ASIIN Seal & Euro-Inf® & EUR-ACE®

Accreditation Report

Bachelor's Degree Programmes
Computer Sciences and Engineering
Software Engineering
Artificial Intelligence and Data Engineering
Electrical and Electronics Engineering

Provided by
International University of Sarajevo

Version: 26 June 2026

Table of Content

A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for [1]	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC)[2]
Računarske nauke i inžinjering	Computer Sciences and Engineering	ASIIN, EuroInf® Label	-/-	04
Softverski inžinjering	Software Engineering	ASIIN, EuroInf® Label	-/-	04
Umjetna inteligencija i inžinjering podataka	Artificial Intelligence and Data Engineering	ASIIN, EuroInf® Label	-/-	04
Elektrotehnika i elektronika	Electrical and Electronics Engineering	ASIIN, EUR-ACE® Label	AQ Austria in 2016, valid for five years	02
Date of the contract: 07.07.2025 **Submission of the final version of the self-assessment report:**25.02.2026 **Date of the onsite visit:** 21.-22.04.2026 **at:** Faculty of Engineering and Natural Sciences, International University of Sarajevo				
Expert panel: Prof. Dr. Milad Mirbabaie, University of Bamberg Prof. Dr. Isabel John, Technical University of Applied Sciences Würzburg-Schweinfurt Prof. Dr Jossy Sayir, University of Cambridge Assoc. Prof. Dr. Miloš Ljubojević, University of Banja Luka Mr. Milan Petrović, Student at University of Rijeka				

[1] ASIIN Seal for degree programmes; EUR-ACE® Label: European Label for Engineering Programmes; EuroInf®: Label European Label for Informatics;

[2] TC: Technical Committee for the following subject areas: TC 02 – Electrical Engineering/Information Technology; TC 04 – Informatics/Computer Science.

Representative of the ASIIN headquarter: David Witt	
Responsible decision-making committee: Accreditation Commission for Degree Programmes	
Criteria used: European Standards and Guidelines as of May 15, 2015 ASIIN General Criteria, as of March 28, 2023 Subject-Specific Criteria of Technical Committee 02 – Electrical Engineering/Information Technology as of December 9, 2011 Subject-Specific Criteria of Technical Committee 04 – Informatics/Computer Science as of March 29, 2018	

B Accreditation Status

Result Overview

The most recent decision for the ASIIN Seal was made by the ASIIN Accreditation Commission on 26.06.2026

Degree Programmes	ASIIN Seal	Validity	European Label	Validity
Ba Computer Sciences and Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Software Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Artificial Intelligence and Data Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Electrical and Electronics Engineering	Without requirements	30.09.2031	EUR-ACE®	30.09. 2031

Fulfilment of the Accreditation Criteria

ASIIN General Criteria / Subject-Specific Criteria	Ba Computer Sciencecs and Engineering	Ba Software Engineering	Ba Artificial Intelligence and Data Science	Ba Electrical and Electronics Engineering
1 Degree programme: Concept, Content & Implementation				
1.1 Objectives and learning outcomes (intended qualification profile)	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.2 Title of the degree programme	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.3 Curriculum	Fulfilled	Fulfilled	Fulfilled	Fulfilled

ASIIN General Criteria / Subject-Specific Criteria	Ba Computer Sciencecs and Engineering	Ba Software Engineering	Ba Artificial Intelligence and Data Science	Ba Electrical and Electronics Engineering
1.4 Admission requirements	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.5 Workload and credits	Fulfilled	Fulfilled	Fulfilled	Fulfilled
1.6 Didactics and teaching methodology	Fulfilled	Fulfilled	Fulfilled	Fulfilled
2 Exams: System, Concept and Organisation				
2 Exams: System, Concept and Organisation	Fulfilled	Fulfilled	Fulfilled	Fulfilled
3 Resources				
3.1 Staff and staff development	Fulfilled	Fulfilled	Fulfilled	Fulfilled
3.2 Student support and student services	Fulfilled	Fulfilled	Fulfilled	Fulfilled
3.2 Funds and equipment	Fulfilled	Fulfilled	Fulfilled	Fulfilled
4 Transparency and Documentation				
4.1 Module descriptions	Fulfilled	Fulfilled	Fulfilled	Fulfilled
4.2 Diploma and Diploma Supplement	Fulfilled	Fulfilled	Fulfilled	Fulfilled
4.3 Relevant rules	Fulfilled	Fulfilled	Fulfilled	Fulfilled
5 Quality Management: Quality Assessment and Development				
5 Quality Management: Quality Assessment and Development	Fulfilled	Fulfilled	Fulfilled	Fulfilled

Accreditation History

The programmes have not been previously accredited by ASIIN.

C Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF[3]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Computer Sciences and Engineering (CSE)	Baccalaureus/Baccalaurea inžinjer/inžinjerka računarstva I inžinjeringa/ Bachelor of science (B.Sc.) in Computer sciences and Engineering	• Computer system organization • Software engineering • Computing methodologies	6	Full time	-/-	8 semesters	240 ECTS	2004/05
Software Engineering (SE)	Baccalaureus/Baccalaurea inžinjer/inžinjerka softverskog inžinjeringa/ Bachelor of Science (B.Sc.) in Software Engineering.	• Computer system organization • Software engineering • Computing methodologies	6	Full time	-/-	8 semesters	240 ECTS	2015/16
Artificial Intelligence and Data Engineering (AIDE)	Baccalaureus/Baccalaurea inžinjer/inžinjerka umjetne inteligencije I inžinjeringa podataka/ Bachelor of Science (B.Sc.) in Artificial Intelligence and Data Engineering	• Computer system organization • Software engineering • Computing methodologies	6	Full time	-/-	8 semesters	240 ECTS	2022/23
Electrical and Electronics Engineering (EEE)	Baccalaureus Inžinjer Elektrotehnike i Elektronike / Bachelor of Science (B.Sc.) in Electrical and Electronics Engineering	• Electrical Engineering and Electronics • Automation and Electronics • Electric Power • Signal Processing and Telecommunications.	6	Full time	-/-	8 semesters	240 ECTS	2012/13

[3] EQF = The European Qualifications Framework for lifelong learning

Contextualisation

The International University of Sarajevo (IUS) was established in 2003 by the Foundation for the Development of Education. It is the largest foundation-based private university in Bosnia and Herzegovina.

The university offers study programmes at the undergraduate, master's, and doctoral levels. English is used as the official language of instruction and institutional communication. IUS hosts a diverse academic community comprising approximately 2,000 students and more than 200 academic and administrative staff from over 12 countries, with students originating from more than 45 countries.

The institutional structure consists of six academic units: the Faculty of Engineering and Natural Sciences (FENS), the Faculty of Business and Administration (FBA), the Faculty of Arts and Social Sciences (FASS), the Faculty of Law (FLW), the Faculty of Education (FEDU), and the Faculty of Medical Sciences (FMS). The four programmes under review are located in the Faculty of Engineering and Natural Sciences (FENS), which comprises the Department of Natural Sciences and the Department of Engineering.

As IUS states in its Self-Assessment Report, "[the] ICS-related programmes (CSE, SE, AIDE) form the computing- and informatics-oriented strand of engineering education at IUS. They were introduced progressively to strengthen the university's profile in computer science and to respond to evolving developments in information technologies, computing, and labour-market demands. CSE, launched in 2004, was the first computing programme at IUS and laid the foundation for this field. SE, introduced in 2015, expanded the portfolio by emphasising applied software development and engineering practice. AIDE, established in 2022, reflects the growing importance of data-centric and AI-driven technologies in both academia and industry. The ICS-related programmes fall under the Technical Sciences area, specifically within the Information and Computing Engineering field. Most core courses align with the scientific branches of Computer System Organisation, Software Engineering and Computing Methodologies. In addition, compulsory mathematics components in Theoretical Mathematics, Applied Mathematics and Probability and Statistics provide a common analytical foundation across the curricula.

Alongside the ICS-related programmes, Electrical and Electronics Engineering (EEE) represents another strand of engineering education at IUS. It offers a curriculum focused, but not limited to, circuits, electronics, power, control and embedded systems. The EEE has four scientific branches of Electrical Engineering and Electronics, Automation and Electron-

ics, Electric Power and Signal Processing and Telecommunication. The program under the original name ‘Microelectronics’ was established in 2004. In 2012 academic year the program was revised and changed its title to Electrical and Electronics Engineering Study Program (EEE), along with changes to the corresponding titles for each cycle of study.”

D Expert Report for the ASIIN Seal[4]

1. The Degree Programme: Concept, Content & Implementation

Criterion 1.1 Objectives and Learning Outcomes of a Degree Programme (Intended Qualifications Profile)

Evidence:

- Self-Assessment Report
- Book of Rules on Adoption, Changes and Evaluation of Study Programs
- AT THE INTERNATIONAL UNIVERSITY OF SARAJEVO
- Module handbook of each degree programme
- Objective-module-matrix for each degree programme
- Diploma Supplement for each degree programme
- Faculty and programmes' websites
- Discussions during the audit

Preliminary assessment and analysis of the experts:
The experts base their assessment of the learning outcomes on the information provided in the module descriptions and in the Self-Assessment Report of the four degree programmes under review. For each degree programme, IUS has described Educational Objectives (EOs) and Programme Learning Outcomes (PLOs). The EOs and PLOs are published on the faculty's websites and easily accessible for students as well as other stakeholders. Furthermore, there are regular revision processes in place that take into account feedback by external and internal stakeholders.

The experts refer to the Subject-Specific Criteria (SSC) of the Technical Committees Informatics/Computer Science (SSC 04) and Electrical Engineering/Information Technology (SSC 02) and use the objective-module-matrices and module descriptions for each programme

[4] This part of the report applies also for the assessment for the European subject-specific labels. After the conclusion of the procedure, the stated requirements and/or recommendations and the deadlines are equally valid for the ASIIN seal as well as for the sought subject-specific label.

as a basis for judging whether the intended learning outcomes correspond with the competences as outlined by the respective SSC.

The experts note that the relationship between EOs and PLOs has been established in a comprehensible and logical manner. The development of EOs of each study programme under review involves both internal and external stakeholders so that the curricula can be adapted and modified according to the needs of the industry and the graduates on a regular basis. For example, IUS regularly conducts surveys, through which the different stakeholders get the chance to assess the programmes and their main objectives and adapt them if necessary. Internal stakeholders include all of IUS members (students, teaching staff, and non-academic employees), while the external stakeholders include the industry, alumni, the government, and society.

For the Bachelor's degree programme in Computer Sciences and Engineering, IUS defines the following Educational Objectives (EOs) and Programme Learning Outcomes (PLOs):

"Educational Objectives:

- **EO1**. Seek professional and academic opportunities in computing, engineering, and related fields, applying strong foundations in algorithms, systems, and software development.
- **EO2**. Pursue continuous learning and advanced studies to strengthen their analytical, problem-solving, and technical expertise.
- **EO3**. Contribute to the design and development of software and computer systems by applying systematic engineering approaches in professional and research projects.
- **EO4**. Assume leadership, research, or entrepreneurial roles in technology-driven industries, academia, and organizations.
- **EO5**. Demonstrate awareness of ethical, legal, and societal responsibilities in the practice of computer science and engineering.

Learning Outcomes:

- **LO1**. Demonstrate a sound knowledge of the basic theoretical aspects of computer science and engineering, with a focus on software development practices, algorithms and computer systems organization, and other various computing areas.
- **LO2**. Apply the necessary strong mathematical skills and logical reasoning to solve engineering and scientific problems.
- **LO3**. Effectively document and analyze requirements and translate them into an implementable design using different design patterns applied in the industry.

- **LO4**. Analyze, design and develop software systems by following recommended concepts, principles and practice of the industry.
- **LO5**. Show an ability to communicate effectively, work in a team and understand social, professional, legal and ethical issues related to computing."

Furthermore, IUS presents the following potential career paths for graduates in its Self-Assessment Report: "CSE graduates are trained to be able to work both in industry and pursue further specialisation in academia. The competence profile prepares them for diverse professional roles across the IT sector and related domains, including software developer or designer, systems developer, web developer, network architect or administrator, database specialist, IT consultant, cybersecurity analyst, researcher, and academic careers."

For the Bachelor's degree programme in Software Engineering, IUS defines the following Educational Objectives (EOs) and Programme Learning Outcomes (PLOs):

"Educational Objectives:

- **EO1**. Seek professional and academic opportunities in software engineering and related fields, applying systematic approaches to the design, development, and maintenance of high-quality software systems.
- **EO2**. Pursue lifelong learning and advanced studies to deepen their expertise in modern software engineering methods, tools, and technologies.
- **EO3**. Contribute to complex software projects by applying engineering principles, scientific methods, and quality practices across all stages of the software life cycle.
- **EO4**. Assume leadership, research, or entrepreneurial roles in software-driven industries, academia, and innovation-oriented organizations.
- **EO5**. Demonstrate professional integrity, responsibility, and awareness of ethical and societal impacts in the practice of software engineering.

Learning Outcomes:

- **LO1.** Demonstrate understanding of fundamental knowledge in software engineering through a systematic approach to the development, deployment, and maintenance of software across its life cycle stages.
- **LO2.** Apply systematic methods and tools to design, implement, and evaluate software systems across their life cycle.
- **LO3.** Apply necessary and systematic methods prescribed for executing specific software engineering tasks under certain assumptions.

- **LO4.** Perform a wide spectrum of tasks including project planning and estimation, system and software requirements analysis, data structure design, program architecture definition, coding, testing, and maintenance.
- **LO5.** Explain and apply the scientific method, research approaches, and modelling techniques in software engineering.
- **LO6.** Utilize modern tools and methods to automate and optimize software development activities, including project management and CI/CD pipelines.
- **LO7.** Analyze and critically evaluate all phases of software design with a systematic approach to testing, quality assessment, maintenance, and the software product's life cycle.
- **LO8.** Communicate effectively, work collaboratively in diverse teams, and apply ethical and professional standards in software engineering practice."

Furthermore, IUS presents the following potential career paths for graduates in its Self-Assessment Report: "SE graduates work across the private and public sectors, including IT and software companies, telecommunications, finance, healthcare, manufacturing, start-ups and public administration, as well as in the IT functions of non-IT organisations. The competence profile sup-ports roles throughout the software life cycle, such as software developer, systems analyst, quality-assurance engineer, software architect, IT consultant, and project or process manager. Graduates may also progress to research and academic careers or continue to post-graduate programmes at IUS and internationally."

For the Bachelor's degree programme in Artificial Intelligence and Data Engineering, IUS defines the following Educational Objectives (EOs) and Programme Learning Outcomes (PLOs):

"Educational Objectives:

- **EO1**. Seek employment as a computer scientist with expertise on artificial intelligence and data, in local and global industries and organizations, with the ability to use fundamental knowledge, computational principles, and skills in data science to create software of varying size and complexity for various application areas.
- **EO2**. Show an ability to continue learning throughout their career (such as through professional, technical, or postgraduate education), which can enhance their analytical and critical thinking skills and prepare them for advanced computer and data science practices and contribute to the intellectual foundations of the data science field.

- **EO3**. Participate in numerous software projects where they demonstrate proficiency in using theoretical computing knowledge to analyse, model, design, develop, and evaluate computing solutions.
- **EO4**. Become leaders or entrepreneurs in the field of data science.
- **EO5**. Demonstrate an understanding of professional ethics and social responsibility as a data scientist.

Learning Outcomes:

- **LO1**. Analyze complex computing problems and apply computing principles and other relevant disciplines to identify solutions.
- **LO2**. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- **LO3**. Communicate effectively in various professional contexts.
- **LO4**. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- **LO5**. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- **LO6**. Apply theory, techniques, and tools throughout the data analysis lifecycle and employ the resulting knowledge to satisfy stakeholders' needs.
- **LO7**. Develop a complete comprehension of the theoretical and practical aspects of Artificial Intelligence related to creating, designing, implementing, and evaluating data-intensive systems."

Furthermore, IUS presents the following potential career paths for graduates in its Self-Assessment Report: "Graduates of the programme have career opportunities such as data analyst, data engineer, database administrator, data scientist, business analyst and artificial intelligence engineer. In addition, AIDE provides opportunities in fields where data products and software platforms are developed, or where the application of machine-learning and artificial-intelligence algorithms is required."

For the Bachelor's degree programme in Electrical and Electronics Engineering, IUS defines the following Educational Objectives (EOs) and Programme Learning Outcomes (PLOs) (see more details in Appendix):

"Educational Objectives:

- **EO1**. To apply the basic principles and methods of electrical and electronics engineering in the broad field of applications.

- **EO2** To apply mathematical and scientific reasoning in a variety of electrical and electronics engineering problems.
- **EO3** To design, implement and properly document solutions to complex problems in the field of electrical engineering.
- **EO4** To analyze and compare alternative solutions to problems in the field of electrical and electronics engineering.
- **EO5** To use various specific software and hardware for the analysis and design of electrical and electronic systems.
- **EO6** To participate in teamwork on the design and implementation of solutions to problems in the field of electrical and electronics engineering.
- **EO7** To communicate clearly and concisely, orally and in writing.
- **EO8** To think critically and creatively, independently and in a team.
- **EO9**To recognize the social and ethical responsibilities of professional work
- **EO10** To monitor the development and apply new achievements in the field of electrical and electronics engineering.

Learning Outcomes:

- **LO1** Explain the broader multi-disciplinary context of Engineering Sciences.
- **LO2** Use sound knowledge in mathematics, natural sciences and engineering to explain the complex phenomena peculiar to electrical engineering technology, in particular electrical circuits, analogue and digital electronics, electromagnetism, signal processing and control theory.
- **LO3** Identify, classify and describe the performance and general quality attributes and possible trade-offs within the given problem of electrical engineering systems.
- **LO4** Identify, model and solve engineering problems in electrical and electronics engineering.
- **LO5** Use software and hardware tools, as well as laboratory equipment to design, test and evaluate analogue and digital electric and electronic circuits, devices and products.
- **LO6** Use relevant technical literature and other sources of information relating to problems given.
- **LO7** Use up-to-date techniques and tools for electrical and electronics engineering applications.
- **LO8** Apply the processes and methods of scientific inquiry, including the search and retrieval of scientific information, the formulation of scientific hypotheses, the design and conduct of experiments, and the analysis and interpretation of data.
- **LO9** Independently collect and interpret relevant data pertaining to the topics of interest in the field of electrical and electronics engineering.

- **LO10** Use data-base systems, information on norms, guidelines (codes of good practice) and safety regulations in their field of electrical and electronics engineering.
- **LO11** Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations through project-oriented work.
- **LO12** Analyze and communicate effectively in written and oral English language, document and deliver professional work in their own field and in neighboring fields using modern technical and visual means.
- **LO13** Work effectively on technical tasks individually or in a team and coordinate the team if necessary."

Furthermore, IUS presents the following potential career paths for graduates in its Self-Assessment Report: "Graduates enjoy a wide range of career opportunities in the energy sector, telecommunications, automation, electronics design, education, and other high-tech industries. Their competence profile supports roles such as electrical engineer, electronics designer, systems engineer, embedded systems developer, network engineer, automation specialist, power systems engineer, and researcher."

In the experts' opinion, the intended qualification profiles of all four programmes under review are generally clear, plausible and allow students to take up an occupation, which corresponds to their qualification. They learn that the graduates of IUS are much sought after in the labor market. The representatives of industry emphasize the high quality of the graduates of the programmes under review. In addition, the industry states that they are very satisfied with the scope of the collaboration with the university. Furthermore, students as well as graduates also state that they are satisfied with and well aware of their good job perspectives.

The experts merely note that the university states, with regard to the two Bachelor's degree programmes Computer Science Engineering and Electrical and Electronics Engineering, that graduates could subsequently work as researchers. However, the experts do not entirely agree with this. They acknowledge that completing a bachelor's degree lays the initial foundation and that graduates could subsequently pursue a master's degree to continue on the path to becoming a researcher; but immediately after completing a Bachelor's degree, the experts do not yet see sufficient skills to tell graduates that they could subsequently become researchers. They therefore recommend that the university reconsider the career profile of the researcher for the two Bachelor's degree programmes Computer Science Engineering and Electrical and Electronics Engineering.

In summary, the experts confirm that all four degree programmes under review adequately reflect EQF 6 level (Bachelor's programmes). This can also be confirmed based on the module descriptions and discussions. The learning outcomes are consistent with the ASIIN SSC 04, respectively SSC 02, and therefore also with the criteria of the Euro-Inf Label, respectively the EUR-ACE label. They aim at the acquisition of specific competences and are well-anchored and binding. However, regarding the Bachelor's degree programmes Computer Sciences and Engineering and Electrical and Electronic Engineering, the experts recommend reconsidering the career profile of a researcher.

Criterion 1.2 Name of the Degree Programme

Evidence:

- Self-Assessment Report
- Samples of the Diplomas
- Diploma Supplement for each degree programme
- Discussions during the audit

Preliminary assessment and analysis of the experts:
The experts confirm that the English titles of each degree programme under review, and their Bosnian translation, correspond with the respective intended aims and learning outcomes as well as the main course language, which is English in all four programmes.

Criterion 1.3 Curriculum

Evidence:

- Self-Assessment Report
- Study plan of each degree programme
- Module descriptions
- Syllabi (*available on E-Campus*)
- Objective-Course-Matrices
- Book of Rules on Adoption, Changes and Evaluation of Study Programs
- Book of Rules on Recognition of Foreign Higher Education Qualifications
- Website for internship information: *https://scc.ius.edu.ba/internship* and *https://scc.ius.edu.ba/internship-partner-companies*
- Website International Relations Office (IRO): *https://iro.ius.edu.ba/*
- Book of Rules on Participation in Exchange Programmes (*available on the university website*)
- Action Plan for Internationalisation Strategy: 2024–2029 (*available on the university website*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:
Content & Structure of the Programmes

The curricula of the Bachelor's degree programmes under review are reviewed by the experts in order to identify whether the described programme objectives and learning outcomes can be achieved by the available modules. Course descriptions as well as overviews and competence-subject matrices matching the general learning objectives and the module contents were provided for a thorough analysis. In the Self-Assessment Report as well as in further supporting evidence (Objective-Course-Matrices), the university gives a detailed overview of how the competences acquired with the curricula presented correspond to the learning outcomes of SSC 04 & SSC 02. The curricula are designed to comply with the programme objectives and learning outcomes and they are subject to constant revision processes.

The curricula of all four Bachelor's degree programmes are each designed for 8 semesters and offered as full-time study programmes. To complete each programme, graduates must complete at least 240 ECTS points. The students can extend their study time if needed. In its Self-Assessment Report, IUS explains that each "curriculum organises courses from in-

troductory to senior level to ensure progressive development across the study programme. It also specifies the conditions for junior and senior standing and outlines the requirements for a mandatory work placement/internship. It includes a graduation project in which senior students, individually or in teams, work under the guidance of a mentor. Project topics can be derived from ongoing research and projects or proposed in cooperation with industry partners. The graduation project coordinator oversees the preparation, submission, and evaluation of graduation projects, maintaining quality and consistency across all programmes." Each curriculum consists of individual modules/courses, each of which can be assigned to one of five categories: mandatory courses, free electives (any course offered at university), university electives (pool of introductory courses at university level, including foreign languages), faculty electives (pool of courses offered at faculty level), and programme electives (offering specialized courses within a single programme). Furthermore, in all four programmes under review, there is a mandatory internship in the last year with a scope of six ECTS points, as well as a graduation project, which also consists of six ECTS points.

The Bachelor's degree programme Computer Sciences and Engineering consists of 30 mandatory courses (177 ECTS), three university electives (2 of them foreign language) for nine ECTS points, one free elective (6 ECTS), two faculty electives (12 ECTS), and six programme electives (36 ECTS). In its SAR, IUS sums the curricular structure up as follows: "The curriculum begins with foundation courses in mathematics, physics, and programming in the early semesters. In the first year, students also develop effective communication skills, are introduced to the fundamental principles of engineering, and take foreign-language electives. The middle semesters focus on core computer science and engineering courses. In the later semesters, students undertake the Work Placement/Internship and programme electives, culminating in the Graduation Project."

The Bachelor's degree programme Software Engineering consists of 28 mandatory courses (165 ECTS), four university electives (2 of them foreign language) for 15 ECTS points, one free elective (6 ECTS), three faculty electives (18 ECTS), and six programme electives (36 ECTS). In its SAR, IUS sums the curricular structure up as follows: "The curriculum begins with foundation courses in mathematics and programming in the early semesters. In the first year, students also develop effective communication skills, are introduced to the fundamental principles of engineering, and take foreign-language electives. The middle semesters focus on core software engineering. In the later semesters, students complete the Work Placement/Internship and programme electives, and the sequence culminates in the Graduation Project."

The Bachelor's degree programme Artificial Intelligence and Data Engineering consists of 27 mandatory courses (159 ECTS), four university electives (2 of them foreign language) for

15 ECTS points, two free elective (12 ECTS), two faculty electives (12 ECTS), and seven programme electives (42 ECTS). In its SAR, IUS sums the curricular structure up as follows: “The curriculum moves from foundations in programming, data structures, databases, calculus, linear algebra, discrete mathematics, probability and statistics to core AI and data courses such as Artificial Intelligence, Introduction to Machine Learning, Data Mining, Deep Learning, Big Data Analytics and Applied Data Engineering. It culminates in integration through the Graduation Project and a structured internship. Programme electives provide depth and specialisation in AI and data-engineering topics.”

The Bachelor’s degree programme Electrical and Electronic Engineering consists of 29 mandatory courses (174 ECTS), two university electives (both of them foreign language) for six ECTS points, one free elective (6 ECTS), two faculty electives (12 ECTS), and seven programme electives (42 ECTS). In its SAR, IUS sums the curricular structure up as follows: “The first year of study provides students with a fundamental knowledge of mathematics, physics, electrical and programming. In the first year, students develop effective communication skills and are introduced to the fundamental principles of engineering. In addition, students study foreign language elective courses. The second and third year of study are focus mainly on core courses related to electrical and electronic engineering such as Analogue Electronics I, Electrical Circuits II, Instrumentation and Measurements, Electromagnetism I, System Modelling, Digital Design, Control System Desing, Power Systems, Electrical Machines, and Embedded Systems. In addition, Mathematic courses, interdisciplinary courses and faculty and program electives courses take place in the second and third year. The last year has three required courses namely Project Management, Work Placement/Internship and Graduation Project. In addition, students choose a free elective, faculty elective and program elective courses in their last year after consultation with their academic advisor.”

An internship (also called “Work Placement”) is a mandatory part of each curriculum under review. As described in the Self-Assessment Report, “[the] internship has a minimum duration of 30 days (25 working days) and is evaluated as 6 ECTS credits. […] The Student Internship Application Form is used to obtain approval from the internship coordinator, who verifies the company and ensures the tasks assigned to the student are relevant to their field of study, providing a meaningful hands-on experience that complements their academic learning. The evaluation process involves both the industrial mentor and the internship coordinator” In the end, students have to prepare an internship report as final examination of this course.

Overall, the experts are satisfied with the curricula of all four Bachelor's degree programmes under review. They see that the programmes are well structured and that the modules build on each other in a reasonable way, enabling the students to effectively reach the learning outcomes as laid down for each programme as a whole. Furthermore, the experts confirm that the programmes cover up-to-date content and that the curricula are regularly updated to latest development.

During the audit, the experts primarily discuss the length of the internship with the programme coordinators. Whilst they generally support the inclusion of a compulsory internship, they note that 25 working days (5 hours each) is relatively short to provide students with sufficient practical experience. This is consistent with reports from university officials that many students voluntarily extend their internships. According to the university, this is supported by the institution. Students are also advised to undertake the internship during the summer break between semesters in order to have more time for it. Overall, students report positive experiences with the placement. On the one hand, it is well organised and the university provides good support with the arrangements. On the other hand, students value the experience highly and also report job opportunities that arose following placements even before they had completed their studies. The industry partners also report positive experiences, meaning that all parties could envisage expanding the placement to a greater extent. The experts, too, are of the opinion that the internship should be expanded to allow students to spend a longer period in a real-world environment. Furthermore, this could then be integrated more closely with the graduation project. The graduation project itself is worth only six ECTS credits, which is at the lower end of the scale for graduation theses in Bachelor's programmes. The experts are of the opinion that either the internship or the final project should be expanded. This would give students the opportunity to engage with a (practical) topic for a longer period and on a larger scale. This could then be reflected accordingly in the requirements for the reports/final project; for instance, with a larger scope, more in-depth work could be expected. Overall, the experts are convinced that it would be beneficial to expand at least one of these two elements within the respective curricula, in order to provide students with the experience of working on a larger project over a longer period. Where appropriate, the internship phase and the graduation project could then also be systematically combined or built upon one another.

Otherwise, the experts are very much in agreement with the content of the individual programmes. It is only in the case of the Bachelor's degree programme Artificial Intelligence and Data Engineering that the experts believe ethical aspects could be given greater prominence in the (compulsory) curriculum. As it is a dedicated AI degree programme, following

the experts' opinion, the topics of ethics and social responsibility should be accorded a correspondingly significant role.

In summary, the experts note that, overall, all four programmes under review are of high standard and well-structured, and are consistent with the defined learning objectives. They merely recommend to increase whether the scope of the graduation project or the internship, and for the Bachelor's degree programme Artificial Intelligence and Data Engineering, they recommend to more integrate ethical aspects in the curriculum.

Periodic Review of the Curricula

According to the SAR, the periodic review of the curriculum at the IUS is regulated by several internal documents, including the *Statute*, the *Book of Rules on Adoption, Changes and Evaluation of Study Programmes*, and the *QA Rule Book*. These regulations define the procedures and responsibilities for ensuring the continuous development and quality assurance of study programmes.

As described in the SAR, curriculum review processes are designed to ensure that the combination of modules supports the intended academic level and that courses remain aligned with programme learning outcomes and national qualification standards. Periodic curriculum reviews involve the assessment of courses in relation to these objectives. In addition, the SAR reports that annual programme evaluations are conducted. These include the analysis of pass rates, student feedback, and reports from academic advisors. The outcomes of these evaluations are used to inform potential improvements to the respective curriculum.

The *Book of Rules on Adoption, Changes and Evaluation of Study Programmes* stipulates that internal programme evaluation (self-evaluation) is carried out continuously and at least once after the completion of a study cycle. Furthermore, course analyses and an annual programme analysis report are prepared at the end of each academic year. These reports examine teaching outcomes within the curricula and include proposals for improvement measures.

The experts are able to ascertain that the curricula of all programmes under review are periodically reviewed with regard to the implementation of the programme objectives and learning outcomes. The experts welcome the fact that the university takes into account feedback from various stakeholders when reviewing its programmes. The SAR provides several documented examples of curricular changes resulting from these review processes, indicating that the procedures are actively applied and documented.

Mobility

According to the SAR, internationalisation activities at the IUS are primarily coordinated by the International Relations Office (IRO), which is responsible for implementing the university's international educational policy and promoting the institution abroad. The IRO initiates and manages cooperation agreements and supports the exchange of students, as well as academic and administrative staff, within frameworks such as Erasmus+, and other exchange programmes. Calls for participation in exchange programmes are communicated mainly through internal channels, in particular via email and the university website. The procedures governing student mobility, including application processes, selection criteria, duration of mobility, and credit transfer, are regulated by the Book of Rules on Participation in Exchange Programmes.

Information on the number of incoming and outgoing students in the programmes under review is provided in the following tables (the new programme AIDE does not yet have any substantial mobility numbers):

Computer Sciences and Engineering:

Year	Incoming Students (Total)	Outgoing Students (Total)
2020-2021	0	6
2021-2022	2	2
2022-2023	5	0
2023-2024	1	3
2024-2025	6	4

Software Engineering:

Year	Incoming Students (Total)	Outgoing Students (Total)
2020-2021	0	6
2021-2022	0	1
2022-2023	0	0
2023-2024	0	2
2024-2025	1	10

Electrical and Electronics Engineering:

Year	Incoming Students (Total)	Outgoing Students (Total)
2020-2021	3	1
2021-2022	3	2
2022-2023	2	2
2023-2024	2	4
2024-2025	1	4

The experts positively acknowledge that internationalisation is given strategic importance at institutional level and is actively supported by the university leadership. In the discussion with the Rector, it becomes evident that the university pursues a comprehensive internationalisation strategy, which includes both student and staff mobility as well as the continuous alignment of the curriculum with international standards and criteria.

The experts are able to ascertain that the programmes promote (international) student mobility through an appropriate and well-established framework. Furthermore, students are supported in planning and organising their mobility through dedicated institutional structures, such as the International Relations Office and programme-specific Erasmus coordinators. In addition, students have access to scholarship opportunities, which contribute to the financial feasibility of study-related stays abroad.

During the discussions, students confirm that they are regularly informed about mobility opportunities, for example via emails regarding Erasmus+ programmes. They also report that the recognition of credits obtained abroad functions reliably and without significant obstacles. Credits earned during mobility are generally recognised without extending the standard period of study, indicating that the programme is structured in a way that facilitates mobility and avoids structural barriers. Overall, the students express a high level of satisfaction with the existing framework conditions for mobility, which is explicitly welcomed by the experts.

However, during the on-site discussions, some students reported that the information provided about the partner universities was not always entirely up to date. In some cases, for example, students had looked at courses at the external university whilst still at IUS, on the assumption that these would be easily recognised upon their return. However, once they arrived at the other university, it turned out that the information was no longer entirely up to date and not all courses were being offered as originally expected. This could subsequently lead to problems with recognition, or the outgoing students were unable to attend as many courses abroad as had previously been agreed and planned. However, the students also note that these were isolated cases and that there is no systemic problem. The experts can also understand that the IUS cannot always be in control when there are (short-term) changes at the partner universities about which they themselves were not informed. Nevertheless, the experts would like to record the students' comments here and therefore recommend to the university to better communicate with the Erasmus partner institutions to ensure that the provided information about the offered courses at the other institution are always up-to-date.

Criterion 1.4 Admission Requirements

Evidence:

- Self-Assessment Report
- IUS Statute (*available on the university website*)
- Student Admission Policy (*available on the university website*)
- Book of Rules on Recognition of Passed Courses and of Their Equivalence at the International University of Sarajevo (*available on the university website*)
- Book of Rules on Recognition of Foreign Higher Education Qualifications (*available on the university website*)
- Website on Admission: *https://sao.ius.edu.ba/en/admission*
- Website on Qualification Recognition: *https://www.ius.edu.ba/en/qualification-recognitions*
- Website on Tuition Fees and Scholarships: *https://www.ius.edu.ba/en/tuition-fees-scholarships*
- Admission rate statistics
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, admission procedures at the IUS are regulated at institutional level and involve several governing bodies. The Faculty Council proposes enrolment quotas, while the Senate adopts a decision on the publication of the admission call, including the defined quotas for all study cycles. This decision is subsequently submitted to the competent Ministry for final approval.

As reported in the SAR, the selection of candidates is carried out by an admission committee appointed by the Rector, in accordance with criteria defined by law, university regulations, and the official enrolment announcement. The general framework for admission is set out in the IUS Statute. For first-cycle programmes, applicants are required to hold a four-year secondary school qualification (or equivalent) and demonstrate English language proficiency at B2 level. As stated in the Self-Assessment Report, "[for] national students, applications are handled by the Student Affairs Office (SAO). International applicants apply through the International Admission Office within the International Relations Office. In accordance with Article 99(6) – (7), candidates who completed secondary education abroad may participate in the procedure, and, if they meet the requirements of the call, may be conditionally enrolled, prior to recognition of their secondary-school qualification."

Information on admission requirements, tuition fees, and available scholarships is published on the university's website. Students during the on-site discussions testify that they are informed in detail about the requirements and the necessary steps to apply for admission into the degree programmes under review.

IUS provides the following data on available study places and the number of admitted students in the different programmes in recent years:

Computer Sciences and Engineering

Year	Available Seats	Admitted Students	Admission Rate (%)
2020/2021	100	28	(28 / 100) × 100 = 28.00%
2021/2022	100	48	(48 / 100) × 100 = 48.00%
2022/2023	100	73	(73 / 100) × 100 = 73.00%
2023/2024	120+10	77	(77 / 130) × 100 = 59.23%
2024/2025	120+10+20+10	90	(90 / 160) × 100 = 56.25%

Software Engineering

Year	Available Seats	Admitted Students	Admission Rate (%)
2020/2021	100	37	(37 / 100) × 100 = 37.00%
2021/2022	120	100	(100 / 120) × 100 = 83.33%
2022/2023	160	113	(113 / 160) × 100 = 70.63%
2023/2024	200	200	(200 / 200) × 100 = 100.00%
2024/2025	200	96	(96 / 200) × 100 = 48.00%

Artificial Intelligence and Data Engineering

Year	Available Seats	Admitted Students	Admission Rate (%)
2023/2024	80	38	(38 / 80) × 100 = 47.50%
2024/2025	100	37	(37 / 100) × 100 = 37.00%

Electrical and Electronics Engineering

Year	Available Seats	Admitted Students	Admission Rate (%)
2020/2021	80+30	14	(14 / 110) × 100 = 12.73%
2021/2022	80+30	30	(30 / 110) × 100 = 27.27%
2022/2023	60+30	37	(37 / 90) × 100 =41.11%
2023/2024	60+30	43	(43 / 90) × 100 =47.78%
2024/2025	60+30	38	(38 / 90) × 100 = 42.22%

The experts see evidence that IUS keeps track of its students' progress and achievements. In this way, an instrument is in place to monitor the performance records of students with various enrolment backgrounds. In their assessment, the experts find the admission rules to be clearly defined, binding, transparent, and based on IUS' written regulations. They confirm that the admission requirements support the students in achieving the intended learning outcomes. Regarding the credit transfer for students, adequate policies are in place.

Criterion 1.5 Workload and Credits

Evidence:

- Self-Assessment Report
- Study Rules for the First and Integrated Study Cycles (*available on the university web-site*)
- Module handbook
- Syllabi (*available on E-Campus*)
- Student Survey Questionnaire
- Student Survey Report Spring 2025
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, the allocation of workload and credits at IUS is regulated by the *Study Rules for the First and Integrated Study Cycles*, which serve as the central framework for Bachelor-level education.

IUS uses the ECTS system, whereby the university defines one ECTS credit as corresponding to an average workload of 25 hours. The ECTS system also takes into account students' self-

study hours, not just the time spent at the university, for example in lectures and seminars. All the programmes under review here have a duration of four years, during which a total of 240 ECTS credits must be earned. These are distributed evenly at 60 ECTS credits per year or 30 ECTS credits per semester. The individual modules within the programmes are worth either six or three ECTS credits. This also applies to the internship and the graduation project, both of which are worth six ECTS credits each.

IUS further indicates that the programmes apply a structured approach to ensure that credit allocation reflects actual student workload. This includes adherence to the ECTS framework, internal review of course design and syllabi, and regular collection of student feedback through surveys and course evaluations. Feedback is analysed to identify discrepancies between expected and actual workload, and adjustments are made where necessary. In addition, the SAR states that academic performance data, including pass rates and course completion patterns, are monitored to identify potential mismatches between assigned credits and actual workload.

The experts find that a credit system based on student workload, namely the ECTS system, is implemented. The workload appropriately includes both contact hours and self-study time, and credits are awarded for each module in accordance with the respective workload.

The experts further determine that all compulsory components of the study programmes are fully covered within the credit system. All Bachelor's degree programmes under review comprise 240 ECTS credits and thus meet the minimum requirement of at least 180 ECTS credits. In discussions with the students, the experts enquire how the workload is perceived and whether the allocated credits correspond to the actual effort required. Students confirm that the workload is initially estimated by the teaching staff and subsequently evaluated through course evaluations. Overall, they assess the workload as feasible and realistically estimated.

Following the students' assessment, the experts consider the estimated workload to be realistic and well-founded, allowing each programme to be completed within the standard period of study. This assessment is also confirmed by the students during the discussions. The experts also note that it is regularly monitored whether the credits awarded for each module correspond to the actual student workload and whether the distribution of workload across semesters enables completion within the standard period of study.

Criterion 1.6 Didactic and Teaching Methodology

Evidence:

- Self-Assessment Report
- Module Descriptions
- Syllabi (*available on E-Campus*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:

Various teaching and learning methods are used within the Bachelor's degree programmes under review. As described in the Self-Assessment report and displayed in the individual module descriptions, "[the] ICS-EE cluster uses a coherent mix of methods to promote student-centred learning and attainment of programme learning outcomes. Practical teaching is implemented through the following approaches: Hands-on labs, Project-based components, Work placement/Internship as a mandatory course, Graduation Project. Most courses follow a consistent structure that combines lectures with mandatory tutorials as hands-on lab sessions. These tutorials enable students to apply theoretical concepts in practical settings, experiment with tools and technologies, and develop essential technical skills. In addition to tutorials, many courses incorporate project-based learning in which students collaborate to solve real-world problems using knowledge gained in lectures and tutorials. To ensure effective assessment of both theoretical knowledge and practical application, most courses include evaluation components such as projects and hands-on labs. Specifically, 70.5 percent of the courses offered by the ICS programmes include projects, while 64 percent incorporate lab assignments. While these numbers for the courses offered by EEE programme are 26.2 percent and 59.5 percent, respectively […]. These components contribute significantly to the final grade and highlight the importance of practical, skills-based teaching."

Furthermore, IUS describes in its SAR, that "members of the teaching staff can apply the didactical instruments and methods defined in the approved syllabus. They deliver lectures, conduct tutorials and labs, guide projects, hold regular consultations, supervise internships and Graduation Projects, and assess student work using published criteria and timelines. All members of the teaching staff regularly self-evaluate the delivery of their courses by the end of each semester, and they report any problems and propose their suggestions for course improvements."

Regarding research and scientific work, IUS explains that [independent] scientific work is supported by course projects, by student participation in research, conferences, and publications, by industry-linked topics and mentoring in the Graduation Project, and by the

internship report and evaluations that document methods, tools, results, and reflection. These elements ensure students practise inquiry, analysis, and academic communication within authentic, professionally relevant contexts. […] Students in the ICS programmes are consistently encouraged and supported to engage in research activities as part of their course projects, graduation projects, or as independent research efforts. […] The academic staff within the EEE programme actively encourage and engage students in research, scientific, and educational initiatives through various programs."

In summary, the expert group considers the teaching methods and instruments to be suitable to support the students in achieving the intended learning outcomes. In addition, they confirm that the study concept of all four degree programmes under review comprises a variety of teaching and learning forms as well as practical parts that are adapted to the respective subject culture and study format. It actively involves students in the design of teaching and learning processes.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 1:

Criterion 1.1:

Regarding the career profile of a researcher for the programmes Computer Sciences and Engineering and Electrical and Electronics Engineering, the University states that the reference to a research career has been revised, and the direct researcher career path removed, in both programme websites and in the corresponding sections of the Self-Assessment Report. Therefore, there is no need for the experts to stick with the corresponding recommendation.

Criterion 1.3:

IUS also provided comments on additional proposed recommendations regarding the curricula and mobility (see detailed statement in the latter part of the report). The experts acknowledge these positively and note that the university is systematically addressing these aspects and will take them into account in the further development of its programmes. The experts are keeping the respective recommendations on file so that they can be used as part of the evaluation during the reaccreditation process.

The experts consider criterion 1 to be fulfilled.

2. Exams: System, Concept and Organisation

Criterion 2 Exams: System, Concept and Organisation

Evidence:

- Self-Assessment Report
- Sample exams and theses
- Module Descriptions
- Syllabi (*available on E-Campus*)
- Guidelines for Students with Disabilities at IUS (*available on the university website*)
- Academic Calendar: https://www.ius.edu.ba/en/academic-calendar
- Rule Book on Disciplinary and Material Liability of Students (*available on the university website*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:
All examination regulations are defined in the *Study Rules for the First and Integrated Study Cycles*. The SAR also refers to procedures for handling disciplinary violations and student appeals which are dealt with on the basis of the *Study Rules* or the *Rule Book on Disciplinary and Material Liability of Students*. In addition, provisions are in place to ensure appropriate assessment conditions for students with disabilities, including the possibility of adapted examination formats and support measures coordinated through the relevant support office.

As described in the SAR, a variety of assessment methods is employed: “Assessments often include written mid-term and final exams, projects, lab assignments, presentations, research papers, collaborative group work, and active class participation. This diversity of assessment methods ensures that examinations adequately measure the achievement of intended learning out-comes. At the beginning of each semester, course instructors update the syllabus for each course on E-Campus, so students can view the assessment types, weights, passing thresh-olds, submission schedules, and any conditions for completing the course.”

The SAR further indicates that “Students’ work is graded continuously during the semester, and the final grade is determined after the final examination. Students receive points for each form of activity and assessment during the semester and on their final exam, after which the final grade is determined. Activities and assessments done during the semester must account for at least 50 percent of the final grade. The final exam accounts for a max-

imum of 50 percent of the final grade as defined in Study Rules for the First and Integrated Study Cycles, Article 36. The course instructor is obliged, within five days from the day of holding the pre-examination or examination activities, to enter the achieved results in the SIS and notify students about the time for reviewing written or practical exam work, in line with Article 38. A student who is unsatisfied with the achieved grade at any grade component can file a written appeal for re-evaluation by the committee, as defined in Article 41."

In its SAR, IUS provides the following information regarding its grading scheme:

Harmonized Grading Scale	Harmonized International Letter Grade	IUS Grade Coefficient	Grade System Prescribed by Canton Sarajevo Law	Grade System Prescribed by Canton Sarajevo Law
0-44	F	0.0	F	5
45-54	E	1.0		
55-64	C	2.0	E	6
65-69	C+	2.3	D	7
70-74	B-	2.7		
75-79	B	3.0	C	8
80-84	B+	3.3		
85-94	A-	3.7	B	9
95-100	A	4	A	10

The organisation of examinations follows a structured system, including regular final examinations as well as multiple make-up examination periods. Students who fail an examination, are unable to attend, or wish to improve their grade are entitled to participate in make-up examinations, with the most recent grade being counted. Examination dates are included in the academic calendar, and detailed schedules are published in advance via the university website and faculty notice boards. Grades are communicated through the Student Information System within a defined timeframe, and students are informed of their right to review assessment results.

During the audit, students express a high level of satisfaction with the examination system of the study programmes. They report that all relevant information, such as examination dates and assessment criteria, is provided in a timely and transparent manner. The applicable examination regulations are clearly communicated.

Students further indicate that the workload and level of difficulty of examinations are generally appropriate and manageable. They also express overall satisfaction with the number and distribution of examinations. The experts concur with this assessment and conclude that the overall examination load is appropriate, allows sufficient time for preparation, and supports a smooth progression of studies.

The experts also observe that examinations are assessed according to transparent criteria. Based on student feedback indicating that they consistently receive feedback on their examinations and that the assessment criteria are clearly communicated, the experts confirm that students have the opportunity to discuss their examination results with lecturers.

Furthermore, the experts note that it is regularly reviewed whether examinations adequately assess the achievement of learning outcomes, whether the level of requirements is appropriate, and whether sufficient time is available for preparation and completion. This is, for example, ensured through regular student surveys.

The experts further confirm that the study programmes include a final thesis or final project (Graduation Project). The reviewed theses demonstrate that students are capable of independently working on a task at the intended level of the respective degree programme. In cases where final theses are conducted outside the university, the institution assumes responsibility for ensuring appropriate academic standards and suitable conditions at the respective external organisation.

However, the experts also note that final-year projects are often carried out in groups. This is, in itself, a legitimate approach, and the experts recognise that the scope of the tasks is commensurate with this. The programme coordinators explain that, when projects are carried out in groups, students are able to tackle larger-scale projects that are more in line with the demands of the industry later on. The experts can well understand this, but wish to understand how individual grading then takes place. In response, the university explains that the individual groups hold weekly meetings with their supervisors, during which progress and individual contributions are discussed and assessed. This allows the supervisor to track, even during the semester, which individual is contributing how much to the group and what individual marks should be awarded for this. This then accounts for 70% of the assessment. The remaining 30% of the mark is awarded for the oral presentation, with 10% allocated to the mid-term presentation and the remaining 20% to the final presentation. During the audit discussions, it emerged that, for the oral presentation, individual group members are generally given a collective mark. Consequently, the experts are not entirely sure to what extent systematic emphasis is placed on individual marking of all contributions made by the respective group members. They can understand that the supervisor forms an impression of the individual contributions over the course of the entire project, and the lecturers on site also confirm that not all participants in a group always receive the same mark. Nevertheless, the experts are of the opinion that greater emphasis should be placed on individual assessment, particularly in the context of the presentations. Therefore, the experts recommend to consider placing a greater emphasis on individual contributions in the assessment of group projects, for example by including individual reports or individual presentations.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 2:

The experts consider criterion 2 to be fulfilled.

3. Resources

Criterion 3.1 Staff and Development

Evidence:

- Self-Assessment Report
- Staff handbook
- Website on Academic Staff: https://fens.ius.edu.ba/en/academic-staff
- HR Plan
- Procedure on Academic Appointments and Promotion in Scientific Fields at the International University of Sarajevo (*available on the university website*)
- Book of Rules on Incentives Policy and Financial Support for Full-Time Academic Staff at the International University of Sarajevo (*available on the university website*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, the programmes under review employ a sufficient number of qualified academic, professional, and support staff to ensure teaching, supervision, and student support. Staff qualifications are ensured through defined recruitment procedures, student evaluations, and advisory input: "Appointments and promotions are governed by the Procedure on Academic Appointments and Promotion in Scientific Fields at IUS, in line with Article 116 of the Law on Higher Education (Official Gazette of the Canton of Sarajevo, 36/22). Since the language of instruction is English, all academic and administrative staff must demonstrate proficiency, guaranteeing international standards in teaching and student support. Full-time (FT) academic staff typically teach a 3+3 course load per year, with exceptions for Deans (2+2) and Programme Coordinators (3+2). Most courses are delivered as three contact hours per week, with some 3 ECTS electives taught in two hours. Additional support is provided through part-time (PT) staff, including adjunct professors and experts from industry."

In the SAR, IUS presents the following tables regarding available academic staff in ICS related programmes:

	Academic Year					
Academic Staff Title	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/2026***
Full Professors	0	1	1	1	1	1
Associate Professors	2	2	3	3	4	4
Assistant Professors	5	6	5	6	6	6
Senior Assistants	1	1	1	1	2	2
Assistants	1	0	0	2	2	2
Part Time Instructors and Experts from Industry	0	0	3	4	4	5
TOTAL	9	10	10	13	19	20
Male-female	2-7	3-7	4-6	6-7	10-9	10-10
Female %	78%	70%	60%	54%	47%	50%
Total number of students (first and second cycle)	283	369	507	678	694	784
Student per academic staff**	31	37	51	52	37	39

*Only Fall Semester data for 2025/26 academic year is reported.

**Some of the first-year courses, faculty electives, free electives and common faculty courses like Project Management and Ethics in Engineering and Sciences courses are taught by the instructors from other programs or faculties. For example, in CSE programme only 65% of the courses in the curriculum are taught by ICS programmes academic staff.

In the SAR, IUS presents the following tables regarding available EEE academic staff:

	Academic Year					
Academic Staff Title	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/26**
Full Professors	3	2	1	1	1	1
Associate Professors	1	0	1	1	1	1
Assistant Professors	1	3	2	2	2	2
Senior Assistants	0	3	2	2	2	2
Assistants	3	1	0	0	0	0
Part Time Instructors and Experts from Industry	0	2	3	3	6	3
TOTAL	8	11	9	9	12	9
Male-female	7-1	10-1	8-1	8-1	10-2	6-3
Female %	13%	9%	11%	11%	17%	33%
Total number of students (first and second cycle)	60	76	93	114	126	161
Student per academic staff*	8	7	10	13	11	18

*Some of the first-year courses, faculty electives, free electives and common faculty courses like Project Management and Ethics in Engineering and Sciences courses are taught by the instructors from other programs or faculties.

As outlined in the SAR, the recruitment of academic staff follows a structured process. Prior to the beginning of each academic year, the faculty prepares an annual plan of staffing needs, which is submitted to the Senate and the Board of Trustees for approval. This plan is closely linked to the teaching implementation plan adopted by the Senate upon proposal of the Faculty Council. The recruitment process is initiated by the Dean's Office. The SAR further indicates that academic appointments and promotions are regulated by an institutional procedure aligned with national higher education legislation. Academic staff are appointed to defined academic titles, and progression within the academic career follows formally established criteria. Staff members are required to hold appropriate academic qualifications and professional expertise.

In summary, the experts emphasise the highly committed and motivated staff and the satisfaction of the students. They conclude that IUS has defined adequate measures for staff selection and that all programmes under review can be carried out effectively with the existing staff.

HR Development

The SAR also describes measures for staff development. The university provides structured opportunities for academic and didactic training, including seminars, workshops, study visits, and online learning formats. Training needs are identified through appraisal processes, student feedback, and internal quality assurance mechanisms. Particular emphasis is placed on the development of innovative teaching methods and the use of digital tools. Academic staff are expected to engage in continuous professional and pedagogical development. What is more, IUS also encourages and supports them to conduct research and take part in (international) academic conferences and research projects.

Finally, the SAR indicates that the performance of academic staff is regularly evaluated through annual staff evaluations and semester-based student surveys. The results are analysed at institutional, faculty, and programme levels and are used to identify areas for improvement, while also serving to assess whether the subject-specific and didactic qualifications of the teaching staff adequately support the delivery of the degree programmes.

In Summary, all interviewed staff demonstrate high motivation and attachment to the institution. In the opinion of the experts, IUS offers sufficient support mechanisms and opportunities for teaching staff members who wish to strengthen their professional and teaching skills.

Criterion 3.2 Student Support and Student Services

Evidence:

- Self-Assessment Report
- Website of the Student Affairs Office: *https://sao.ius.edu.ba/en*
- Website of the Student and Career Centre: *https://scc.ius.edu.ba/*
- Website International Relations Office (IRO): *https://iro.ius.edu.ba/*
- Website on Tuition Fees and Scholarships: *https://www.ius.edu.ba/en/tuition-fees-scholarships*
- Website of the Information Technology Office: *https://ito.ius.edu.ba/en*
- Website of the IUS Students' Psychological Counselling Centre (SPCC): *https://psy.ius.edu.ba/en/blog/ius-students-psychological-counseling-centre-spcc*
- Guidelines for Students with Disabilities at IUS (*available on the university website*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, the IUS provides a range of academic, administrative, and personal support services for students.

At institutional level, several central units contribute to student support. The International Office supports student mobility, while the Student Career Centre (SCC) offers career-related services such as individual counselling, interview preparation, and workshops on application skills. The SCC also organises events such as job fairs, providing opportunities for networking with potential employers. In addition, alumni relations are maintained through the SCC, which manages an alumni database, conducts surveys, and facilitates engagement through guest lectures and cooperation with industry.

The SAR further indicates that financial support is available through various scholarship schemes. Scholarships are awarded on the basis of an annual scholarship examination assessing subject-specific and general competences. Additional scholarships and tuition waivers may be granted to selected groups, depending on availability. Scholarships for undergraduate studies are generally awarded for a period of up to five years, with specific conditions applying to full scholarships.

In terms of personal support, the university provides psychological counselling services through a dedicated centre, offering assistance related to mental health, personal development, and academic challenges. The SAR also refers to institutional guidelines for students with disabilities, which define responsibilities, ensure accessibility, and provide tai-

lored support measures, including adaptive technologies and flexible assessment arrangements.

Administrative and technical support is provided through faculty offices, library services, IT services, and workshop or laboratory staff.

Finally, the effectiveness of student support services is monitored through regular student surveys and programme reviews, the results of which are used to inform further improvements.

The experts welcome that students have access to both subject-specific and general counselling, as well as comprehensive supervision and support services, complemented by adequate administrative and technical assistance.

Students confirm during the discussions that they have had very positive experiences with the support measures at the IUS. They report that information on available services is easily accessible and that they are effectively guided to the appropriate contact persons when needed.

The experts consider that sufficient resources are available to provide individual guidance, counselling, and support to all students. The support system effectively assists students in adapting to the university environment, achieving the intended learning outcomes, and successfully completing their studies.

Criterion 3.3 Funds and equipment

Evidence:

- Self-Assessment Report
- Visitation of the relevant facilities
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, the financing of the IUS is primarily based on tuition fees, which are complemented by continuous support from the IUS Foundation and strategic contributions from the Board of Trustees. Additional funding is generated through externally financed research projects, international collaborations, and partnerships with industry and public institutions. These external resources are reported to contribute to the development of laboratory infrastructure, applied research activities, and academic staff development. The SAR further indicates that long-term financial sustainability is ensured through regular budget allocations, multi-year financial planning, and targeted investments in infrastructure, equipment, and human resources.

In its SAR, IUS present the infrastructure and equipment of the programmes under review as follows: “IUS operates a modern campus of 20,508 m² equipped with classrooms, amphitheatres, laboratories, a library, sports halls, and student facilities (canteen, café, gym).

- Computer Labs and IT Infrastructure: 10 computer laboratories with 193 desktop computers (Windows, Linux, MacOS) support student coursework. Labs are equipped with licensed and open-source software, including MATLAB, SPSS, Packet Tracer, PyCharm, RStudio, and MS Visual Studio. IUS holds a Campus Agreement with Microsoft, enabling full access to Microsoft 365, Windows Server, SQL Server, and other products. Network infrastructure is based on Cisco solutions with a 250 Mbps internet backbone and campus-wide Wi-Fi.
- Specialised Equipment for ICS programmes: Cisco routers, switches, firewalls for networking courses (SE308), and Raspberry Pi kits with sensors for IoT courses (AID403). In 2024, ICS acquired a high-performance DELL PowerEdge R7615 server for compute-intensive AI and data science tasks. This investment enhances student and research capacity for simulations, optimisation, and model training.
- EEE students have access to laboratories within FENS and the Research and Development Centre (RDC). EEE laboratories are equipped for practical teaching and research activities in the fields of control systems, power systems, signal analysis, and electronics circuits. Equipment includes:
    - Specialized software (E.g. MATLAB, Octave, SciLab, LTSpice) for modelling, analysis, and simulations,
    - Control equipment for experimental research in control and automation (E.g., several Dspace control boards, Oscilloscopes)
    - Data acquisition devices
    - Digital devices for electrical power system protection (DIGSI and SOPROTEC),
    - Various microcontrollers, motors, transformers, and related equipment.
- Library and Digital Resources: The IUS library (561 m², 162 reading places) provides 29,379 units, processed via the ZAKI-X system, and searchable in an online catalogue with RFID tracking. It offers specialised reading rooms (PhD, thesis, group work, English learners). Additional resources include Crossref DOI assignment and Pearson MyLab & Mastering digital platforms.”

Furthermore, IUS provides additional resources via internal and external cooperations as described in the SAR: “Internal cooperation: ICS students benefit from cross-faculty courses and shared resources (e.g., Mathematics, EEE labs). External cooperation: The National and University Library of BiH (NULBiH) agreement provides students and staff with access to additional databases, reading rooms, and multimedia halls. Partnerships with industry (Ko-

deks, MIBO, Fortinet, Bloomteq, DV Power, etc.) provide guest lectures, internships, and joint projects. Erasmus+ and Horizon projects enable mobility, joint courses, and research collaboration. All cooperations are formalised through MoUs or project contracts, approved by the Senate and managed by the International Relations Office and QA Office."

During the audit, the experts assess the existing premises, lecture theatres, laboratories and their facilities. Overall, the experts conclude that IUS has sufficient facilities to offer and deliver the four programmes under review effectively. This applies to the existing laboratories, including equipment and technical staff, as well as to the library and the literature available to students. However, the experts also note that the hardware in the technical laboratories, in particular, could be further expanded. This applies even more to the Electrical and Electronics Engineering Bachelor's programme, as it is more hardware-intensive than the other three CS-related programmes. Indeed, the industry partners also state in the on-site discussions that, whilst they are generally very satisfied with IUS and its students, they would like to see even more practical skills. In their view, the best way to achieve this would be to incorporate more 'real-life projects' into the curricula, although this would require additional equipment. In the Electrical and Electronics Engineering field, this applies in particular to hardware such as the available microcontrollers. In the Computer Science field, resources are needed primarily for the subject of AI. Therefore, whilst the experts note that the current equipment is sufficient to run the four programmes effectively, they would also advocate for the ongoing upgrading of the existing hardware in the laboratories in order to further improve conditions at the IUS for both students and teaching staff.

In addition, the experts discuss access to (international) academic literature, particularly for teaching staff. They report that access to relevant academic databases is limited. Although there have been positive developments in this regard in recent years, the situation still has room for improvement. New agreements have been concluded, and lecturers report that access to databases is available via Turkish cooperation partners. However, these can only be accessed via specific computers in the library and not, for example, via VPN from home or from one's own office. This makes the work somewhat complicated and inconvenient in some respects. The experts can well understand this; whilst they recognise the efforts of the IUS to continually improve the situation for lecturers, they nevertheless want to emphasise that access to international literature and academic databases should be further improved. They note that, whilst sufficient resources are available to teach the programmes under review adequately, the situation for lecturers in particular should be further improved to provide them with a better research environment.

In summary, the expert group assesses that the available funds, the technical equipment, and the infrastructure (laboratories, library, seminar rooms, etc.) are well suited to the re-

quirements for providing the four study programmes under review. However, they recommend to increase the available hardware in the laboratories, especially regarding microcontrollers and hardware for AI, and to improve access to international academic (literature) databases.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 3:

The experts consider criterion 3 to be fulfilled.

4. Transparency and Documentation

Criterion 4.1 Module Descriptions

Evidence:

- Self-Assessment Report
- Module Descriptions for each programme
- Syllabi (*available on E-Campus*)
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, IUS provides comprehensive information on its modules through independent programmes' websites. This platform is accessible to all relevant stakeholders and is primarily designed to support students.

As reported in the SAR, the curriculum is presented in clearly structured tables, in which each module (course) code is linked to the corresponding course syllabus. These syllabi can also be accessed via an integrated university-wide syllabus database available through the E-Campus system. The SAR indicates that academic staff are able to update and modify syllabus information directly within this system.

Furthermore, as stated in the SAR, a separate module handbook has been compiled for the purpose of accreditation, following the ASIIN template, in addition to the existing online syllabus system.

Based on the review of the module handbook and course syllabi, the experts conclude that these documents contain all of the required information. In particular, they include the module title, the responsible staff, teaching and learning methods, credits and workload, intended learning outcomes, module content, admission and examination requirements,

forms of assessment, details on the calculation of module grades, recommended literature, and the date of the most recent revision.

During the discussions, students confirm that information on courses is consistently available online.

Criterion 4.2 Diploma and Diploma Supplement

Evidence:

- Self-Assessment Report
- Sample of the Diplomas
- Sample of the Diploma Supplements
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, the diploma and the Diploma Supplement are designed and prepared in line with the official templates issued by the Ministry of Science and Youth of Sarajevo Canton. Upon successful completion of a study cycle, each student is awarded a defined set of graduation documents. These include a bilingual diploma (issued on a single form), a Diploma Supplement in Bosnian and English, and a Graduation Certificate, likewise issued in both languages.

As stated in the SAR, the institution has established an administrative process to ensure timely issuance of these documents. According to the information provided, graduates receive the Graduation Certificate within seven days after completion, while the diploma and the Diploma Supplement are issued within 30 days.

The experts positively acknowledge that all graduates receive both a diploma and a Diploma Supplement in English within a short period after graduation. The Diploma Supplement includes a Transcript of Records documenting all completed modules, the credits obtained, the grades achieved, and the cumulative GPA. These documents provide a comprehensive overview of the individual student's academic performance. Moreover, they enable a clear classification of the degree programme within the respective higher education system.

At the same time, the experts note certain shortcomings. While the Diploma Supplement contains most of the information required for transparency and international comparability, it does not include the programme learning outcomes and therefore does not fully describe the qualification profile of the graduate, instead referring to external sources such as the institutional website. Furthermore, the Diploma Supplement does not provide a clas-

sification of the final grade based on statistical data from the respective cohort, as recommended in the ECTS Users' Guide. The absence of such cohort-based grade distribution data limits the possibility to adequately contextualise and compare the graduate's performance with that of their peers.

Therefore, the university must ensure that the Diploma Supplement includes information on the learning outcomes and provides statistical data on the distribution of final grades, as set out in the ECTS Users' Guide.

Criterion 4.3 Relevant Rules

Evidence:

- Self-Assessment Report
- Study Rules for the First and Integrated Study Cycles (*available on the university website*)
- First Cycle Course Catalogue Academic Year 2024–2025 (*available on the university website*)
- Website for IUS regulations: *https://www.ius.edu.ba/en/regulations*
- Website oft he Faculty: https://fens.ius.edu.ba/en
- Programmes' websites:
    - https://cse.ius.edu.ba/en
    - https://se.ius.edu.ba/en
    - https://aide.ius.edu.ba/en
    - https://ee.ius.edu.ba/en
- Discussions during the audit

Preliminary assessment and analysis of the experts:
According to the SAR, all relevant study-related rules and regulations at the IUS are published on the university's website and are accessible via the main page. Course-related information is provided in the language of the degree programme and is available to all stakeholders involved.

As outlined in the SAR, the rights and obligations of students enrolled in first and integrated study cycles are defined in the *Study Rules for the First and Integrated Study Cycles*. In addition, key institutional documents, including the *Statute*, the *Book of Rules on Adoption, Changes, and Evaluation of Study Programmes*, the *Rules on Academic Failure*, and the *FENS Manual for Formatting and Writing the Project, Thesis, and Dissertation*, are publicly available online.

The SAR further describes the procedures for handling student complaints and regulatory matters. Initial decisions are taken by the Faculty Dean, who may consult the relevant programme coordinator. In the case of an appeal, the Faculty Council acts as the second-level decision-making body. The University Senate is involved only in exceptional cases, particularly when the Faculty Council is unable to reach a decision.

The experts confirm that the rights and obligations of both the university and the students are clearly defined and binding. All relevant rules and regulations are published on the university's website and are therefore accessible to all relevant stakeholders. Students also confirm during the discussions that they have access to all necessary information, which is available not only in English but also in Bosnian and Turkish.

The experts further note that comprehensive information about the study programmes is available on the respective programmes' websites.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 4:

Criterion 4.2:

IUS acted promptly on the experts' feedback, revised the Diploma Supplements, and issued an official decision to amend the diplomas. The new versions now include statistical data on the distribution of final grades and provide explicit information on the respective learning outcomes. The experts express their gratitude for this prompt adjustment and confirm that the Diploma Supplements now contain all the required information and thus meet the criterion.

The experts consider criterion 4 to be fulfilled.

5. Quality management: quality assessment and development

Criterion 5 Quality management: quality assessment and development

Evidence:

- Self-Assessment Report
- Book of Rules on Adoption, Changes and Evaluation of Study Programmes at the International University of Sarajevo (SP Rule Book) (*available on the university website*)
- Book of Rules on the Establishment and Development of the Internal System of Quality Assurance and Quality Management at the International University of Sarajevo (QA Rule Book) (*available on the university website*)
- Action Plan of the Implementation of Recommendations and Improvement of the Quality System at the IUS (*available on the university website*)
- Book of Rules on Academic Staff Evaluation (*available on the university website*)
- Rules of Procedure of the Committee for Monitoring Study Programmes (Curriculum Committee) at the International University of Sarajevo (*available on the university website*)
- Student Survey Questionnaire
- Student Survey Report Spring 2025
- Discussions during the audit

Preliminary assessment and analysis of the experts:
As reported in the SAR, quality management at institutional and study programme level is mainly regulated by two central documents: the *Book of Rules on the Establishment and Development of the Internal System of Quality Assurance and Quality Management* (*QA Rule Book*) and the *Book of Rules on Adoption, Changes and Evaluation of Study Programmes* (*SP Rule Book*). In accordance with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG), the national legal framework, and the relevant regulations of Sarajevo Canton, these documents define the procedures, responsibilities, and instruments for internal quality assurance, including planning and reporting processes, surveys, curriculum and syllabus reviews, self-evaluation, accreditation procedures, and the adoption, modification, evaluation, or discontinuation of study programmes.

The SAR indicates that the Strategic Development Office plays a central role in coordinating quality assurance activities. Its tasks include drafting policy documents, coordinating sur-

veys and accreditation processes, supporting curriculum reviews, maintaining records, and assisting the relevant stakeholders.

The university has undergone national external accreditation three times. As stated in the SAR, the current accreditation is valid from 2024 to 2029. A publicly available post-accreditation action plan for the period 2024–2029 guides the implementation of recommendations and the further development of the quality system.

At programme level, internal evaluation is described in the SAR as a statutory obligation regulated by the *SP Rule Book*. The Faculty Council is responsible for initiating and carrying out the internal evaluation of study programmes in all study cycles and for adopting measures for improvement. According to the SAR, this internal programme evaluation is conducted at least once after the end of the study cycle in which the programme is implemented.

As reported in the SAR, the procedures for the proposal, adoption, modification, evaluation, temporary suspension, and discontinuation of study programmes are defined in the SP Rule Book adopted in March 2023. The SAR indicates that the rule book provides differentiated procedures for minor, major, and substantial changes to study programmes. It is further stated that the Curriculum Committee, as a permanent university committee appointed by the Rector, examines proposals for new study programmes and amendments to existing ones and issues opinions on these proposals. New study programmes are proposed by the Faculty Council and, after review by the Curriculum Committee, require approval by the Senate and the Board of Trustees. The SAR also notes that the competent ministry of Sarajevo Canton must be informed when a new programme is introduced or changes are made to an existing one.

With regard to methods used to ensure that programme development is aligned with the intended learning outcomes, the SAR highlights two main instruments: semester-based student surveys and the annual performance evaluation of academic staff. The student surveys are mandatory, anonymous, and centrally coordinated by the Strategic Development Office. According to the SAR, they are used to collect feedback on teaching quality, course content, and the learning environment, and the results are intended to support corrective measures. In addition, academic staff are required to report regularly on their teaching performance and to reflect on the survey results.

During the discussions, the experts further examine the practical implementation of the quality assurance mechanisms. In discussions with the students, the experts enquire how they assess the internal quality assurance processes of the programmes, particularly with regard to student involvement. Students report that course evaluations are conducted at the end of each semester, and that completion of the survey is required before final grades

can be accessed. In addition, they indicate that they can also provide feedback directly to lecturers through informal discussions. The students confirm that surveys are conducted regularly and that feedback to lecturers can also be provided informally at any time. The experts further enquire whether students are informed about the results of course evaluations. Students report that the outcomes of the evaluations are generally not discussed with them and that they do not receive specific information on the results. At the same time, they express the impression that their feedback is taken seriously and leads to visible consideration within the programme.

The experts also learn that the faculty has a newly established faculty advisory board including external industry representatives. Shortly after the on-site visit, the board will hold its first meeting. The faculty expects to receive valuable external feedback on a systematic level through this board. The experts think it is a good idea that such a board has been set up on faculty level.

The experts confirm that the processes and responsibilities for the further development of the programme are clearly defined in the relevant quality management regulations.

Furthermore, they recognise that students generally feel heard and taken seriously, and believe that their comments and opinions are relevant to the further development of the programmes and/or individual aspects of the university. Nevertheless, the experts note that the feedback loop for course evaluations is not officially closed, as there is no systematic communication of the results back to the students. Although the experts note that there is a very good atmosphere at the IUS, they believe that the IUS still needs to ensure that the evaluation results are discussed with the students in a systematic and institutionalised manner.

Apart from that, the experts are of the opinion that IUS' quality management system, guided by internal and external feedback, involves students, alumni and industry stakeholders and ensures a comprehensive and continuous approach to programme improvement.

Final assessment of the experts after the comment of the Higher Education Institution regarding criterion 5:

Closing the Feedback Loop:

The university acknowledges the experts' requirement regarding the systematic closure of feedback loops and the communication of evaluation outcomes to students. It reports that the Quality Assurance Rule Book has been amended to formally require the communication of survey results and resulting actions to relevant stakeholders, including students. Accord-

ing to the university, responsibilities and procedures for discussing survey results and implementing improvement measures have been defined at course, programme, faculty, and institutional level in order to ensure that feedback processes are systematic, documented, and transparent.

The experts welcome these measures and note that the university has formally embedded the feedback process in its quality assurance procedures. They consider the requirement to be fulfilled.

The experts consider criterion 5 to be fulfilled.

E Additional Documents

No additional documents needed.

F Comment of the Higher Education Institution

The institution provided a detailed statement as well as the following additional documents

- Appendix 1. Syllabus for the AID101
- Appendix 2. Syllabus for the ENS309
- Appendix 3. Senate Decision on Amendments to the Diploma Supplement
- Appendix 4. QA Rule Book - ANNEX 3 Description of procedures for conducting the surveys.pdf
- Appendix 5. Senate Decision on Annex 3 of the QA Rule Book.pdf
- Appendix 6. FENS_Advisory Board_December 2025.pdf

IUS provides the following statement:

"The International University of Sarajevo (IUS) would like to express its appreciation to the ASIIN expert panel for the thorough evaluation process, constructive discussions during the site visit, and the valuable recommendations provided in the preliminary evaluation report of the four IUS study programs: Computer Sciences and Engineering (CSE), Software Engineering (SE), Artificial Intelligence and Data Engineering (AIDE) and Electrical and Electronics Engineering (EEE) in the ICS-EE cluster (Cluster A).

Following the preliminary report, the University carefully reviewed each recommendation and requirement and sets out its comments below, criterion by criterion. Criteria for which the panel identified no recommendation or requirement are not repeated.

Name of the degree programme
Correction:
There is a typo regarding the official title of the *Computer Sciences and Engineering (CSE)* program. The official English translation of the study program is *Computer Sciences and Engineering,* not Computer Science and Engineering. Accordingly, the final degree/official qualification obtained is *Bachelor of Science (B.Sc.) in Computer Sciences and Engineering*.
All program titles in the original Bosnian language are correctly written, with only a minor correction needed: the word "I" should be written in lowercase.
The final degree for the Electrical and Electronics Engineering (EEE) in Bosnian is: "*Baccalaureus/Baccalaurea inžinjer/inžinjerka elektrotehnike i elektronike*".

Criterion 1.1 Objectives and Learning Outcomes of a Degree Programme (Intended Qualifications Profile)

Recommendation 1: The experts recommend that the University reconsider the career profile of researcher for the Computer Sciences and Engineering and the Electrical and Electronics Engineering programmes, noting that a bachelor's degree provides the foundation for a research career rather than full qualification as an independent researcher.

IUS Comment:

The University accepts the recommendation. The reference to a research career has been revised, and the direct researcher career path removed, in both programme websites and in the corresponding sections of the Self-Assessment Report (see: https://cse.ius.edu.ba/en/bachelor-studies and https://ee.ius.edu.ba/en/bachelor-studies).

Criterion 1.3 Curriculum

Content & Structure of the Programmes

Recommendation 2 (scope of internship and graduation project):

The experts recommend increasing the scope of either the internship or the graduation project, noting that the internship is relatively short and that the graduation project, at 6 ECTS, is at the lower end for bachelor's theses.

IUS Comment:

The University acknowledges the recommendation. The internship and the Graduation Project are retained as two separate mandatory curriculum components because they serve distinct purposes. The internship provides structured professional exposure, while the Graduation Project is the academic capstone through which students demonstrate independent design, implementation, validation, reporting and presentation at the intended degree level.

The internship sets a minimum requirement of 30 calendar days (25 working days, at least 150 contact hours per the Internship Rulebook), and students may remain longer where this is feasible and supported by the host organisation. The 6 ECTS Graduation Project is supported by a structured, supervised process documented in the FENS Graduation Project Handbook, with defined phase deliverables, mandatory regular supervision, use of the FENS report template, midterm and final evaluation, and project presentation.

The University also notes that the experts panel confirmed that the reviewed projects show independent work at the intended level. The scope of the Graduation Project and internship will be reviewed in the next curriculum revision cycle. Possible options may include increas-

ing the ECTS value and/or scope of the Graduation Project, strengthening the preparatory phase, considering a two-stage capstone structure, or further encouraging longer internship placements. These matters will also be discussed in upcoming FENS Advisory Board meetings as part of external stakeholder consultation. Any change will follow the regular curriculum review and approval procedures, with attention to workload balance, supervision capacity and programme structure.

Recommendation 3 (ethics in the AIDE programme):
For the Artificial Intelligence and Data Engineering programme, the experts recommend that ethics and social responsibility be given a more prominent role in the compulsory curriculum.

IUS Comment:
Ethics and social responsibility are addressed in the AIDE curriculum through the mandatory faculty course Ethics in Engineering and Natural Sciences (ENS309) and within core data courses such as Fundamentals of Data Science (AID101), which includes dedicated content on Data Science Ethics and Social Issues (https://ecampus.ius.edu.ba/syllabus/aid101-fundamentals-data-science). The University accepts that this coverage should be given greater prominence in the compulsory AIDE curriculum.
The programme will review the compulsory AIDE curriculum and may strengthen ethics and social responsibility through relevant course content, assignments and assessment tasks, and, where appropriate, consider a dedicated AI ethics course or component. Any curricular or syllabus-level change will follow the regular programme and curriculum review procedures.

Mobility
Recommendation 4 (information from Erasmus partners):
The experts would like to recommend to the university to better communicate with the Erasmus partner institutions to ensure that the provided information about the offered courses at the other institution are always up-to-date.

IUS Comment:

IUS International Relations Office (IRO) has been informed regarding this matter and will verify partner course catalogues and confirm course availability with partner institutions before learning agreements are finalised, to reduce recognition discrepancies during mobility. In addition, the International Relations Office is required to organize annual meetings with Erasmus coordinators, who are appointed from among the academic staff.

Criterion 2. Exams: System, Concept and Organisation

Recommendation 5:

The experts recommend placing greater emphasis on the individual assessment of contributions in group projects, particularly in the context of the presentations, for example through individual reports or individual presentations.

IUS Comment:

The University acknowledges the experts' recommendation. In group Graduation Projects, individual contributions are considered by the supervisor during regular supervision meetings and reflected in the supervisor's evaluation. To make individual achievement more explicit in the committee-assessed presentation component, the midterm and final committee evaluation rubrics/forms will be revised to include an individual assessment criterion for each student in group projects. The revised rubric will allow the committee to assess both the team-level quality of the project and each student's individual contribution, understanding, and presentation or defence performance. The FENS Graduation Project Handbook evaluation forms (Midterm Presentation Grading Form and Final Poster Presentation Evaluation Form) will be revised.

Criterion 3.3 Funds and equipment
Recommendation 6 (laboratory hardware):
The experts recommend increasing the available hardware in the laboratories, in particular microcontrollers for the *Electrical and Electronics Engineering* programme and hardware for Artificial Intelligence in the Computer Science field.

IUS Comment:
The University upgrades laboratory equipment through university-level annual investment planning, budget approval, and procurement procedures, based on needs identified by faculties and programs. In the computing field, recent investment includes the high-performance DELL PowerEdge R7615 server acquired in 2024 with two NVIDIA L40 GPU (RAM: 48GB per GPU) and 3TB storage space for artificial intelligence and data-intensive work. Besides the AI server, the University has 3 computer labs dedicated to AI education and research activities as follows:

- 15 Windows-based desktop computers (main AI Computer Lab located in Building A)
- 10 Linux-based Workstations with NVIDIA RTX2060 GPU (RAM: 6GB)

(located within our RDC) and

- 10 Windows-based desktop computers within the external ArtiAnalytics AI computer lab located in the RDC.

Based on the submitted project proposals, the University is going be equipped with additional HPC (High-Performance Computing) hardware and software solutions necessary for internal and external research and other projects, students' theses, and educational/teaching activities (additional HPC nodes with GPU capabilities and dedicated storage capacity).

For the *Electrical and Electronics Engineering* program, laboratory development is an ongoing process. IUS and the program continuously assess the needs of students and teaching staff and plan the acquisition of new equipment accordingly. In line with this approach, additional procurement of microcontrollers, embedded-systems platforms, measurement instruments, and prototyping equipment is planned for the upcoming semester to further enhance hands-on learning opportunities and laboratory work.
In addition to institutional investments, IUS actively pursues external funding opportunities through national and international project calls. These projects provide valuable opportunities to acquire more advanced and specialized equipment that would otherwise be difficult to obtain through regular budgets alone. As part of the ongoing RCF project, we are currently in the process of procuring batteries, power electronic switches, transformers, and other high-voltage engineering equipment that will further strengthen the teaching and research infrastructure of the *Electrical and Electronics Engineering* laboratories.
IUS has also received positive feedback from Türk Telekom regarding a project proposal focused on equipping and modernizing the laboratories within the Electrical Engineering and Information Technology cluster. The project aims to renew and enrich existing laboratory resources, introduce contemporary technologies, and further improve the practical learning environment for our students.
The University remains committed to the continuous improvement of its laboratory facilities and will continue to address development needs through both regular procurement activities and externally funded projects, ensuring that students and academic staff have access to modern and relevant equipment that supports high-quality teaching, learning, and research.

Recommendation 7 (access to academic databases):
The experts recommend improving access to international academic literature and databases, in particular for teaching staff, including access from outside the library.

IUS Comment:

The University continuously works on expanding access to academic literature and research databases for both its academic staff and students. Improving the availability of online re-

sources remains one of the institution's strategic priorities, and significant progress has been made in recent years. As a result of these efforts, the number of databases accessible to the University community has increased substantially from year to year.

To further enhance access to scientific information, the University has established cooperation agreements with the National and University Library of Bosnia and Herzegovina (NULBiH) and the University of Health Sciences (SBÜ). Through these partnerships, access to approximately 90+ additional research databases has been enabled, including some of the most important international resources such as EBSCO, Scopus, Web of Science, ScienceDirect, Springer E-Books, SpringerLink Journal, Taylor and Francis, PubMed, and many others.

It should be noted, however, that the access conditions for a significant portion of these resources are defined by the respective agreements and licensing arrangements with partner institutions. Consequently, access to certain databases is restricted to designated institutional locations and cannot currently be provided remotely. This is a common practice among institutions that provide access through institutional agreements, where publishers and database providers define access rights based on authorized locations and institutional networks. For example, the *National and University Library of Bosnia and Herzegovina* also provides access to certain subscribed databases exclusively within its premises, in accordance with licensing requirements and contractual obligations set by content providers. While these limitations are beyond the University's direct control, the institution fully recognizes the importance of remote access and continues to explore possibilities for improving accessibility.

One example of the University's efforts to provide flexible access to scholarly resources, including access outside institutional premises, was its subscription to Research4Life. Through this initiative, academic staff and students were able to access a broad range of multidisciplinary databases remotely. While access to Research4Life is no longer active, the University has since prioritized investments in databases and information services that are considered more relevant to the current teaching and research needs of its academic staff and students, thereby ensuring the most effective use of available resources.

In addition, the University maintains a direct subscription to JSTOR, with access available both within the institution and remotely for authorized users and actively promotes the use of high-quality open access resources among both students and academic staff. A wide range of freely available resources is highlighted through the Library's e-resources web page, providing additional support for teaching, learning, and research activities.

The University recognizes that access to academic databases represents a significant financial investment for higher education institutions. Nevertheless, the continuous expansion of available resources reflects its strong commitment to strengthening the research environment for both academic staff and students. The University continues to work towards further improving access to literature, with a particular focus on enhancing flexibility and usability

for its users. It remains dedicated to expanding and optimizing access in the future, ensuring that its staff and students benefit from increasingly comprehensive and convenient access to academic resources.

Criterion 4.2 Diploma and Diploma Supplement

Requirement:

The University must ensure that the Diploma Supplement includes information on the programme learning outcomes and provides statistical data on the distribution of final grades, as set out in the ECTS Users' Guide.

IUS Comment:

The University has reviewed the requirement. The diploma and diploma supplement at IUS are designed and prepared according to the official guidelines of the Ministry of Science and Youth of Sarajevo Canton, which are aligned with the guidelines prescribed by the Agency for Development of Higher Education and Quality Assurance of Bosnia and Herzegovina (HEA). Since ASIIN required the University to update the Diploma Supplement, the University took necessary measures regarding the diploma supplement update.

The Senate of the International University of Sarajevo, at its 201st session held on June 22nd, 2026 (Decision No. IUS-SENAT-11-1825/26 , issued on 22 June 2026), adopted a Decision on Amendments to the Diploma Supplement, specifically regarding incorporating the List of Program Learning Outcomes into Section 4.1 of the official Diploma Supplement. Furthermore, the Senate approved the enhancement of the grading information contained in Section 4.4 of the Diploma Supplement by introducing two additional columns within the grading scale table. The Senate Decision, along with an example of the updated Diploma Supplement, is provided as an appendix.

Criterion 5 Quality management: quality assessment and development

Requirement:

The University must ensure that the results of course evaluations are communicated back to students in a systematic and institutionalised manner, so that the feedback loop is formally closed.

IUS Comment:

The University acknowledges the experts' requirement to systematically close feedback loops and ensure that students are informed about the outcomes of course evaluations.

The University amended its Quality Assurance Rule Book, specifically Annex 3: *Description of Procedures for Conducting Surveys* (Decision No. IUS-SENAT-1386/26, issued on 19 May 2026), which was subsequently officially adopted by the University Senate. The revised procedure formally requires that survey results and the actions taken in response be communicated to all relevant stakeholders, including management, lecturers, and students.
The closed feedback loop runs at four levels:
At the course level - lecturers are expected to include survey reflection in the designated part of the publicly available course syllabus form in the E-campus. These reflections are automatically shared with students who participated in the survey. Lecturers are also encouraged to discuss student feedback during the first-class session of the following semester.
At the program level - Programme Councils review survey outcomes annually with SPIUS student representatives;
At the faculty level - Faculty action plans are compiled and communicated to students through faculty boards and official channels;
At the institutional level, the Rectorate reviews the action plans and meets annually with SPIUS representatives.

These measures ensure that feedback loops are systematic, documented, and verifiable, directly addressing the experts' expectation that this process be formally guaranteed in written procedures.
In addition, the FENS Advisory Board provides external stakeholder input at faculty level, complementing student and alumni input within the same quality management system. See the FENS Advisory Board establishment announcement and the first FENS Advisory Board meeting announcement.

ASIIN Review:

The experts also learn that the faculty has a newly established faculty advisory board including external industry representatives. Shortly after the on-site visit, the board will hold its first meeting. The faculty expects to receive valuable external feedback on a systematic level through this board. The experts think it is a good idea that such a board has been set up on faculty level.

IUS Correction

The Faculty of Engineering and Natural Sciences has already established a Faculty Advisory Board (Decision No. IUS-FENS-06-3589/25, issued on 10 December 2025), composed of distinguished experts from industry, the business sector, and relevant institutions and organisations from Bosnia and Herzegovina and abroad.

The Faculty Advisory Board meets annually to monitor labour market needs, strengthen cooperation with industry, contribute to the improvement of study programmes and curricula, and initiate joint projects, internships, and other development activities. The first meeting of the FENS Advisory Board was held on 27 March 2026, before the on-site ASIIN accreditation visit."

G Summary: Expert recommendations

Taking into account the additional information and the comments given by IUS, the experts summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN Seal	Maximum duration of accreditation	Subject-specific label	Maximum duration of accreditation
Ba Computer Sciences and Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Software Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Artificial Intelligence and Data Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Electrical and Electronics Engineering	Without requirements	30.09.2031	EUR-ACE®	30.09. 2031

Recommendations

For all degree programmes

E 1. (ASIIN 1.3) It is recommended to consider increasing either the scope of the graduation project or the internship.

E 2. (ASIIN 1.3) It is recommended to better communicate with the Erasmus partner institutions to ensure that the provided information about the offered courses at the other institution are always up-to-date.

E 3. (ASIIN 2) It is recommended to consider placing greater emphasis on individual contributions in the assessment of group projects, for example by including individual reports or individual presentations.

E 4. (ASIIN 3.3) It is recommended to improve access to international academic (literature) databases.

E 5. (ASIIN 3.3) It is recommended to increase the available hardware in the laboratories, especially regarding microcontrollers and hardware for AI.

For the Bachelor's degree programme Artificial Intelligence and Data Engineering

E 6. (ASIIN 1.3) It is recommended to more integrate ethical aspects in the curriculum.

H Comment of the Technical Committees

Technical Committee 02 – Electrical Engineering/Information Technology (17.06.2026)

Assessment and analysis for the award of the ASIIN seal:

The technical committee discusses the procedure and agrees with the experts' vote.

Assessment and analysis for the award of the EUR-ACE® Label:

The Technical Committee deems that the intended learning outcomes of the degree programme do comply with the engineering specific parts of Subject-Specific Criteria of the Technical Committee 02 – Electrical Engineering/Information Technology.

The Technical Committee 02 – Electrical Engineering/Information Technology recommends the award of the seals as follows:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**	**Subject-specific label**	**Maximum duration of accreditation**
Ba Electrical and Electronics Engineering	Without requirements	30.09.2031	EUR-ACE®	30.09. 2031

Technical Committee 04 – Informatics/Computer Science (18.06.2026)

Assessment and analysis for the award of the ASIIN seal:

The TC discusses the procedure and follows the experts' assessment without any changes.

Assessment and analysis for the award of the Euro-Inf® Label:

The Technical Committee deems that the intended learning outcomes of the degree programmes do comply with the Subject-Specific Criteria of the Technical Committee 04 – Informatics/Computer Science.

The Technical Committee 04 – Informatics/Computer Science recommends the award of the seals as follows:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**	**Subject-specific label**	**Maximum duration of accreditation**
Ba Computer Sciences and Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Software Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Artificial Intelligence and Data Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031

I Decision of the Accreditation Commission (26.06.2026)

Assessment and analysis for the award of the subject-specific ASIIN seal:

The Accreditation Commission discusses the procedure and follows the votes of the experts and the Technical Committees without any changes.

Assessment and analysis for the award of the EUR-ACE® Label:

The Accreditation Commission deems that the intended learning outcomes of the degree programme Electrical and Electronics Engineering do comply with the engineering specific parts of Subject-Specific Criteria of the Technical Committee 02 – Electrical Engineering/Information Technology.

Assessment and analysis for the award of the Euro-Inf® Label:

The Accreditation Commission deems that the intended learning outcomes of the degree programmes Computer Sciences and Engineering, Software Engineering, and Artificial Intelligence and Data Engineering do comply with the Subject-Specific Criteria of the Technical Committee 04 – Informatics/Computer Science.

The Accreditation Commission decides to award the following seals:

Degree Programme	**ASIIN Seal**	**Maximum duration of accreditation**	**Subject-specific label**	**Maximum duration of accreditation**
Ba Computer Sciences and Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Software Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Artificial Intelligence and Data Engineering	Without requirements	30.09.2031	Euro-Inf®	30.09. 2031
Ba Electrical and Electronics Engineering	Without requirements	30.09.2031	EUR-ACE®	30.09. 2031*

*Subject to the approval of the ENAEE Administrative Council

Recommendations

For all degree programmes

E 1. (ASIIN 1.3) It is recommended to consider increasing either the scope of the graduation project or the internship.

E 2. (ASIIN 1.3) It is recommended to better communicate with the Erasmus partner institutions to ensure that the provided information about the offered courses at the other institution are always up-to-date.

E 3. (ASIIN 2) It is recommended to consider placing greater emphasis on individual contributions in the assessment of group projects, for example by including individual reports or individual presentations.

E 4. (ASIIN 3.3) It is recommended to improve access to international academic (literature) databases.

E 5. (ASIIN 3.3) It is recommended to increase the available hardware in the laboratories, especially regarding microcontrollers and hardware for AI.

For the Bachelor's degree programme Artificial Intelligence and Data Engineering

E 6. (ASIIN 1.3) It is recommended to strengthen the integration of ethical aspects in the curriculum.

Appendix: Programme Learning Outcomes and Curricula

According to [….] the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor degree programme Computer Sciences and Engineering:

"Educational Objectives:

- **EO1**. Seek professional and academic opportunities in computing, engineering, and related fields, applying strong foundations in algorithms, systems, and software development.
- **EO2**. Pursue continuous learning and advanced studies to strengthen their analytical, problem-solving, and technical expertise.
- **EO3**. Contribute to the design and development of software and computer systems by applying systematic engineering approaches in professional and research projects.
- **EO4**. Assume leadership, research, or entrepreneurial roles in technology-driven industries, academia, and organizations.
- **EO5**. Demonstrate awareness of ethical, legal, and societal responsibilities in the practice of computer science and engineering.

Learning Outcomes:

- **LO1**. Demonstrate a sound knowledge of the basic theoretical aspects of computer science and engineering, with a focus on software development practices, algorithms and computer systems organization, and other various computing areas.
- **LO2**. Apply the necessary strong mathematical skills and logical reasoning to solve engineering and scientific problems.
- **LO3**. Effectively document and analyze requirements and translate them into an implementable design using different design patterns applied in the industry.
- **LO4**. Analyze, design and develop software systems by following recommended concepts, principles and practice of the industry.
- **LO5**. Show an ability to communicate effectively, work in a team and understand social, professional, legal and ethical issues related to computing."

The following **curriculum** is presented:

International University of Sarajevo, Faculty of Engineering and Natural Sciences (FENS)

First Cycle Curriculum - Computer Sciences and Engineering Program

Academic Year: 2025-2026

Click on the course code or title to see its syllabus.

Semester I

Code	Title	Prerequisites	T	P	ECTS
CS103	Introduction to Programming		3	2	6
ELIT100	Academic English and Effective Communication		2	1	6
ENS101	Introduction to Engineering		2	1	3
MATH101	Calculus I		3	2	6
NS102	Physics		3	2	6
xxx	Foreign Language Elective I		0	2	3
		Semester Total =			30

Semester II

Code	Title	Prerequisites	T	P	ECTS
CS105	Advanced Programming	CS103	3	2	6
ELIT200	Critical Reading and Writing	ELIT100	2	1	6
MATH102	Calculus II	MATH101	3	2	6
MATH201	Linear Algebra	MATH101	3	2	6
xxx	University Elective I	See Table 1			3
xxx	Foreign Language Elective II	For. Lang. Ele. 1	0	2	3
		Semester Total =			30

Semester III

Code	Title	Prerequisites	T	P	ECTS
CS206	Data Structures	CS105	3	2	6
CS303	Digital Design		3	2	6
MATH202	Differential Equations	MATH102	3	2	6
MATH203	Introduction to Probability and Statistics	MATH101	3	2	6
MATH204	Discrete Mathematics		3	2	6
		Semester Total =			30

Semester IV

Code	Title	Prerequisites	T	P	ECTS
CS207	Analysis of Algorithms	CS206 MATH204	3	2	6
CS304	Computer Architecture	CS105	3	2	6
CS306	Database Management	CS105	3	2	6
ENS203	Electrical Circuits I	MATH101	3	2	6
MATH205	Numerical Analysis	MATH201 and MATH202	3	2	6
		Semester Total =			30

Semester V

Code	Title	Prerequisites	T	P	ECTS
CS305	Programming Languages	CS206	3	2	6
CS307	Operating Systems	CS304	3	2	6
CS412	Web Application Development	CS105	3	2	6
IE408	Project Management	Junior Standing	2	2	6
xxx	Faculty Elective I	See Table 2			6
		Semester Total =			30

Semester VI

Code	Title	Prerequisites	T	P	ECTS
CS308	Software Engineering	CS306	3	2	6
EE325	Embedded Systems	CS103	3	2	6
ENS309	Ethics in Engineering and Natural Sciences	Junior Standing	3	0	6
SE308	Communication Systems and Networks	Junior Standing	3	2	6
xxx	Faculty Elective II	See Table 2			6
		Semester Total =			30

Semester VII

Code	Title	Prerequisites	T	P	ECTS
CS313	Theory of Computation	CS105 and MATH204	3	2	6
CS370	Work placement/Internship	Senior Standing			6
xxx	Program Elective I See Table 3	Senior Standing			6
xxx	Program Elective II See Table 3	Senior Standing	3		6
xxx	Program Elective III See Table 3	Senior Standing	3		6
		Semester Total =			30

Semester VIII

Code	Title	Prerequisites	T	P	ECTS
xxx	Free Elective I				6
xxx	Program Elective IV See Table 3	Senior Standing	3		6
xxx	Program Elective V See Table 3	Senior Standing	3		6
xxx	Program Elective VI See Table 3	Senior Standing	3		6
ENS490	Graduation Project	Last Semester	0	4	6
		Semester Total =			30

Abbreviations: T (Theory), P (Practice), ECTS credit	
Total Credits Required for Graduation	240
Total Credits of Electives	69
No. of Courses	42
Min. ECTS Credits for Applied/Practical Component of the Curriculum	53
Elective Ratio	29%

According to [….] the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor degree programme Software Engineering

"Educational Objectives:

- **EO1**. Seek professional and academic opportunities in software engineering and related fields, applying systematic approaches to the design, development, and maintenance of high-quality software systems.
- **EO2**. Pursue lifelong learning and advanced studies to deepen their expertise in modern software engineering methods, tools, and technologies.
- **EO3**. Contribute to complex software projects by applying engineering principles, scientific methods, and quality practices across all stages of the software life cycle.
- **EO4**. Assume leadership, research, or entrepreneurial roles in software-driven industries, academia, and innovation-oriented organizations.
- **EO5**. Demonstrate professional integrity, responsibility, and awareness of ethical and societal impacts in the practice of software engineering.

Learning Outcomes:

- **LO1.** Demonstrate understanding of fundamental knowledge in software engineering through a systematic approach to the development, deployment, and maintenance of software across its life cycle stages.
- **LO2.** Apply systematic methods and tools to design, implement, and evaluate software systems across their life cycle.
- **LO3.** Apply necessary and systematic methods prescribed for executing specific software engineering tasks under certain assumptions.
- **LO4.** Perform a wide spectrum of tasks including project planning and estimation, system and software requirements analysis, data structure design, program architecture definition, coding, testing, and maintenance.
- **LO5.** Explain and apply the scientific method, research approaches, and modelling techniques in software engineering.

- **LO6.** Utilize modern tools and methods to automate and optimize software development activities, including project management and CI/CD pipelines.
- **LO7.** Analyze and critically evaluate all phases of software design with a systematic approach to testing, quality assessment, maintenance, and the software product's life cycle.

LO8. Communicate effectively, work collaboratively in diverse teams, and apply ethical and professional standards in software engineering practice."

The following **curriculum** is presented:

International University of Sarajevo, Faculty of Engineering and Natural Sciences (FENS)

First Cycle Curriculum - Software Engineering Program

Academic Year: 2025-2026

Click on the course code or title to see the syllabus.

Semester I

Code	Title	Prerequisites	T	P	ECTS
CS103	Introduction to Programming		3	2	6
ELIT100	Academic English and Effective Communication		2	1	6
ENS101	Introduction to Engineering		2	1	3
MATH101	Calculus I		3	2	6
xxx	University Elective I	See Table 1			6
xxx	Foreign Language Elective I		2	0	3
				Semester Total =	30

Semester II

Code	Title	Prerequisites	T	P	ECTS
CS105	Advanced Programming	CS103	3	2	6
ELIT200	Critical Reading and Writing	ELIT100	2	1	6
MATH201	Linear Algebra	MATH101	3	2	6
SE211	Software Construction	CS103	3	2	6
xxx	University Elective II	See Table 2			3
xxx	Foreign Language Elective II	For. Lang. Ele. 1	2	0	3
				Semester Total =	30

Semester III

Code	Title	Prerequisites	T	P	ECTS
CS206	Data Structures	CS105	3	2	6
MATH203	Introduction to Probability and Statistics	MATH101	3	2	6
MATH204	Discrete Mathematics		3	2	6
SE322	Software Requirements Analysis	CS105	3	2	6
xxx	Faculty Elective I	See Table 3			6
				Semester Total =	30

Semester IV

Code	Title	Prerequisites	T	P	ECTS
CS207	Analysis of Algorithms	CS206 MATH204	3	2	6
CS304	Computer Architecture	CS105	3	2	6
CS306	Database Management	CS105	3	2	6
CS310	Human Computer Interaction		3	2	6
xxx	Faculty Elective II	See Table 3			6
				Semester Total =	30

Semester V

Code	Title	Prerequisites	T	P	ECTS
CS305	Programming Languages	CS206	3	2	6
CS307	Operating Systems	CS304	3	2	6
CS412	Web Application Development	CS105	3	2	6
IE408	Project Management	Junior Standing	2	2	6
SE302	Software Testing and Maintenance	CS105 and MATH204	3	2	6
				Semester Total =	30

Semester VI

Code	Title	Prerequisites	T	P	ECTS
CS308	Software Engineering	CS306	3	2	6
ENS309	Ethics in Engineering and Natural Sciences	Junior Standing	3	0	6
SE308	Communication Systems and Networks	Junior Standing	3	2	6
xxx	Faculty Elective III	See Table 3			6
xxx	Free Elective I				6
				Semester Total =	30

Semester VII

Code	Title		Prerequisites	T	P	ECTS
CS420	Network Programming		SE308	3	2	6
SE370	Work placement/internship		Senior standing			6
xxx	Program Elective I	See Table 4	Senior standing	3		6
xxx	Program Elective II	See Table 4	Senior standing	3		6
xxx	Program Elective III	See Table 4	Senior standing	3		6
					Semester Total =	30

Semester VIII

Code	Title		Prerequisites	T	P	ECTS
ENS490	Graduation Project		Last Semester	0	4	6
SE407	Software Quality Management		Junior Standing	3	2	6
xxx	Program Elective IV	See Table 4	Senior standing	3		6
xxx	Program Elective V	See Table 4	Senior standing	3		6
xxx	Program Elective VI	See Table 4	Senior standing	3		6
					Semester Total =	30

Abbreviations: T (Theory), P (Practice), ECTS credit	
Total Credits Required for Graduation	240
Total Credits of Electives	84
No. of Courses	42
Min.ECTS Credits for Applied/Practical Component of the Curriculum	65.8
Elective Ratio	35%

According to [….] the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor degree programme Artificial Intelligence and Data Engineering:

"Educational Objectives:

- **EO1**. Seek employment as a computer scientist with expertise on artificial intelligence and data, in local and global industries and organizations, with the ability to use fundamental knowledge, computational principles, and skills in data science to create software of varying size and complexity for various application areas.
- **EO2**. Show an ability to continue learning throughout their career (such as through professional, technical, or postgraduate education), which can enhance their analytical and critical thinking skills and prepare them for advanced computer and data science practices and contribute to the intellectual foundations of the data science field.
- **EO3**. Participate in numerous software projects where they demonstrate proficiency in using theoretical computing knowledge to analyse, model, design, develop, and evaluate computing solutions.
- **EO4**. Become leaders or entrepreneurs in the field of data science.
- **EO5**. Demonstrate an understanding of professional ethics and social responsibility as a data scientist.

Learning Outcomes:

- **LO1**. Analyze complex computing problems and apply computing principles and other relevant disciplines to identify solutions.
- **LO2**. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- **LO3**. Communicate effectively in various professional contexts.
- **LO4**. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- **LO5**. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- **LO6**. Apply theory, techniques, and tools throughout the data analysis lifecycle and employ the resulting knowledge to satisfy stakeholders' needs.

- **LO7**. Develop a complete comprehension of the theoretical and practical aspects of Artificial Intelligence related to creating, designing, implementing, and evaluating data-intensive systems."

The following **curriculum** is presented:

International University of Sarajevo, Faculty of Engineering and Natural Sciences (FENS)

First Cycle Curriculum - Artificial Intelligence and Data Engineering Program

Academic Year: 2023-2024

Click on the course code or title to see its syllabus.

Semester I

Code	Title	Prerequisites	T	P	ECTS
CS103	Introduction to Programming		3	2	6
ELIT100	Academic English and Effective Communication		2	1	6
ENS101	Introduction to Engineering		2	1	3
MATH101	Calculus I		3	2	6
xxx	University Elective I	See Table 1			6
xxx	Foreign Language Elective I		0	2	3
		Semester Total =			30

Semester II

Code	Title	Prerequisites	T	P	ECTS
AID101	Fundamentals of Data Science		3	2	6
CS105	Advanced Programming	CS103	3	2	6
ELIT200	Critical Reading and Writing	ELIT100	2	1	6
MATH201	Linear Algebra	MATH101	3	2	6
xxx	University Elective II	See Table 1			3
xxx	Foreign Language Elective II	For. Lang. Ele. 1	0	2	3
		Semester Total =			30

Semester III

Code	Title	Prerequisites	T	P	ECTS
AID201	Programming for Data Science	CS103	3	2	6
CS206	Data Structures	CS105	3	2	6
MATH203	Introduction to Probability and Statistics	MATH101	3	2	6
MATH204	Discrete Mathematics		3	2	6
xxx	Faculty Elective I	See Table 2			6
		Semester Total =			30

Semester IV

Code	Title	Prerequisites	T	P	ECTS
CS207	Analysis of Algorithms	CS206 and MATH204	3	2	6
CS306	Database Management	CS105	3	2	6
CS417	Introduction to Data Mining	CS206	3	2	6
MATH306	Statistical Modeling	MATH203	3	2	6
xxx	Faculty Elective II	See Table 2			6
		Semester Total =			30

Semester V

Code	Title	Prerequisites	T	P	ECTS
CS412	Web Application Development	CS105	3	2	6
EE418	Introduction to Machine Learning		3	2	6
IE408	Project Management	Junior Standing	2	2	6
xxx	Program Elective I	See Table 3			6
xxx	Free Elective I				6
		Semester Total =			30

Semester VI

Code	Title	Prerequisites	T	P	ECTS
AID302	Optimization for Data Science		3	2	6
AID304	Big Data Analytics		3	2	6
CS404	Artificial Intelligence	(CS103 or AID201) and MATH201	3	1	6
ENS309	Ethics in Engineering and Natural Sciences	Junior Standing	3	0	6
xxx	Program Elective II	See Table 3			6
		Semester Total =			30

Semester VII

Code	Title	Prerequisites	T	P	ECTS
AID401	Deep Learning	CS404	3	2	6
CS370	Work placement/Internship	Senior standing	0	14	6
xxx	Program Elective III See Table 3	Senior standing	3	2	6
xxx	Program Elective IV See Table 3	Senior standing			6
xxx	Program Elective V See Table 3	Senior standing			6
		Semester Total =			30

Semester VIII

Code	Title	Prerequisites	T	P	ECTS
AID402	Applied Data Engineering		3	2	6
xxx	Program Elective VI See Table 3	Senior standing			6
xxx	Program Elective VII See Table 3	Senior standing			6
xxx	Free Elective II				6
ENS490	Graduation Project	Last Semester	0	4	6
		Semester Total =			30

Abbreviations: T (Theory), P (Practice), ECTS credit		No. of Courses	42
Total Credits Required for Graduation	240	Min. ECTS Credits for Applied/Practical Component of the Curriculum	
Total Credits of Electives	81	Elective Ratio	34%

According to [….] the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the Bachelor degree programme Electrical and Electronics Engineering:

"Educational Objectives:

- **EO1**. To apply the basic principles and methods of electrical and electronics engineering in the broad field of applications.
- **EO2** To apply mathematical and scientific reasoning in a variety of electrical and electronics engineering problems.
- **EO3** To design, implement and properly document solutions to complex problems in the field of electrical engineering.
- **EO4** To analyze and compare alternative solutions to problems in the field of electrical and electronics engineering.
- **EO5** To use various specific software and hardware for the analysis and design of electrical and electronic systems.
- **EO6** To participate in teamwork on the design and implementation of solutions to problems in the field of electrical and electronics engineering.
- **EO7** To communicate clearly and concisely, orally and in writing.
- **EO8** To think critically and creatively, independently and in a team.
- **EO9**To recognize the social and ethical responsibilities of professional work
- **EO10** To monitor the development and apply new achievements in the field of electrical and electronics engineering.

Learning Outcomes:

- **LO1** Explain the broader multi-disciplinary context of Engineering Sciences.
- **LO2** Use sound knowledge in mathematics, natural sciences and engineering to explain the complex phenomena peculiar to electrical engineering technology, in particular electrical circuits, analogue and digital electronics, electromagnetism, signal processing and control theory.
- **LO3** Identify, classify and describe the performance and general quality attributes and possible trade-offs within the given problem of electrical engineering systems.
- **LO4** Identify, model and solve engineering problems in electrical and electronics engineering.

- **LO5** Use software and hardware tools, as well as laboratory equipment to design, test and evaluate analogue and digital electric and electronic circuits, devices and products.
- **LO6** Use relevant technical literature and other sources of information relating to problems given.
- **LO7** Use up-to-date techniques and tools for electrical and electronics engineering applications.
- **LO8** Apply the processes and methods of scientific inquiry, including the search and retrieval of scientific information, the formulation of scientific hypotheses, the design and conduct of experiments, and the analysis and interpretation of data.
- **LO9** Independently collect and interpret relevant data pertaining to the topics of interest in the field of electrical and electronics engineering.
- **LO10** Use data-base systems, information on norms, guidelines (codes of good practice) and safety regulations in their field of electrical and electronics engineering.
- **LO11** Demonstrate an awareness of project management and business practices, such as risk and change management, and understand their limitations through project-oriented work.
- **LO12** Analyze and communicate effectively in written and oral English language, document and deliver professional work in their own field and in neighboring fields using modern technical and visual means.
- **LO13** Work effectively on technical tasks individually or in a team and coordinate the team if necessary."

The following **curriculum** is presented:

International University of Sarajevo, Faculty of Engineering and Natural Sciences (FENS)

First Cycle Curriculum - Electrical and Electronics Engineering Program: AY 2023-2024

Click on the course code or title to see its syllabus.

Semester I

Code	Title	Prerequisites	T	P	ECTS
ELIT100	Academic English and Effective Communication		3	0	6
MATH101	Calculus I		3	2	6
NS102	Physics		3	2	6
CS103/ENS2	Introduction to Programming/Programming for Engineers		3	3	6
ENS101	Introduction to Engineering		2	2	3
xxx	Foreign Language Elective I See Table 2		0	2	3
		Semester Total =			30

Semester II

Code	Title	Prerequisites	T	P	ECTS
MATH102	Calculus II	MATH101	3	2	6
NS122	Physics II	NS102	3	2	6
MATH201	Linear Algebra	MATH101	3	2	6
ENS203	Electrical Circuits I	MATH101	3	2	6
NS112	Understanding Science and Technology		2	0	3
xxx	Foreign Language Elective II See Table 2		0	2	3
		Semester Total =			30

Semester III

Code	Title	Prerequisites	T	P	ECTS
CS105/EE221	Advanced Programming/Object Oriented Programming	ENS213 or CS103	3	3	6
EE201	Analog Electronics I	ENS203	3	2	6
EE202	Electrical Circuits II	ENS203	3	2	6
MATH202	Differential Equations	MATH102	3	2	6
MATH203	Introduction to Probability and Statistics	MATH101	3	2	6
		Semester Total =			30

Semester IV

Code	Title	Prerequisites	T	P	ECTS
EE305	Instrumentation and Measurements	ENS203	3	2	6
ELIT200	Critical Reading and Writing	ELIT100	2	1	6
ENS201	Electromagnetism I	MATH102	3	1	6
ENS206	System Modeling	MATH202	3	3	6
MATH205	Numerical Analysis	MATH201	3	2	6
		Semester Total =			30

Semester V

Code	Title	Prerequisites	T	P	ECTS
CS303	Digital Design	Junior Standing	3	3	6
EE311	Control System Design	ENS206	3	3	6
EE322	Power Systems	EE202	3	2	6
xxx	Faculty Elective I See Table 4				6
xxx	Programme Elective I See Table 3				6
		Semester Total =			30

Semester VI

Code	Title	Prerequisites	T	P	ECTS
EE321	Electrical Machines	EE202	3	2	6
EE325	Embedded Systems	ENS213 or CS103	2	3	6
ENS207	Engineering Graphics		1	2	6
ENS309	Ethics in Engineering and Natural Sciences		3	0	6
xxx	Programme Elective II See Table 3				6
		Semester Total =			30

Semester VII

Code	Title	Prerequisites	T	P	ECTS
EE370	Work placement/Internship	Junior Standing	0	14	6
IE408	Project Management	Junior Standing	2	2	6
xxx	Programme Elective IV See Table 3				6
xxx	Programme Elective V See Table 3				6
xxx	Faculty Elective II See Table 4				6
		Semester Total =			30

Semester VIII

Code	Title	Prerequisites	T	P	ECTS
xxx	Programme Elective V See Table 3				6
xxx	Programme Elective VI See Table 3				6
xxx	Programme Elective VII See Table 3				6
xxx	Free Elective I				6
ENS490	Graduation Project	Last Semester	0	4	6
		Semester Total =			30

Abbreviations: T (Theory), P (Practice), ECTS credit	
Total Credits Required for Graduation	240
Total Credits of Electives	66
No. of Courses	42
Min. ECTS Credits for Applied/Practical Component of the Curriculum	78
Elective Ratio	28%