

Escuela de Empresa:

Curso Universitario de Especialización en Nanotraining en Inteligencia Artificial y Deep Learning

University of Sarajevo, School of Economics and Business:

Course:	Total number of hours	Description
Information Systems Management	75	Understanding of the role of information technologies in business environment, and of the significance of business information systems in strengthening company's competitive position.
Business application of computer networks and telecommunications	75	This course is an introduction to the business application of computer networks. Understanding of the work of computer communications, the elements necessary for connecting businesses, such as protocols, hardware and software, and legislation in this area are topics that are covered. Students will learn how to connect systems and their business to the Internet.
Software Engineering	75	The objective of the course is to gain knowledge of the overall process and self-development of applications using modern software development methods. 1. Introduction to software engineering 2. Software project management 3. Software application development - traditional approaches 4. Software application development - modern approaches 5. Types of software architectures (web applications, mobile applications...) 6. Identification, analysis and definition of requirements 7. Process Design 8. Development Environments (Android, iOS, Windows) 9. Application Development Techniques 10. Design Documentation 11. Testing, Verification, and Validation 12. Software Solutions Implementation and Maintenance 13. Software Solutions Performance Metrics 14. Software Solutions Performance Models 15. Case studies of selected software solutions
Business Intelligence	75	Introduction to the concept of Business Intelligence and its role as a management tool for faster and more qualitative business decision making; learning about Business Intelligence techniques, methods and accents; Presentation of basic business intelligence development models.
Information Systems Analysis and Design	75	This course offers a detailed insight into the overall process of information systems development. The course emphasizes a holistic approach to introducing organizational change and methods of specifying and designing

		information systems within a framework that views user requirements as fundamental to the development of an information system.
E-business	75	The objective of the course is to offer a comprehensive overview of principles, strategic guidelines and technologies for the full implementation of e-commerce in the company. Special emphasis is placed on the role and models of transformation from the classic to the e-business form of business, with the definition of a clear role of the e-business system in securing a better competitive position of the company.
Programming and Database	75	Introducing students to the basic concepts, principles and methods of programming; gaining the knowledge necessary to complete all stages of software development; identification of problems in business practice that can be solved by an algorithmic way of solving problems; introduction to systems of storage, access, manipulation, analysis and display of data, as well as database models, software systems for database management, architectures, analysis and design of databases and basic commands of programming query languages
Decision-making Support Systems	90	Understanding the importance of business decision making and the role of information technology in the market environment, and the importance of business information systems in the complex process of business analysis and decision making.
Web Technologies and development	75	The objective of the course is to present state-of-the-art Web technologies and enable students to use them in concrete business processes independently developing relevant web / mobile applications. To equip students to understand the complex process of developing business applications and to apply modern agile methodologies in the development of quality software.
Business Information Systems	75	Understanding the role of business information systems in the form of integrated software solutions in modern business, basic modules, methods and techniques of implementation.
Marketing Communications	75	The aim of the course is to introduce students to the basic stages of the marketing communication planning process, to explain to them the importance of creativity in marketing, to provide them with knowledge about the main

		communication tools and media that companies can use to promote their products and services. Particular emphasis is placed on understanding the need to integrate marketing communications and coordination strategies.
Project – Full implementation of IT services to existing Hotel Services in Cyprus	75	Project Management Principles 2. Project definition and planning; project activities 3. Critical path and optimization 4. Project management; monitoring; control; budgeting, teamwork 5. Specificity of IT projects 6. Models of IT management; structure of typical IT projects
Business Statistics	90	Acquiring statistical methods and models and application in economics and management
Marketing	75	Marketing is a system for the satisfaction of human wants. Effective marketing is critical for the long-term success because this function ensures that the firm attracts, retains and grows customers by creating, delivering and communicating superior customer value. The aim of this course is to introduce students to the concepts and activities of modern marketing management and to provide them with practical work in assessing and solving marketing problems. The theory and practice of marketing concepts will be presented through lectures, cases, discussions and individual/group assignments.
Business finances	75	The aim of subject is introducing students with fundamental instruments (techniques) of corporate finance and presentation of financial function as the profitable activity of any company.
Entrepreneurship	75	Course objectives are focused on the process of improving the entrepreneurial culture of the BiH society by presenting a spectrum of positive repercussions for the national economy in terms of increasing its competitiveness and standards of citizens and their status in the regional and global distribution of knowledge, competences and skills and generally the results of their work. Expanding the entrepreneurial culture within the Bosnian society based on the principles of entrepreneurial thinking, based on creativity and innovation, and the principles of entrepreneurial behavior, based on high ethical standards, high level of commitment, continuous learning and prompt application of the learned in practice, will ensure a higher level of entrepreneurial ventures within BiH economy and a higher

		degree of democratization of BiH society.
Management Economics	90	The course focuses on models of economic behavior of businesses and consumers in the specific conditions of the business environment, determined primarily by the nature of the market structure. The main objective of the course is to enable students to properly use the basic concepts in the field of microeconomics, and to develop critical and reasoned thinking and attitude in business judgment, decision making and action.
Management of Information Technologies	75	Understanding the issues of managing information resources and technologies as business resources in contemporary business, as well as the role of IT in improving the efficiency and effectiveness of business.
Marketing Management	75	The aim of the course is to: - Develop student abilities to understand connection between marketing management and strategic management - Help them to understand the role of marketing in the corporate management - Develop students' skills in marketing analysis, research, and strategy creating - Improve their abilities for management of marketing elements and tactics
Quantitative financial models	75	The aim of the course is to teach students the theoretical and practical knowledge in quantitative models in finance based on applied mathematics, such as equivalence principle and compound interest in deterministic and stochastic processes. The goal is for students to assess the efficiency and effectiveness of available models in order to solve business problems.
Strategic Management	75	The concept of the course in Strategic Management is based on the view that profitability is primarily determined by its strategic choice, having in mind the fact that the choice of an enterprise's strategy is an equally important issue for any enterprise whether it is in a profitable or money-losing business. The aim of the course in Strategic management is to study the process of defining an enterprise's strategy.
Business environment	75	The objective of this course is to familiarize students with the challenges faced by managers in the local and international environment. Particular emphasis of this course is on the analysis of the business environment in

		transition economies, including Bosnia and Herzegovina.
Business process analysis	75	The objective of the course is to familiarize students with methodologies and tools for analyzing, modeling and managing business processes, emphasizing the major role of IT systems in business process reengineering.
Fundamental of Economics	75	The basic aims of classes in the course include acquisition of knowledge and understanding of microeconomic principles that student need for easier following and faster acquisition of knowledge in the second-semester courses, which deal with details of microeconomic behavior and players; acquisition of basic knowledge that form basis of macroeconomic policy, i.e. understanding of mutual dependence of monetary policy, fiscal policy, trade policy and foreign currency exchange policy; acquisition of basic knowledge on measuring production, revenue, employment, unemployment, saving, investment, state consumption and consumption of households and their impact on forming the gross domestic income and national income; and acquisition of basic knowledge on the economic growth theory and business cycle theory .
Business Informatics	75	To master concepts and applications of modern business computing.
Business economics	75	Business economics is a field of economics that studies how individual firm operate in contemporary business environment (furthermore it aims to explore the influence of different factors on business performance measures such as efficiency, effectiveness and profitability). The purpose of this subject is to give students a thorough understanding of main economic categories that apply to business process, and to develop the economic mindset necessary to make business decisions based on optimal choice between investments and outcomes
Business Law	90	Studying the basics of business law includes knowledge of: basic law of obligations, company law, bankruptcy law, contracts, securities and competition law. The aim of studying of this subject is to introduce future economists with basic principles of law which they will encounter in their future work. This is a consequence of the fact that, no matter of sector in which they will work, economists encounters

		a number of legal institutes and instruments. This is a reason why this discipline that we call business law has become unavoidable in education of economists.
Fundamentals of Management	75	Understanding basic context in which top-manager(s) run (a) business(es) and understanding the logic of management as an integral business process from the perspective of configurationally-situational approach.
Marketing of Non-profit Organizations	75	The aim of this course is to understand theoretical concepts and practical implications of non-profit marketing. Course focuses on the impact of nonprofit marketing in the social sector and the growing intersection between nonprofit management and the business world. It provides answers on questions: How important is nonprofit marketing to an organization's long-term existence? Is there a growing correlation between nonprofit management and the business world, how and why? It emphasizes the challenges of nonprofit marketing and having to influence multiple audiences for long-term success. In the private sector, one focus can guide action. In the non-profit world, many balls must be kept rolling forward – and sometimes success in one does not lead to success in another.
Banking	75	Familiarize students with origin, development, role and importance which banking and banks have as the most important financial intermediaries in modern economy and in domestic financial system. Familiarize students with banking system of Bosnia and Herzegovina, regarding to banking sector in FBiH and RS. Familiarize students with system of central banking, including monetary policy instruments of central banks, Central Bank of Bosnia and Herzegovina, as important institution which contributes to stability and development of domestic banking sector. Introduction to basic banking principles, deposit and non-deposit sources and bank capital. Familiarize students with wide range of traditional and modern banking operations. During the semester, many practical examples will be presented to students and students will be involved in discussions, debates and presentations.
Accounting	75	The objective of the “Accounting” course is that students learn that acquiring knowledge about

		main financial statements, that is, financial reporting, in context of International Accounting Standards, is of crucial importance for vast majority of students in the world, who are engaged in studying business operations of a company.
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