Decision of the FIBAA Accreditation Committee for Programmes

106th Meeting on 23 March 2018

Project Number:	16/077
Higher Education Institution:	Azerbaijan State Oil and Industry University
Location	Baku, Azerbaijan
Study Programme:	Computer Engineering (B.Sc.)
Type of Accreditation	initial Accreditation

The FIBAA Accreditation Committee for Programmes has taken the following decisions:

According to § 12 (2) in conjunction with § 16 (1) in conjunction with § 16 (2) of the "Special Conditions for awarding the FIBAA Quality Seal for Programme Accreditation "FIBAA Programme Accreditation"", the study programme is accredited with one condition.

Period of Accreditation: March 23rd 2018 until the end of spring semester 2023

Condition:

- **Condition**
  The HEI defines the English Level for international applicants in the admission requirements and ensures that all applicants have sufficient language skills to successfully complete the study programme.
  (see chapter 2.5),

Proof of meeting the condition is to be supplied by December 23rd, 2018.

The FIBAA Quality Seal is awarded.

FOUNDATION FOR INTERNATIONAL
BUSINESS ADMINISTRATION ACCREDITATION
FIBAA – BERLINER FREIHEIT 20-24 – D-53111 BONN

Assessment Report

Black passages are identical to the other reports from the HEI

Higher Education Institution (HEI):
Azerbaijan State Oil and Industry University
Baku, Azerbaijan

Bachelor study programme:
Computer Engineering

Qualification awarded on completion:
Bachelor of Science (B.Sc.)

General Information on the study programme

Brief description of the study programme:
The programme Computer Engineering aims to raise specialists and instructors for the field of computer engineering and helps to meet the demands in relevant industries, job centres and higher education institutions. The objectives of the programme are to bring up experienced and knowledgeable individuals equipped with theoretical and practical information related to computer engineering. Successful undergraduates should be able to demonstrate a range of cognitive and intellectual skills together with techniques specific to computer engineering areas.

Type of study programme:
Bachelor programme

Projected study time and number of ECTS points assigned to the study programme:
4 years - 240 ECTS

Mode of study:
Full-time

Didactic approach:
Study programme with obligatory class attendance

Double/Joint Degree programme:
No

Scope (planned number of parallel classes) and enrolment capacity:
One at a time, Enrolment capacity of 20 per year

Programme cycle starts in:
Fall semester

Initial start of the programme:
1991

Type of accreditation:
Initial accreditation

Procedure

A contract for the initial accreditation of the Computer Engineering (Bachelor of Science) was made between FIBAA and Azerbaijan State Oil and Industry University on August 3rd, 2016. On June 30th, 2017, the HEI submitted a self-evaluation report, which included a detailed description of the programme and further documents in order to prove that the criteria for programme accreditation were met.
At the same time, FIBAA appointed a review panel. The HEI agreed to the chosen experts. The panel consisted of:

Prof. Dr. Andreas Mockenhaupt
University of Applied Sciences Albstadt-Sigmaringen
Professor for Innovation and Sales and Distribution Management, Industrial Engineering

Prof. Dr. Gerd Hofmeister
University of Applied Science Erfurt
Professor for General Business Administration with the focus on Human Resource Management for Bachelor and MBA programmes

Prof. Dr.-Ing. Bernd Hamacher
University of Applied Science Osnabrück
Professor for Engineering and Information Management

Dr. Kavus Abushov
ADA University, Baku, Azerbaijan
Assistant Professor for Political Sciences

Martin Luckmann
AgileBrains GbR
Managing Partner
Management Consultant

Thomas Sachs
University of Bayreuth
PhD student Information Management

FIBAA project manager:
Vera Kassler

The assessment is based on the self-evaluation report, amended by further documents, requested by the panel, and a site visit. The site visit took place on October 24th to October 26th at the HEI's premises in Baku, Azerbaijan. The same cluster included an appraisal of Computer Engineering (Bachelor of Science). At the end of the on-site visit, the panel gave 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 January 31th 2018. The statement on the report was given up on February 9th 2018, it has been taken into account in the report on hand.

Summary

The Bachelor Programme Computer Engineering (B.Sc.) offered by Azerbaijan State Oil and Industry University fulfils with one exception the FIBAA quality requirements for Bachelor programmes and can be accredited by the Foundation for International Business Administration Accreditation (FIBAA) for five years starting on March 23rd, 2018 and finishing on the end of spring semester 2023, under one condition. The programme is in accordance with the national and the European Qualification Frameworks and the European Standards and Guidelines in their applicable version valid at the time of opening of the procedure, and with the Bologna declaration.

The panel members identified need for improvement regarding the following aspect: admission. They recommend the accreditation on condition of meeting the following requirements:

- Condition
  The HEI defines the English Level for international applicants in the admission requirements and ensures that all applicants have sufficient language skills to successfully complete the study programme.
  (see chapter 2.5),

Proof of meeting this condition is to be supplied by December 23rd, 2018.

Furthermore, the quality requirements that have not been fulfilled – (Equality of opportunity (chapter 3.2)/ internationality of the student body (chapter 3.4)/ External evaluation by alumni, employers and third parties (chapter 5.2)) – are no asterisk criteria and therefore do not lead to a condition. The measures the HEI takes to solve the identified problems are to be considered during the re-accreditation.

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

- The panel recommends observing and analysing the amount and given reasons of dropouts as well as taking measures to reduce the number of students who leave the university without finalizing their studies. (see chapter 3.2.3),
- The panel recommends to encourage the teachers' development of English language skills. (see chapter 4.1.2),
- The panel therefore recommends to provide the students with information on the results of evaluations and quality assurance measures. (see chapter 5.2.1),
- They recommend to implement a survey and to involve external parties more strategically in the quality assurance. (see chapter 5.2.3).

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

There are criteria in which the programme exceeds the quality requirements:

- International orientation of the study programme design (see chapter 1.2),
- Lecturing Tutors (see chapter 3.3.4),
- Foreign Language Skills (see chapter 3.4.4),
- Programme Director (see chapter 4.2.1),
- Alumni Activities (see chapter 4.5.2).

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

Information

Information on the Institution

Being a 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 1920. ASOIU offers undergraduate, Masters and postgraduate level degrees. This higher educational school acted under different names in various periods. Founded as the Azerbaijan Polytechnic Institute,the institution was continued under the name of Azerbaijan Oil Institute, then Azerbaijan Industrial Institute, Azerbaijani Oil and Chemistry Institute, Azerbaijan State Oil Academy and quite recently was renamed into Azerbaijan State Oil and Industry University (2015).

At the Bachelor stage students are trained on 53 specialties and at the Masters' on 50 specialties. All programmes at ASOIU have been approved by the Ministry of Education of the Republic of Azerbaijan and are audited by the Chamber of Accounts of the Republic of Azerbaijan. ASOIU provides education for local and international students. The graduates work in over 70 countries.

Nearly 9,000 students and 1,000 employees in research, teaching and administration are part of the university. Throughout its rich history, 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.

There are seven faculties in ASOIU that train highly qualified specialists for the oil industry:
1. Faculty of Geological Exploration
2. Faculty of Oil and Gas Production
3. Faculty of Chemical Technology
4. Faculty of Oil Mechanical
5. Faculty of Power Engineering
6. Faculty of Information Technologies and Control
7. Faculty of Economics and Management

ASOIU participates in a number of international projects for improving education quality and applying innovations in education. For example the Bachelor degree in environmental protection was set up within the frames of the European Union's TEMPUS programme. Since 2015, ASOIU has been taking part in the Erasmus+ network, hence the students gain the opportunity to study for a short period in leading universities of Europe. Furthermore, the Mevlana programme creates opportunities for academic mobility with Turkish universities. Currently ASOIU has cooperation agreements with over 58 universities and organisations from more than 25 countries.

ASOIU is a member of the following international associations:
1. European Universities Association
2. Black Sea Basin Universities Association
3. Eurasian Silk Way Universities Consortium
4. International Association of University Presidents
5. Caucasus University Association
6. DAAD (German Academic Exchange Service)
7. Erasmus+ programme
8. Korea International Cooperation Agency
9. International Associations of Universities
10. IEEE Computational Intelligence Society

11. CISCO Networking Academy
12. Oracle Academy
13. International Federation of Red Cross and Red Crescent Societies
14. Auto Cad Design Academy
15. Azerbaijan-UK Alumni Association
16. AIESEC Alumni International

Programme Description and Appraisal in Detail

1. Objectives

1.1 Objectives of the study programme (Asterisk-Criterion)

ASOIU aims to raise specialists and instructors for the field of computer engineering and help to meet the demands in relevant industries and higher education institutions. Graduates will be involved in many hardware and software aspects of computing, from the design of individual microcontrollers, microprocessors, personal computers, and supercomputers, to circuit design. This field of engineering not only focuses on how computer systems themselves work, but also how they integrate into the larger picture. Usual tasks involving computer engineers include writing software and firmware for embedded microcontrollers, designing VLSI chips, designing analogue sensors, designing mixed signal circuit boards, and designing operating systems. Computer engineers are also suited for robotics research, which relies heavily on using digital systems to control and monitor electrical systems like motors, communications, and sensors.

The objectives of the programme are:

- to bring up experienced and knowledgeable individuals equipped with theoretical and practical information related to the discipline;
- to accomplish competent graduates who are able to contribute to the developments and research studies in the field;
- to equip the students with the abilities needed to face the challenges of the domestic and foreign professional sector or of post-graduate academic programmes in Azerbaijan or abroad;
- to acquire the professional skills that a rapidly shifting technological environment demands, including complex reasoning, critical thinking and problem solving;
- to be able to assume leading roles in the industry and to succeed in the private industrial sector, in the government sector, as well as in the academic and research environment.

Successful undergraduates should be able to demonstrate a range of cognitive and intellectual skills together with techniques specific to computer engineering areas: analytical skills applying technical analysis, data management and diagnostic problem-solving skills in order to make decisions in non-standard situations in an autonomous way.

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

- understand and apply knowledge of mathematics, science and engineering;
- analyse a problem, identify and define the appropriate computing requirements to its solution;
- apply mathematical foundations, algorithmic principles and computer engineering techniques in the modelling and design of computer-based systems;
- design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social aspects;
- plan and carry out experiments as well as to analyse and interpret data;
- use the techniques, skills and modern engineering tools necessary for engineering practice;
- understand professional, ethical, legal, security and social issues and responsibilities that apply to engineering;
- work productively in a multidisciplinary team, in particular to carry out projects involving computer engineering skills;
- communicate effectively with a range of audiences;

- recognise the need for, and an ability to engage in life-long learning.

Appraisal:

The qualification objectives of the programme are explained and convincingly presented in relation to the target group and the targeted professional field.
The objectives embrace academic proficiency, comprehensive employability, as well as the development of the individual student's personality, especially of the development of ethical thinking.
The subject-specific and extra-curricular qualification objectives correspond with the aspired level at graduation that ASOIU wants to achieve with the programme. The panel also approves the skills to be acquired.
The programme takes into account the requirements of the Azerbaijan 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)

According to ASOIU, the programme is completely taught in English and complies with international curriculum standards. The international orientation is a clear focus of the programme design and can be seen in the international components of certain modules. The curriculum takes into account international orientation of the contents in different aspects as evidenced in the module descriptions.

This programme delivers an integrated experience to prepare students for leadership on an international level. Therefore, the programme design takes into account the required international aspects that assure the graduates' employability. The curriculum also emphasises international focus of the courses both compulsory and elective (see chapter 3.4).

ASOIU has cooperation agreements with other international Higher Educational Institutions to encourage international exchange. Cooperation with companies and industry is mainly used for the invitation of guest speakers. Furthermore, due to the fact that international guest lecturers teach in that programme the students become able to participate in discussions with individuals from different cultural backgrounds and points-of-view. This is expected to make them more knowledgeable to perform in organisations at the national as well as international level.

In addition, supporting course materials, such as case studies used by instructors, are covering relevant topics from various countries. Furthermore, the language of instruction in every module is English.

Appraisal:

The programme design appropriately takes into account the required international aspects to its graduates' employability. 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 nowadays business world. Achieving this aim is specially nurtured through English as the teaching language. Furthermore ASOIU is always in contact with other Higher Education Institutions and promotes cooperation. There are also often guest lecturer from other universities to extend the student's horizon and enable them to handle international tasks. The panel also appreciates the high motivation and the willingness of the appropriate persons at the university.

		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

The programme is positioned in the Azerbaijan education market as an academic programme that provides high quality education in English language which also contributes to its international positioning. The curriculum wants to cover almost all sides of today's computer engineering studies worldwide and responds to the international market's requirements.

The programme wants to provide employers with necessary technical/ computer/ decision-making/ problem solving skills to apply efficiently to the different areas today. ASOIU wants graduates to possess necessary computer and communication skills that help them quickly adapt to any work environment. They are expected to become effective team members and knowledgeable in the different areas. Therefore, graduates are readily employable in both private and public sectors. Many graduates find employment in various areas related areas as computer firms, industry factories, marketing, sales, accounting, banking and financial services, business services, and public organisations.

ASOIU follows the constitutional principles of the Republic of Azerbaijan. It is a Higher Educational Institution based on the general objectives, basic principles and requirements of the national higher education system that includes international values.
ASOIU performs its mission following the principles, responsibilities, duties and application procedures:

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

Appraisal:

The quality of the programme and the learning and living environment at the university are reasons for students to study at ASOIU. The profile and the competence goals are such that the programme can compete both on the education and on the job market. The programme provides students with solid theoretical and methodological knowledge and most important with key qualifications which are essential for a further successful career. Therefore, the positioning of the study programme in the educational market and the job market is plausible to the panel.

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. During the interviews the panel got the information that Graduates are able to find a profession shortly after graduation. Hence, there is space in the job market. The panel could get an impression of the students' skills during the on-site visit and is convinced about their employability. The panel appreciates that the university thought carefully about the graduates' employability when developing the programme.

With ASOIU as a state university that offers a range of programmes, the study programme is convincingly integrated into its overall strategic concept. The study programme's qualification goals are clearly in line with the university's mission and overall strategy.

		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 is managed by the State Examination Center (for local applicants) and the International Cooperation Office and International Students Dean Office from ASOIU (for international applicants). The details of the admission requirements are communicated on the website of the State Examination Center. The results of the selection are published on this website in applicants' registered account as well.

Students admitted to the programme come from two sources:

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

Admission requirements for local students:
Admission is based on the centralized Unified National Exams. Azerbaijan citizens need their school graduation certificate to pass the entrance examination that is organised by the State Examination Center. It is established to arrange entrance exams in conformity with national standards of the Republic of Azerbaijan. The exam is held once a year during the months of May through July. Depending on the results of the exams, successful enrolees are admitted to the universities in the correspondence of their specialty choice. The admission requirements indicate that applicants have to pass exams for English language. Those students whose level of written English and communication skills is below the required standards are offered English courses arranged by the university that provides English reading, writing, and communication skills.

Admission requirements for international students:
Enrolees are admitted without passing the centralised examination of Azerbaijan. The applicants apply directly to the university electronically and have to complete and submit an application form to get registered for the programme. International Applicants also need to provide their school graduation certificate. Further English language skills are not proved in the admission process.

All international applicants are reviewed by the Foreign Students Department. Eligible applicants receive a Conditional Acceptance Letter and are required to pay their first semester tuition fee. Upon payment they receive an Official Acceptance Letter.

ASOIU arranges necessary counselling services with information and guidance for students to contribute to the personal, physical, cultural and social development of students. The university aims at contributing to the social and personal development of its students as well as their academic achievement. It organises various activities to endow students in social and cultural terms, to promote a sense of unity and solidarity and to support students in their transfer to business.

The Student Union Committee arranges different activities to involve students in the social life of the university, to assess their leisure time or to help solving their social problems. Under the Student Union Committee many clubs have been founded in the university life to make students socially active in their intercultural environment. The ASOIU Foreign Student Department has been established to facilitate the international enrolee (non-Azeri speaking) application process to ASOIU and to ensure that the applicants receive support and guidance from registration through to graduation. The Department aims to understand all applicant situations and maintain a friendly and understanding relationship with them.

Appraisal:

The admission requirements are based on the national regulations. They are documented, comprehensible and openly available for interested parties via the website of the university. Information about the process of admission are available via the website of the State Examination Center. The influence of the selection of the university to select students is limited, but it has the advantage that it can take only those applicants with a high score in the entrance tests, which works towards selecting qualified students.

The selection procedure for local students is transparent and ensures that qualified students are admitted. The panel found that the students have very good language skills. They state that the language requirements managed by the State Examination Center are high enough to let the students complete the appropriate programme. The international applicants don't need to pass the centralized examination of Azerbaijan. They apply directly to the university and have to submit an application form to get registered for the programme. This application form doesn't contain information about a necessary English level every applicant has to have. Hence, it is not ensured that the students are qualified enough to successfully complete the study programme. In the statement the University informs that the required English skills for enrolees will be level IELTS (5). However, there are no further formal written information about the necessary English level in the admission requirements.

The panel recommends the **condition**:

> The HEI defines the English Level for international applicants in the admission requirements and ensures that all applicants have sufficient language skills to successfully complete the study programme.

For clarification of specific questions of enrolment and contents of study, applicants can directly turn to a student counselling service or to universities' staff. Personal dialogue between the applicant and ASOIU is provided. Furthermore, all necessary information are published on the programmes' homepage.

		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)			condition		
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

The following table shows the Curriculum of the programme:

№	Course code	Courses	Credits	Total hours	Auditorium hours			Semester	Workload
					According to the type of training				
					Lectures	Seminars	Laborat		
	HC-BOO	**Humanitarian courses**	**30**	**900**	**105**	**300**			
1	HC-B01	Azerbaijan History	6	*180*	30	45		1	5
2	HC-B02.1	Foreign Language – 1	6	180		90		1	6
3	HC-B02.2	Foreign Language – 2	7	210		90		2	6
4	HC-B03	Azerbaijani Language and culture of speech	5	150		60		2	4
		Elective courses							
5		I blok: 1) Philosophy; 2) Economics ; 3) Sustainable human development	4	120	45	15		4	4
6	HC-B04.1	II blok: 1) Fundamentals of law and Constitution of Azerbaijan Republic; 2) Political Science; 3) Sociology; 4) Introduction to multiculturalism	2	60	30			2	2
	SPTC-B00	**Speciality Professional Training Courses**	**180**	**5400**	**1095**	**225**	**780**		
			143	*4290*	*855*	*195*	*540*		
7	SPTC-B01.1	Mathematics – 1	4	*120*	30	15		1	3
8	SPTC-B01.2	Mathematics – 2	5	*150*	30	30		2	4
9	SPTC-B01.3	Mathematics – 3	5	*150*	30	15		3	3
10	SPTC-B02	Probability theory and statistics	4	*120*	30	15		3	3
11	SPTC-B03	Physics	8	*240*	45		30	1	5
12	SPTC-B04	Fundamentals of Computer Engineering	6	*180*	30	15	30	1	5
13	SPTC-B05	Cycle theory	4	*120*	30		15	3	3
14	SPTC-B06	Production economics and management	4	*120*	30	15		5	3
15	SPTC-B07	Fundamentals of programming	7	*210*	30	15	30	2	5
16	SPTC-B08	Fundamentals of electronics	4	*120*	30		15	5	3
17	SPTC-B09	Computer architecture	5	*150*	30		30	3	4
18	SPTC-B10	Computer networks	6	*180*	30	15	30	4	5
19	SPTC-B11	System programming and operation systems	7	*210*	45	15	30	3	6

20	SPTC-B12	Digital systems	6	*180*	30		30	5	4
21	SPTC-B13	Computer systems security	6	*180*	30		30	7	4
22	SPTC-B14	Data structure and database systems	7	*210*	45		30	5	5
23	SPTC-B15	Operations research	5	*150*	30		30	6	4
24	SPTC-B16	Formal languages and automata theory	5	*150*	30		30	3	4
25	SPTC-B17	System analysis and computer modeling	5	*150*	30		30	4	4
26	SPTC-B18	Multimedia technologies	4	*120*	15		30	2	3
27	SPTC-B19	Computer circuit design and microprocessor systems	7	*210*	45		30	6	5
28	SPTC-B20	Fundamentals of computers applied theory	6	180	30		30	4	4
29	SPTC-B21	Systems simulation	6	180	30		30	7	4
30	SPTC-B22	Internet technologies	5	*150*	30	15	15	7	4
31	SPTC-B23	Life safety	5	*150*	30	15		6	3
32	SPTC-B24	Web programming and design	4	*120*	30		15	4	3
33	SPTC-B25	Civil defense	3	*90*	30	15		7	3
	SPTC-B00	*Elective Courses (On profession training)*	*37*	*1110*	*240*	*30*	*240*		
34	SPTEC-B01	I block:1) Mobile and parallel computer systems; 2) Neural networks	5	*150*	30	15	30	5	5
35	SPTEC-B02	II block:1) Fundamentals of decision-making systems; 2) Data mining	5	*150*	30		30	7	4
36	SPTEC-B03	III block: 1) Artificial intelligence2) Software engineering fundamentals and design	4	*120*	30		30	6	4
37	SPTEC-B04	IV block:1) Fuzzy logic2) Fuzzy systems	5	*150*	30		30	4	4
38	SPTEC-B05	V block: 1) Telecommunication systems and wireless networks2) Computer modeling of electronic circuits	5	*150*	30	15	30	7	5
39	SPTEC-B06	VI block:2) Computer graphics1) Computer mathematics	5	*150*	30		30	6	4
40	SPTEC-B07	VII block: 1) Fundamentals of control 2) Signal processing in computer engineering	4	*120*	30		30	6	4
41	SPTEC-B08	VIII block: 1) Object oriented design and programming2) Programming of mobile devices	4	*120*	30		30	5	4

The name of the programme is Computer Engineering, the qualification awarded at the end of the student's studies is Bachelor of Science.

Computer engineering is a discipline that integrates several fields of electrical engineering and computer science required to develop computer hardware and software. Computer

engineers get a training in electronic engineering or electrical engineering, software design, and hardware-software integration.

The curriculum is based on the following modules:

- Humanitarian core (6 modules)
- Speciality Professional Training Core (34 modules)

The humanitarian core courses are offered first. There are four compulsory courses. After that the students can choose one of three electives in the first block and one module of four other electives from a second block. The Speciality Professional Training Core also includes eight blocks of elective courses where the students have the option to choose between two electives in each block. Each semester a variety of different electives is offered giving students a wider range of choice. During the last semester students are supposed to begin their thesis works, which include identifying a topic, choosing a scientific supervisor, and beginning the theoretical part of the work. The students work with their scientific supervisors and implement all the works related with the completion of the Bachelor thesis. The students have the possibility to choose elective modules instead to write a final thesis.

Different teaching methods are used to combine theory and practice in the programme. The university has developed activities to deepen the students' competences by organising lectures, workshops and presentations of significant experts from practice. The teachers also use their personal work experience to enrich the lectures with examples from the practice such as in-class discussions, case studies, brain-storming, team presentations/projects, papers, etc. In-class discussions improve the communication skills of students so they are able to express their thoughts or ideas. Brain-storming helps students to generate creative ideas through intensive discussion. Case studies improve students' analytical thinking abilities and enhance their team-work competence.

Interdisciplinary thinking is one of the important aspects of the programme's objective that aims to establish critical thinking, self-confidence, self-efficacy, problem-solving, creativity, etc. A variety of interdisciplinary courses are offered in the programme in order to deepen the learning experience of students allowing for interdisciplinary thinking (e.g. "Operation Research", where the students learn to solve problems in different environments that need decisions").

Ethical Aspects are based on national traditions and principles of multiculturalism that merges national and international features. ASOIU creates the opportunity to learn and to work with people from a variety of cultural and ethical backgrounds. Due to this reality in the discussions of cases, the lecturers try to take into consideration the sensitivity of the issue of ethics e.g. course "Philosophy" or "Introduction to multiculturalism".

Students from ASOIU are required to conduct different types of course assignments, e.g.

- individual or group project assignments,
- presentations,
- discussions,
- case studies,
- team work,
- quizzes, etc.

All these enable students to develop their ability to do scientific research, acquire presentation skills and use scientific methods.

According to ASOIU, the university prepares each course's exam in accordance to its content and learning objectives. It is designed to assess a student's ability to apply theoretical knowledge. In addition to the final exam of each course the results of a mid-term

exam along with other evaluations (oral examination, presentations, team work, quizzes, etc.) are taken into consideration in order to determine the final grade of the student. The final exam is regularly the exam paper and has a duration of 180 minutes. By working on their thesis, students improve their ability to do scientific work. The students also have the possibility to choose some elective modules instead of writing a final thesis.

Appraisal:

The curriculum of the programme adequately reflects the qualification objectives of the study programme. In the view of the panel the contents of the courses are well-balanced, logically connected and oriented towards the intended learning outcomes. Elective courses enable students to acquire additional competences and skills according to their individual interests. Due to the contents and the learning outcomes of the programme the programme description "Computer Engineering" and the awarded degree "Bachelor of Science" are reasonable.

Theory and practice are sufficiently combined throughout the curriculum. Theoretical questions are geared towards application fields to promote employability. Many lecturers bring their business and educational skills with knowledge of recent developments into the programme and link the practical application to the theories discussed in the seminars. In its subjects the programme is interdisciplinary and thus promotes interdisciplinary thinking. Moreover the achieved outcomes show the preparation of the students for an occupation requiring interdisciplinary knowledge. Interdisciplinary thinking is especially suitable to promote the achievement of the competence goals. Ethical aspects are a very important aspect for ASOIU, who wants to take into consideration the sensitivity of the issue of ethics. This content is contained in many courses and part of the curriculum. Ethical implications are appropriately communicated. The panel positively acknowledges that methodological competences and scientific practice are thoroughly trained so that students acquire methodological competences and are enabled to do scientific work on the required level.

Paper, exam paper and project work are ways to test the knowledge and competence of students. The level of performance in examinations and the theses are aligned with the learning outcomes of the courses in terms of form and content. The requirements are in line with the level necessary to attain the desired qualification level. The system of continuing examination including a mid-term and a final examination helps ASOIU to check if students are falling short of expectations and enables the university to support those students. During writing their thesis the students get support from the chosen teacher who supervises the procedure. The students prove, especially in their thesis, their ability to do scientific work and the achievement of the study programme's qualification objectives.

		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			X		

3.2 Structure

Projected study time	3,5 years, seven semesters
Number of Credit Points (CP)	240 ECTS points
Workload per CP	30 hours per ECTS point 900 hours per semester
Number of modules	40 modules, thereof ten elective modules
Time required for processing the final thesis and awarded CP	270 hours - 9 ECTS points
Number of contact hours	6300 hours for eight semesters

The programme consists of modules and assigned ECTS points per module on the basis of the necessary student workload. The curriculum consists of 240 ECTS points. The students have to pass all courses to get the 240 ECTS points, including 43 ECTS points on elective courses (10 elective courses between 2-5 ECTS points on each). The workload is 30 ECTS points per semester. Some courses have prerequisites where students are first required to take the prerequisite course before proceeding to the next dependent course. The calculation of ECTS points involves class hours, midterm and final exams depending on the course requirements as well as independent studies and self-studying. There are fifteen weeks of classes in total - including one week for midterm exams. Final exams are usually conducted after the fifteen weeks of classes.

Course descriptions provide detailed intended learning outcomes, the course contents, the type of course (compulsory/elective), amount of ECTS-points, name of lecturer, teaching methods and examinations.

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

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

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 students are 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.

All courses in the programme use a variety and combination of assessment measures, such as assignments, in-class activities, projects, etc. 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 survey. Changes and improvements in the curriculum are made based on these evaluation results. There is also a suggestion box located outside of the programme student administration office. Furthermore, the programme dropout rate of 30, 40, or 50 per cent is relatively high.

ASOIU is composed of 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 with faculty and students. Students with disabilities as well as students in special family conditions with single or ill parents, or students with problems are provided with necessary assistance throughout the programme and examinations.

Appraisal:

The panel comes to the conclusion that the programme’s structure supports the successful implementation of the curriculum with special regard to the electives as well and is suitable to reach the defined learning outcomes. The programme consists of modules and assigns ECTS points per module and course on the basis of the necessary student workload. The modules provide detailed descriptions of intended learning outcomes and the information defined in the ECTS Users’ Guide.
Module descriptions were provided in English. However, the panel did not receive module descriptions for every module.

The university ensures gender equality and non-discrimination in the relationship with faculty and students. Students in special circumstances, such as foreign students are particularly assisted. The panel learnt that students with disabilities are supported with appropriate actions concerning time and formal standards/requirements throughout the programme and examinations, even when the number of students with disabilities at the university is very small.
The university provides exam regulations that inform the students about the process of exam organisation during the semester and the exam rules. ASOIU also provides transfer regulations: the study programme is designed so that students can study for a certain time at other HEIs. The panel learnt that students can apply for recognition of study periods abroad. The panel got the impression that recognition of study periods abroad is not problematic for students, as they are even encouraged to take part in exchange programmes as part of the university’s internationalisation strategy.

Even though student workload has not systematically been evaluated, students were satisfied with the actual workload and confirmed that finishing their studies within the planned period was possible. The general feasibility of the study programme's workload is ensured by a suitable curriculum design with plausible calculations of workload as well as an adequate number and frequency of continuing examinations throughout the courses and in total in each semester. The delivery of the study programme is well organised and interaction between students and staff works very well. Support services on academic and general issues are ensured by the lecturers and tutors. Statistical data from the study programmes of the Faculty showed dropout rates of 30, 40, 50 per cent or even higher in the last years. ASOIU explains that many of these students dropped out due to personal reasons. The panel learnt from the students that there is no relation to the feasibility why students drop out of their programme.

Nonetheless, in the view of the panel, dropout rates of this amount reduce the success of a study programme. Hence, the panel recommends observing and analysing the amount and given reasons of dropouts as well as taking measures to reduce the number of students who leave the university without finalising their studies.

		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

Faculty members are encouraged to use a variety of teaching methods and encourage interactive learning in order to promote learning and to accomplish the objective outcomes of the programme. Each method is individually oriented towards developing the student's knowledge and understanding. Such methods include:

- The case study/ exercise methods help to improve the student's critical thinking and decision making
- In-class presentations enable students 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
- Group projects teach students how to work as part of a team and teach them how to distribute tasks and responsibilities in an equitable manner
- In-class discussions help instructors measure the students level of understanding of topics discussed.

Students are motivated to actively participate in the courses and get marks, which have influence on the modules' final grades.

Nearly all the sources that are used by the instructors to teach students are the editions of European and American textbooks. A syllabus is distributed to students at the beginning of each course. It covers all the information about the sources recommended by the instructor. The alternative sources, including the links on online internet sources, are provided by instructors as well. All the main recommended textbooks are available at the ASOIU Library. The case studies and similar exercises conducted in class are also available in the textbooks or other sources which students are directed to, or are provided within the classes by the course instructors.

ASOIU knows about the importance of guest speakers/lecturers, especially from the industry, in order to give students a better understanding of the application of theory to practice. It contributes to the increase of students' qualifications. Guest lecturers are regularly invited, their contribution forms an integral part of the study programme's didactical concept.

Successful Master and doctoral students are used as lecturing tutors/teaching assistants to support the students in the learning process and to develop competences and skills, as well as providing administrative support to lecturers in the following ways:

- help students to think beyond the course and encourage them to actively participate in university life;
- prepare time schedules for lectures, exam schedules, distribute auditoriums;
- offer personal support on a range of topics that might include academic difficulty, emotional and social problems or illness;
- provide support for international students;
- collaborate with students, parents, instructors, administrators to determine student needs and problems and assist them accordingly.

Tutors work with students starting from the first year until graduation.

Appraisal:

The didactical concept of the study programme is described, plausible and oriented towards the programme objectives. The logic of the teaching methodology in principle is adequate to lead students to the final qualifications. It is described and explained in a transparent manner. The lecturers use a variety of teaching methods, which promote the theoretical knowledge as well as the application skills of the students. The teaching and learning concept encourages the students to participate actively in the courses for example by group projects or in-class discussions.

During the on-site visit the panel had the chance to examine examples of accompanying course materials. These are oriented towards the intended learning outcomes and correspond to the required level. They are handed out by the lecturers or accessible online. They are user-friendly and encourage students to engage in further independent studies.

The panel appreciates that guest lecturers are invited to ASOIU. They come from companies, the industry and from other Higher Education Institutions abroad. Through their guest lectures and insight in economy, they contribute to the students' qualification process with their special experience.

Every group of students has its tutors starting from the first year until graduation. They support the students in their individual learning process. Every tutor can be reached in defined office hours every day. They are also available via mail. Lecturing tutors contribute to the students' learning process and are systematically integrated into the teaching activities. Each tutor offers personal support on a range of topics that might include academic difficulty, emotional or social problems. The students are also encouraged to actively participate in university life. The tutors also help international students to get in touch with the universities

life. The panel appreciates that all students can develop social competences and skills among other things.

		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 Internationality

In terms of international and intercultural aspects, the whole programme is taught in English language. The curriculum, as specified in the objectives, also emphasises courses with an international focus and content (compulsory and elective). These courses provide students with the necessary skills to handle international tasks contributing to the students' employability. The programme prepares students to effectively work within the international working environment.

In total there are 352 students out of 9000 from different countries studying at the various graduate and undergraduate programmes:

- 259 who are studying at Bachelor level,
- 43 at Masters level,
- 6 at PhD level,
- 44 at foundations course.

These students have a wide range of their origin-country: they are from Turkmenistan, China, Vietnam, Greece, Uzbekistan, Turkey, Georgia, Yemen, Afghanistan, Iran, Syria, Kazakhstan, Pakistan, Germany, India, Russia, Iraq, and Ukraine.

ASOIU works with agents and representative offices in 22 countries to attract young people to study at the university. The personnel working in these offices guide prospective students by advising them in regards to their choices about the area of study.

The majority of the faculty members is from Azerbaijan, but some of them graduated from other countries, such as in the USA, Great Britain, Russia, Norway, etc. There are also some foreign teachers with extensive international academic and professional experience who are invited from time-to-time to deliver lectures at the programme. Some members of staff attend international conferences held in different countries to enhance their qualifications as well as publish academic articles in internationally recognised journals.

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

Appraisal:

International contents are part of the curriculum. Students are thus prepared for the challenges in an international working environment. Through practical examples, students are enabled to act in an intercultural environment.

With only 5% of international students the international composition of the student body is very low. Hence, the students do not benefit a lot from communicating and working with international students. Nevertheless, they study in an international environment because of the internationality of the guest lecturers and the faculty. The international composition of the faculty consists of teachers from different countries and teachers with international academic and professional experience. This composition promotes the acquisition of international competences and skills for the students. Moreover, the teaching language in the study programme is English. Hence, lectures and course materials are 100 per cent in English language. This is a key element and can be assessed above-average. Internationality plays a central role in the study programme's profile.

		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)

The curriculum of the programme promotes additional knowledge through modules like Azerbaijan History or Azerbaijani Language and culture of speech.

Students acquire managing, leadership, communication and public-speaking skills as well as cooperation and conflict handling from the courses at ASOIU. Additionally, students improve their communication skills by presenting their papers or projects and by preparing case studies. In addition, in the courses, students regularly work on group projects that help them to work effectively in teams, experience team dynamics and practice conflict resolution skills.

The leadership, communication and public speaking skills are acquired through such courses as "Operations Research" or "Introduction to multiculturalism". These help the students to enter the professional community easily and quickly.

Appraisal:

Through various methods the students acquire communication and public-speaking skills as well as cooperation and conflict handling skills in the study programme. This is documented in
the module descriptions. They are supported by means of suitable didactical and methodological measures, for example group projects.

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

3.6 Skills for employment / Employability (Asterisk Criterion)

The employability of graduates from the programme is based among others on the following elements:

- a strong link between theory and practice,
- the training of methodological competencies,
- English language courses,
- international content,
- the promotion of systematic work and
- training of social skills.

The language of instruction being 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.

The objective of the programme is to educate future specialists in computer engineering by applying major functional skills to manage any computer information activity. The programme aims to provide the knowledge, skills and abilities needed to become an effective computer engineer in a variety of organisational settings, both national and international. The curriculum has been designed to introduce the students to the major computer, production, business functional areas and organisational behaviour. The possession of these major functional areas improves the employability of the students.

Appraisal:

The programme's aim is to provide the students with skills of their appropriate professional field. To reach this aim the programme has combined theoretical knowledge with practical application both at a local/national as well as at an international level. The university has stated convincingly that graduates of the programmes find a profession shortly after graduation of the programme.

		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

The programme consists of both full-time and part-time members of staff. Full-time members are required to actively participate in programme's day-to-day activity and in the process of development, design and improvement of the curriculum as well. Part-time staff members are the representatives of private and public sectors, they provide teaching service for the programme, transferring the knowledge from the practice directly to the students.
The university provides extensive staff information for all programmes, where the qualification
level, the academic career and the main publications of each teacher are described.

The decision making structure in the faculty and the department is as follows: The department is under the control of the faculty as far as strategic decision making is concerned. The Dean has the overall responsibility of all the strategic decisions concerning the department belonging to the faculty. The Chairperson of the department is responsible about the day to day running of the department (including matters of the staff, secretarial staff, students, the laboratories and other teaching material). The Chairperson arranges meetings with the teaching staff at regular intervals to solve any problems by either contacting the Dean or to the appropriate staff of the university. Faculty members cooperate with each other e.g. when changes may be necessary in the curriculum. In addition, members of staff conduct scientific research and write academic papers together. Furthermore, the organisation of academic events such as conferences and the invitation of guest speakers are done in cooperation.

The Faculty involved in the programme at hand consists of 15 full-time lecturers (two of them are Professors, ten of them are Associate Professors, one of them is PhD holder, two have a Master degree- both of them with a PhD in progress). Furthermore, there are three part-time lecturers (one of them is Associate Professor, one of them is PhD holder, one has a Master degree with a PhD in progress).

As it's indicated, about 60% of the programme's staff have Doctor of Science or Philosophy doctor degrees. One of the important criteria in staff recruitment and employing process is the lecturer's academic qualification. About 40% of staff members are Master degree holders but their contribution to the teaching process on the programme is very important because of their experience in computer engineering. As part-time staff members work in various industry fields, their day-to-day activity is close to practice, so they are the first providers of the practical knowledge and experience to students. One of the major goals is to give students a set of practical knowledge applicable in business engineering fields. It provides the students with the advantage of experiencing the application of theory to practice. Additionally, ASOIU pays attention to questions of the invitation of guest speakers from various industry fields.

Students studying at ASOIU are always able to address the dean of their programme and ask all kind of questions related to their learning process. Students are provided with the information on descriptions of general and elective courses taught, the list of tutors, etc.
Successful Master and doctoral students are used as student tutors to support the students in the learning process. They act as a key point of contact for students with regular meetings throughout the student's programme. The tutors are responsible for guiding students in their course selection and registration process. They also provide academic support when students require and therefore student advisors are very familiar with the students. Due to student familiarity the tutors provide guidance in regards to career planning as well when students request, too.

Appraisal:

The structure and number of teaching staff correspond with the programme requirements. A list of all involved lecturers shows the availability of the required capacity to implement the programme. According to the CVs the academic ability and the practical experience of the teaching staff is in line with the requirements of the programme for teaching. The staff's pedagogical/ didactical qualifications are in line with their tasks and have been verified. Besides, a high number of lecturers have long-year experience in teaching. The teachers have the possibility to attend international conferences concerning e.g. their specialty. During the on-site visit the panel noticed that some of the teachers could improve their English language skills. The panel recommends to encourage their development of English language skills. The University wants to involve more instructors with PhD and Master's degree from different foreign universities. The panel appreciates that, but recommends to further strengthen the English language skills of the lecturers who already teach at ASOIU.

The practical business experience of the faculty corresponds to the requirement of the programme to integrate theory and practice. Besides the regular academic staff, there are teachers from the industry that teach in the programme.

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

As affirmed by students during the on-site visit, the counselling of students by staff and the tutors is intensive. Student support and coaching are an integral part of the services provided by the tutors and teaching staff. It is offered on a regular basis. Emails are answered fairly quickly. Where necessary, the students are given support with academic and related issues.

		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

The programme is managed by the Programme Director. He coordinates the activities of everyone involved in the programme. He has the responsibility of:

- training quality, organisation of educational, scientific, financial and economic activities and budget
- execution of the programme
- representing the programme in the relationship with government agencies and organisations
- identifying the programmes' administrative and functional management structure
- concluding labour contracts and other agreements with employees
- professional development, setting out their authorities, approving job descriptions
- approving regulations governing the activities of the programme
- identifying international relations, controlling its membership with foreign organisations,
- distributing of the courses to faculty members
- dealing with student issues that cannot be dealt with by the student tutors
- arranging meetings with members of staff to discuss programme issues and initiate any necessary changes.

An Advisory Board holds meetings on a regular basis to improve the programmes' quality.

All students are free to address the dean to be guided in any academic issues they may be facing. Students can also reach course instructors via e-mail addresses, provided to students by course syllabuses at the beginning of each semester, and also via the programme web page and the programme page created in Facebook.
The Foreign Students Department provides support to international students regarding the admission and registration procedures. The Department also arranges events to help enhancing the multicultural environment of the university.
Administrative staff consists of 13 employees. Academic studies, conducted by the members of staff, are financially supported. Funds are allocated by the programme so that the staff members can attend international conferences.

Appraisal:

As the panel came to know, the programme management coordinates the activities of everyone involved in the programme and ensures that the programme runs smoothly. It successfully takes initiatives to promote the systematic development of the study programme in a manner which includes all relevant groups. The process organisation, administrative support as well as decision-making processes and responsibilities are determined transparently.
Faculty members and students are supported by the administration in the organisation of the study programme. Several offices and services are responsible for the support of all involved parties in the study programme. Faculty members can attend training programmes to develop their skills.

An advisory board has been installed. The results of the advisory process are taken into account in the development of the programme.

		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

ASOIU has cooperation agreements with more than 58 other higher educational institutions. The network is used for exchange of students. Most of them are Russian or Turkish institutions. The other partner institutions are in countries like Kazakhstan, China, Ukraine or USA.

ASOIU uses learning agreements to ensure that the students' studies abroad are transferable into the appropriate programme.

Cooperation with companies and industry are mainly used for the invitation of guest speakers (see chapter 3.3) in order to give students a different perspective and a better understanding of the application of theory to practice. The information presented by these speakers shall contribute to the students' qualification and skills development.

Appraisal:

ASOIU has various cooperation agreements with higher education institutions.

Furthermore, the university uses its network of companies and industry to invite guest lecturers, which benefits all students by providing insights into practice (see chapter 3.3). Both kinds of cooperation bring benefits to students that participate in exchange or in the guest lectures.

		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

The building of the university consists of three floors. The programmes' floor is 500 m^2 including classrooms, offices, labs, and corridors. The table below describes the classrooms and the IT equipment of the university.

Table 4.2: Faculty classrooms, their capacities, and teaching equipment

Class-room	Area (m^2)	Student Capacity	Equipment of Teaching
Room 238-1	50m^2	66	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner /10 computers
Room 238-2	30 m^2	15	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-3	30 m^2	15	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner
Room 238-4	30 m^2	30	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-5	45 m^2	40	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-6	30 m^2	24	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-11	40 m^2	32	Whiteboard/ Computer/ Projector/ Internet connection
Room 238-12	18 m^2	10	Whiteboard/ Computer/ Projector/ Internet connection
Room 315-Linqofon	50 m^2	18	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner/Radio
Room 337	70 m^2	40	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner/
Room 263	57 m^2	10	Whiteboard/ Computer/ Internet connection
Room 303	30 m^2	24	Whiteboard/ Computer/ Projector/ Internet connection/ Air conditioner/
Room 1623	60 m^2	14	Whiteboard/ Computer/ Projector/ Internet connection/

Computer rooms for business simulation games and audio-training and lecture rooms are equipped with

- computers
- network
- Internet and
- audio-visual equipment.

The library is 1245 m^2 in size and keeps about one million books. All students are strongly encouraged to use the library effectively for their researches during their studies.

The Reading Hall is 217 m^2 in size and can serve 80 readers at once. It is equipped with computers and 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 each working day for 9:00–19:00 time interval. The library's staff consists of 18 persons.

Appraisal:

The quantity, quality, media and IT facilities of the teaching rooms meet the standards required for the programme. Access to the internet through laptops via wireless LAN is provided free of charge. A sufficient number of group rooms is available. The building is equipped with elevators. Nonetheless, there are some barriers that impede the access for disabled people to some rooms of the building. But ASOIU sufficiently assured to provide barrier free access in case that disabled students are enroled.

The opening hours of the library take students' needs sufficiently into account both during and outside of semester time. Access to the literature to digital media (e.g. electronic media, databases) is ensured. The literature expressly required for the study programme is available in a local library near to the rooms where the programme is offered.

		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

The career counselling services are provided at ASOIU Alumni and Career Center of the University. It is aimed to assist students and alumni in entering the job market. Students are also able to address the dean of the programme to achieve the information regarding career counselling and placement. Additionally students are able to find all appropriate information about career opportunities that are published periodically on the programme's web page and the Facebook group.
ASOIU wants to stay in continuous contact with its graduates who are kept up to date with the activities and developments of the university. On Facebook the ASOIU Alumni and Career Center has setup a network among the programme's graduates. Since two years, ASOIU also organises Alumni Celebration Ceremonies to keep in contact. For the university it is very important to inform the graduates as well as the students about the main activities like

- arranged trainings,
- seminars,
- conferences,
- career exhibitions,
- meetings with alumni and
- other news and information for alumni.

Appraisal:

Career counselling and placement services are offered to the students and graduates to promote their employability.

An alumni organisation has been set up with the aim of developing an alumni network. Moreover the panel appreciates that alumni activities as meetings and expert courses are planned foresighted. It is an integral part of the services and is offered on a regular basis. ASOIU provides sufficient resources.

		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		

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.5.2	Alumni Activities		X			

4.6 Financing of the study programme (Asterisk Criterion)

ASOIU is a state university. Moreover the source of financing is students' fees, too. Fees for education constitute the main source of the income. As ASOIU argues, financial activity is given by the fact that the number of students is not falling.

Appraisal:

ASOIU is financed by the Republic of Azerbaijan. The programme also finances itself through tuition fees, which cover the running costs. Therefore, this criterion, which refers in particular to private HEIs, the panel judges as fulfilled. The programme is funded for the entire accreditation period so that students will definitely be able to complete their studies.

		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

ASOIU strives for quality in teaching and aims to build up mechanisms that allow a continuous self-reflection of its performance that is based on results of a quality assurance system. The established quality assurance and development procedure of the university regularly and continuously monitors and develops the quality of the programmes regarding to its contents, implementation and outcomes.

At the end of each semester students are asked to complete an online survey for each of their courses in order to gain feedback in relation to the course and the course instructor. This survey is carried out through the e-university "unibook". The aim of the questionnaire is to acknowledge the administration to increase the quality of teaching and achievement. The results are analysed and provided to the Programme Director and the appropriate teacher. This process provides feedback resulting in making necessary improvements in order to increase the instructor's teaching quality and if necessary make improvements regarding to the content of courses.

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 base for discussing and identifying the issues and problems faced by the instructors and students. It is implemented in order to find suitable solutions to the emerging problems. Teacher with very good results are awarded.

The ASOIU Alumni and Career Center is also in continuous contact with the alumni, so any information provided can be used to make improvements to the programme if it's needed.

The content and curriculum of the programme is available on the university's web page. The programme's content and curriculum are also provided in promotional catalogues. Course plans, examination schedules and examination rules are announced online as well as on the programme's notice board positioned in front of the entrance of the programme hall. All relevant material is suitably documented and published and for everybody accessible.

Activities during the academic year are announced on the programme's web page, Facebook page and notice board. All the announcements regarding the programme documents or/and the programme related events and activities are also done by the programme's dean.

Appraisal:

The panel members came to the conclusion that ASOIU has specified quality targets for the development of programmes and regularly assesses their implementation. Its system of quality assurance and development is designed comprehensively so that continuous quality improvement of the institution can be achieved. There also exists a quality assurance and development procedure, which is used systematically to continuously control and monitor the quality of the programme.

The lecturers are involved in the process of quality enhancement via the "end of semester evaluation meeting" with the programme management. Evaluation by the students is carried out on a regular basis and in accordance with a described procedure. The course evaluation provide information on the students' satisfaction with their studies. The used survey for the course evaluation checks on various subjects. There is also a question regarding the workload.
There is no formalised process of informing the students about their course evaluation. The panel therefore recommends to provide the students with information on the results of

evaluations and quality assurance measures. The University states that tutors explain the results of the evaluation. The panel therefore recommends to formalize this procedure.

There is also no external evaluation by alumni, employers or other parties. The university informed the panel that they are planning to develop a survey for alumni, but it is currently in the formation process. The panel appreciates the plan of ASOIU to involve the alumni in their quality assurance. The panel recommends to implement a survey and to involve external parties more strategically in the quality assurance.

The study programme's aim and curriculum have been suitably documented and published. Students have access to all relevant information on the programme (e.g. regulation, course descriptions, information on examinations, etc.). In addition, the university regularly publishes current news and information 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 & Industry University

Bachelor programme:
Computer Engineering (Bachelor of Science)

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1	**Objectives**					
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		
2	**Admission**					
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)				Condition	
2.6*	Transparency and documentation of admission procedure and decision (Asterisk Criterion)			X		
3.	**Contents, structure and didactical concept**					
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					
3.2.1*	Modular structure of the study			X		

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
	programme (Asterisk Criterion)					
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		
4.3	Cooperation and partnerships					
4.3.1(*)	Cooperation with HEIs and other academic institutions or networks			X		

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
	(Asterisk Criterion for cooperation programmes)					
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		
5	**Quality assurance and documentation**					
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		