1.1. The structure of the study program contains the following elements:

a. The **Information Technology** undergraduate study program at the Faculty of Business and Law focuses on providing students with a comprehensive understanding of both general and specific knowledge related to technical and technological aspects within the fields of electrical and computer engineering. This includes acquiring advanced skills, competencies, and abilities necessary for students to excel in their professional activities within this domain. Re-accreditation is sought to ensure that the program meets or exceeds established standards.

b. The purpose of undergraduate academic studies Information Technology is the mastery of advanced applied IT knowledge, interdisciplinary academic understanding, and specialized skills essential for tackling intricate challenges within the field of information and communication technology. Students are empowered to solve complex problems adeptly and are equipped to address both existing and emerging challenges, risks, and threats even in non-standard working conditions.

The goals of the study program are the acquisition of competences, academic and practical skills necessary for professional proficiency. Learning outcomes are based on students' ability to apply acquired knowledge in real life scenarios. In addition, the program offers elective courses, providing students with the opportunity to delve deeper into specific professional domains of interest, thereby fostering specialized expertise within their chosen field.

Upon completing the study program, students attain the proficiency to undertake professional responsibilities across diverse sectors including industry, education, healthcare, state administration, service industries, and other fields where expertise in information technology is pertinent. Furthermore, their training prepares them for further academic pursuits.

c. Upon successfully concluding the study program, students are conferred with the esteemed academic title of Bachelor of Engineering in Information Technology and Systems.

d. Individuals who have completed four-year secondary education are eligible to enroll in the OAS Information Technology study program. Prospective students take an entrance exam, which includes successfully passing the General Knowledge Test focused on information technology. The ranking of candidates seeking enrollment is determined according to their high school average grade and performance in the General Knowledge Test. This process is defined by the regulations outlined in the Statute of the Faculty and the Enrollment Rulebook.

e. List of compulsory and elective courses comprises 27 compulsory and 17 elective courses, divided into 6 elective groups and work placement in 8th semester of studies. The list of subjects is provided in Table 5.2

Compulsory subjects (27): Mathematics 1, Fundamentals of Computer Technology, Algorithms and Data Structures, English Language 1, Mathematics 2, Introduction to Programming (Python), Architecture of Computer Systems, English Language 2, Probability and Statistics , Program Languages (C and C++), Electronics for Informaticians, Fundamentals of Telecommunications, Operation Systems, Object Oriented Programming -C# (Java) , Databases, Artificial Intelligence. Web Applications Development, Business Information Systems, Introduction to Management, Computer Networks, Software Development, Information Systems Projecting, Internet marketing, Computer Simulations, Work Placement, Final paper subject and Final paper.

Elective subjects 1: Introduction to Web Programming, Digital Electronics, Multimedia Systems, Fundamentals of Entrepreneurship, Electronic Business Communication, Fundamentals of Information Theory and Coding, Systems for Learning Support, Databases Practicum.

Elective subjects 2: Internet Technologies, Security and Computer Systems Protection, Discreet Mathematics, Computer Graphics and Design, Project Management, Software Engineering, Business Communication, Digital Signal Processing, Computer applications Practicum.

f. Teaching process is conducted continuously over the course of 8 semesters, following the established curriculum. The academic year is divided into two semesters, each spanning 15 weeks. The teaching process includes lectures, practical exercises and other forms of teaching, research paper, etc.)

g. Credit value is specified in **Table 5.2.** ESPB credits are allocated to each subject based on the workload and the level of engagement required for its preparation. Compulsory subjects carry 3, 4, 6, 7, and 8 ESPB points, while elective subjects carry 7, 8, and 10 ESPB points. Work placement is assigned 3 ESPB points and entails 6 hours per week during the eighth semester of study, falling under the category of other hours.

h. The credit value for Final paper subject amounts 4 ECTS, while the final paper amounts 6 ECTS, which amounts 10 ECTS.

Prerequisites for enrolment in certain subjects are shown in **Table 5.2.** Subject specifications are given in the attachment of these standards.

i. The information technology study program offers a wide range of elective subjects, enriching the overall quality of the curriculum. The selection process for subjects from other study programs is designed with attention to detail, ensuring alignment with the content and objectives of the IT program. This alignment is achieved through rigorous criteria, including an 80% program match assessment, evaluation of program value and scope measured by ECTS points, and consideration of the student's total workload. Furthermore, factors such as the number of weekly classes, lectures, exercises, and teaching formats are thoughtfully taken into account.

j. Students can transfer into the Information Technology study program from related fields provided they have successfully completed exams pertinent to the IT curriculum and attained the requisite ECTS points for the corresponding academic year. Faculty's Scientific-Teaching Council determines the field relevance and subject compatibility. This decision is made upon recommendation from a commission appointed by either the dean or the council.

к. The Information Technology study program is aligned with related programs in electrical and computer engineering offered at both state and private universities in Serbia and the surrounding region. However, it also encompasses distinctive features. The lectures are conducted in the Serbian language only.

1.2. The scope of study program of undergraduate academic studies Information Technology equals 240 ECTS.

2.1. The purpose of the OAS Information Technology study program is to equip students with the expertise necessary to become adept graduate engineers specializing in information technology and systems. This comprehensive education prepares students for proficient roles within various sectors including industry, economy, state administration, services, and education. Moreover, the program fosters the growth of the software industry on both local and global scales while promoting the advancement of IT within society at large.

The study program is designed to facilitate the acquisition of competencies in information and communication technologies that are not only highly socially justified and beneficial but also aligned with the evolving needs of modern states and civil societies.

2.2. The purpose of the OAS Information Technology study program is harmonized with the fundamental objectives of the Faculty of Business and Law and MB University. Through the accreditation of the OAS Information Technology study program, the Faculty of Business and Law plays a modest yet significant role in advancing the Education and Training Development Strategy in Serbia until 2030. Moreover, it serves to meet the forthcoming societal and labor market demands for skilled professionals in information technology and systems engineering. Our overarching mission revolves around nurturing and producing top-tier, well-educated professionals capable of competing effectively in the knowledge-driven economy.

2.3. The purpose of the OAS Information Technology study program is unequivocally defined to equip students with the requisite competencies for the rigorous profession of a graduate engineer specializing in information technologies and systems. Additionally, it prepares students for the pursuit of further academic excellence through Master's studies.

Informatics stands at the forefront of progressive development, serving as an essential component of modern business and employment practices. The evolution of both the economy and society at large necessitates a profound understanding of IT, thereby emphasizing the critical role of highly educated IT professionals.

3.1. The purpose of Information Technology study program is educating students in various aspects of IT. By covering topics such as computer hardware, operating systems, programming, databases, web design, and artificial intelligence, students can gain a broad understanding of the field and develop the skills needed for professional application. The inclusion of subjects like digital signal processing, electronic business, and multimedia tools reflects the program's recognition of the diverse applications and evolving nature of IT in today's world. Overall, the program provides a solid foundation for students to pursue careers in various IT disciplines.

Students acquire fundamental knowledge and skills essential for professional, dependable, and autonomous work across a spectrum of disciplines covered in the program. This is achieved through comprehensive lectures delivered by esteemed faculty members, aimed at fostering a mastery of high professional standards, business culture and ethical conduct.

The mentioned competencies stem from the curriculum's teaching subjects, which form an indispensable component of the study program. The thematic units comprising the curriculum are tailored to suit the foundational level of academic studies. Moreover, the overarching objective is to shape an IT profile capable of executing even the

most intricate demands in information and communication technologies with precision, professionalism, and a collaborative spirit. Guided by academic-level IT experts, students are instilled with a deep appreciation for the significance of information while honing their ability to work effectively in teams.

The goals include the development of creativity and mastering specific practical skills necessary for the following:

−   training students for practical roles in professions demanding expertise in both electrical and computer engineering, alongside proficiency in contemporary information technologies;
−   the program ensures that students possess fundamental knowledge in information technologies, enabling them to comprehend, integrate, and effectively apply these concepts in practical scenarios;
−   the program fosters students' comprehension of modern advancements in information technology, equipping them with the ability to use professional literature and cutting-edge information and communication technologies for further independent learning in the fields of electrical and computer engineering, and other related fields;
−   educating versatile experts in information technologies, capable of actively engaging in software teams and making meaningful contributions to the advancement of information science;
−   developing students' capacity to comprehend and articulate problems, as well as model systems, with the goal of resolving real-world challenges effectively;
−   training for teamwork and the successful execution of tasks within economic, social, and cultural organizations;
−   preparation for further education by laying the groundwork for both theoretical understanding and practical application in the field of information technology. It equips them with the necessary motivation for lifelong learning and personal academic advancement, essential for pursuing more complex content in related master's academic studies;
−   developing students' awareness of the values of modern society, the necessity for permanent academic education, society development as a whole and protection of the environment.

The above-mentioned goals are reach through the following:

−   familiarizing with fundamental IT principles, methodologies, and techniques essential for problem-solving across diverse computing environments, even in non-standard conditions and application of cutting-edge technologies and tools to various domains of human activity;
−   acquisition of foundational knowledge in mathematical disciplines crucial for analysis, comprehension, and problem-solving, enabling successful application of IT principles and techniques;
−   becoming acquainted with fundamental areas of information technologies, understanding their roles, interconnections, and the core objects, concepts, and methodologies they encompass.;
−   developing the capacity to grasp new models, techniques, and technologies while fostering effective communication and teamwork skills;
−   mastering the content of the subjects;
−   nurturing advanced levels of abstract, analytical, and synthetic thinking, alongside a profound grasp of logical reasoning and varying degrees of abstraction within the realm of IT;
−   developing the initiative and autonomy in problem-solving through proficient utilization of computer resources, employing adopted IT principles and techniques effectively;
−   mastering foreign languages and diverse fields, fostering a multidisciplinary approach to addressing intricate and practical challenges in electrical engineering and computing;

3.2. The goals of the undergraduate study program Information Technology are aligned with the Strategy for Quality Assurance, fundamental objectives and tasks of the Faculty of Business and Law, MB University. To achieve its objectives, the faculty plans teaching processes, scientific research, professional activities, international collaborations, adoption of regulatory frameworks, financial activities, organization of academic events, and convening of professional and management bodies. Oversight of the OAS Information Technology study program's objectives will be undertaken by faculty bodies including the Faculty Council, Teaching and Research Council, Electoral Council, Commission for Quality Assurance and Improvement, Commission for the Implementation of the Student Self-Evaluation Procedure, and other pertinent bodies.

3.3. The goals of this study program are focused on acquiring academic skills, developing creativity and proficiency in the field of information technology and are harmonized with the requirements of the contemporary society and market demands (knowledge), and are aligned with the general acts of the faculty and University (Statute, Rulebook on Quality Assurance, Development Strategy for MB University Development).

3.4. The study program's objectives are harmonized with contemporary standards in electrical and computer engineering, reflecting the demands of the labor market, societal and economic progress, and the established

qualification framework within this domain. Grounded in the Faculty's enduring commitment to educational and scientific research activities in information technologies, these objectives aim to make a meaningful impact in addressing the economic and societal demand for skilled IT engineers. Students play a pivotal role in realizing these objectives through various roles. The curriculum's structure empowers students to shape their educational journey not only by selecting electives but also by actively engaging in internal program evaluations, assessing teaching quality, and initiating advancements in the study program and teaching methodologies.

Description of subject-specific student competencies
Learning outcome
Instruction for standard application 4:
By mastering **Information Technology** study program, students gain a comprehensive understanding of the scientific fundamentals in informatics and information technologies. Equipped with this knowledge, graduates of information technologies and systems are adept at swiftly navigating sought-after roles in the knowledge economy and keeping up with cutting-edge advancements in skills and the utilization of modern information technologies and systems. The curriculum's structure, integrating elements of computing and mathematics, facilitates the well-rounded development of a graduate engineer in information technologies and systems, enabling effective specialization and proficiency in the field.

4.1. Upon mastering the study program students acquire general abilities

General competencies align with the objectives of the Information Technology study program, as well as the strategic goals outlined in the Quality Assurance Strategy at the University and the Faculty of Business and Law. These competencies encompass a broad spectrum of knowledge, capabilities, and skills, including the following:
− analysis, synthesis, understanding and classification of all areas of information and communication technologies;
− independence in the organization and automation of data and information, selection and application of modern knowledge, methods and tools in information technologies;
− mastering the methods, procedures and processes of research, designing and solving problems using information technologies;
− development of critical and self-critical thinking, the ability of professional advancement, access and integration of knowledge for the appropriate effectiveness of the application of information and communication technologies;
− applying theoretical knowledge in practical contexts, effectively utilizing and adapting innovations within the fields of information and communication technologies and professional activities;
− development of communication skills and proficiency in professional networking within diverse environments, integrating knowledge across various disciplines with the aid of information and communication technology;
− planning and management of information resources from micro to macro level with application of professional ethics;
− ongoing education and training within the fields of information and communication technologies, ensuring a commitment to lifelong learning and skill enhancement.

4.2 By mastering the study program students acquire the following subject specific skills:

Undergraduate academic studies in Information Technology should equip graduates, referred to as "Graduate Information Technology Engineers," with foundational knowledge and the capability to apply it effectively. Moreover, they should enable graduates to keep up with the latest advancements in skills and the utilization of modern information technologies and systems:
− business administration, IT support, as organizers of information systems and databases;
− production and business systems in support of software and system development, IT support, in agencies, and other services.

Competencies of engineers are grouped in at least four categories from the mentioned majors in information technology:
− constructing computer systems and networks involves tasks across various phases, including installing, utilizing, and expanding computer equipment, as well as providing system software support. It also involves designing computer networks based on principles such as structured cabling and workgroup organization, along with performing thorough testing of the network. This involves connecting the network to the Internet, integrating individual resources into the network, all with the aim of achieving a functional and properly configured network and equipment conducive to installing and running user programs.

- **Professional programming and development of user program support** entail a range of tasks, including generating and testing program components using program translators and application generators. This involves actively engaging in assessing user needs and requirements, creating, testing, and documenting program segments, and conducting functional tests of the program with users.
- **The creation of databases and data access systems** encompasses tasks such as designing, generating, and testing database components and accessing systems using database programs and application generators. This involves actively engaging in assessing user needs and requirements, as well as creating, testing, and documenting databases and access systems, particularly with consideration to network - Internet administration of business data.
- **The design, construction, and utilization of information and intelligent systems** involve the entire development cycle, including system analysis, determining system architecture, specifying requirements, designing, implementing, testing, and maintaining the system at the desired level of functionality. This process utilizes decomposition techniques, data flow diagrams, workflow diagrams, action diagrams, and other diagrams, as well as CASE tools to ensure standardization and quality, and to create comprehensive information system documentation.

4.3. The learning outcomes of the Information Technology study program are outlined in Annex 4.2 of this curriculum and further detailed in the syllabi of individual subjects, aligning with the assigned learning outcome descriptors of the National Qualifications Framework. These competencies stem from the core expected outcomes of the study program, wherein a graduate in information technology and systems engineering develops a repertoire of creative abilities essential for employment. These abilities represent a comprehensive set of skills that the typical student should possess, comprehend, and demonstrate proficiently. Throughout the duration of their studies, particular emphasis is placed on acquiring the latest knowledge in information technology, continually honing and refining it. This is all aimed at equipping students with the capabilities necessary to tackle complex practical challenges across various domains of life and work.