Asterisk Criterion)			X		
<b>3</b>	<b>Contents, structure and didactical concept</b>					
3.1	Contents					
3.1.1*	Logic and conceptual coherence (Asterisk Criterion)			X		
3.1.2*	Rationale for degree and programme name (Asterisk Criterion)			X		
3.1.3*	Integration of theory and practice (Asterisk Criterion)			X		
3.1.4	Interdisciplinary thinking			X		
3.1.5	Ethical aspects			X		
3.1.6*	Methods and scientific practice (Asterisk Criterion)			X		

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.1.7*	Examination and final thesis (Asterisk Criterion)			X		
3.2	Structure					
3.2.1*	Modular structure of the study programme (Asterisk Criterion)			X		
3.2.2*	Study and exam regulations (Asterisk Criterion)			X		
3.2.3*	Feasibility of study workload (Asterisk Criterion)			X		
3.2.4	Equality of opportunity			X		
3.3	Didactical concept					
3.3.1*	Logic and plausibility of the didactical concept (Asterisk Criterion)			X		
3.3.2*	Course materials (Asterisk Criterion)			X		
3.3.3	Guest lecturers			X		
3.3.4	Lecturing tutors			X		
3.4	Internationality					
3.4.1*	International contents and intercultural aspects (Asterisk Criterion)			X		
3.4.2	Internationality of the student body			X		
3.4.3	Internationality of faculty			X		
3.4.4	Foreign language contents			X		
3.5*	Multidisciplinary competences and skills (Asterisk Criterion)			X		
3.6*	Skills for employment / Employability (Asterisk Criterion)			X		
4.	Academic environment and framework conditions					
4.1	Faculty					
4.1.1*	Structure and quantity of faculty in relation to curricular requirements (Asterisk Criterion)			X		
4.1.2*	Academic qualification of faculty (Asterisk Criterion)			X		
4.1.3*	Pedagogical / didactical qualification of faculty (Asterisk Criterion)			X		
4.1.4	Practical business experience of faculty			X		
4.1.5*	Internal cooperation (Asterisk Criterion)			X		
4.1.6*	Student support by the faculty (Asterisk Criterion)		X			
4.1.7(*)	Student support in distance learning (only relevant and an Asterisk Criterion for blended-learning/distance learning programmes)					X
4.2	Programme management					
4.2.1*	Programme Director (Asterisk Criterion)			X		
4.2.2	Process organisation and administrative support for students and faculty			X		

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.3	Cooperation and partnerships					
4.3.1(*)	Cooperation with HEIs and other academic institutions or networks (Asterisk Criterion for cooperation programmes)			X		
4.3.2(*)	Cooperation with business enterprises and other organisations (Asterisk Criterion for educational and vocational programmes, franchise programmes)			X		
4.4	Facilities and equipment					
4.4.1*	Quantity, quality, media and IT equipment of teaching and group rooms (Asterisk Criterion)			X		
4.4.2*	Access to literature (Asterisk Criterion)			X		
4.5	Additional services					
4.5.1	Career counselling and placement service			X		
4.5.2	Alumni Activities			X		
4.6*	Financing of the study programme (Asterisk Criterion)			X		
<b>5</b>	<b>Quality assurance and documentation</b>					
5.1*	Quality assurance and quality development with respect to contents, processes and outcomes (Asterisk Criterion)			X		
5.2	Instruments of quality assurance					
5.2.1	Evaluation by students			X		
5.2.2	Evaluation by faculty			X		
5.2.3	External evaluation by alumni, employers and third parties				X	
5.3	Programme documentation					
5.3.1*	Programme description (Asterisk Criterion)			X		
5.3.2	Information on activities during the academic year			X		