UNIVERSITETI I EVROPËS JUGLINDORE
УНИВЕРЗИТЕТ НА ЈУГОИСТОЧНА ЕВРОПА
SOUTH EAST EUROPEAN UNIVERSITY

Study program	Computer Sciences (2019/2020)
Faculty	Contemporary Sciences and Technologies
Study Cycle	First Cycle (Undergraduate)
ECTS	240
Code	BI-240
Title	Bachelor of Science in Computer Sciences Module: Business Informatics
Accreditation archive number [240]	03-39/2
Decision for running of the program	03-39/4 (30.05.2019)
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Description of the program

The study program in Computer Sciences - Business Informatics merges the best from the business environment and technological perspectives that overall reflect the contemporary industry growth and at the same time prepares students for leadership positions in organizations throughout the world. The market for such skills already experiences rapid expansion in the same way the society and economy of this country are moving towards the European Union standards and globalization in general.
The structure of the curriculum contains studies which are dynamic, integrative and interactive by nature. These studies are expected to generate highly professional results adjusted for the needs of the labour market, at the same time serving as a solid background for further studies at the post-graduate level.
The Business Informatics curriculum is designed to address the specific needs and market trends that meet the current and future need of the labour market for certain areas of corporate development in the field of information system management and control, as well as their development. The curriculum also involves the portal development, multimedia technologies and projects, IT applications for new businesses, data bases, string value network, e-commerce, interactive marketing, Customer Relations Management (CRM), business convergence and virtual business, corporative finances and accounting.
The undergraduate studies in Business Informatics provide students with a thorough understanding and knowledge from the field of Business and Computer Sciences, while directing them towards certain areas that will further be specialized in the second study cycle. This study program will provide students with opportunities for internship, which will equip them to apply the acquired knowledge and skills in the field of Business Informatics.
The University currently possesses a remarkable IT-infrastructure for the realization of the suggested curriculum in the field of Business Informatics, with computer laboratories, Internet connection and the option of Distance Learning, as well as a library with online resources available for searching.
The curriculum structure aims for a balanced combination of the basic knowledge and specific professional skills. The first year is important for students as it merges a whole range of interdisciplinary courses with practical implementation in the two fields, Business and Informatics. This will be of considerable benefit for their professional unity.
Programme objectives:
- To provide students with independent research, addressing the areas of Business Informatics that were not addressed within the curriculum;
- To develop skills for critical, analytical and functional approach, comparative skills for problem solving that may be applied

in the fields of Business Informatics;
- To provide an opportunity for development of personal skills, communication, research and other important skills necessary for employment.
- To offer an opportunity for the introduction and acquisition of first working experiences in a real working environment from the field of studies through practical work and internship;
- To emphasize multilingual instruction and promote multiethnic and cross-cultural dialog;
- To acquire knowledge and skills from the basic disciplines of Business Informatics: Programming, Databases, Computer Networks, Advanced Web Technologies, Corporate Finances, Management, Marketing and their implementation in related fields.

Career

The graduates will find employment in the fields of system development, software project management, ultimate users of IT support, programming, and as business system analysts, system analysts. For this reason, the individuals who have not only the ability to design technical, computer-based solutions, but also have the ability to notice the possibilities of IT from a business perspective, will be sought for employment by every organization. Students will be equipped with the following skills.
- To manage information function in middle-size and big organizations
- To analyze, plan and develop IT solutions which support the market needs.
- To plan the required business analysis and business risk estimates.
- To develop skillfulness, to contribute in the decision making, design and implementation of the changes in the business process.

Learning outcomes

Knowledge and understanding

- Have demonstrated knowledge and understanding of business and informatics fields (economy, management, marketing, finances and, respectively, programming, databases, computer and information systems, networking and data engineering) extending the one typically associated with first cycle degree.
- Able to develop and apply original and creative ideas within the environment which requires knowledge in overlapping and cross-linked areas of business and informatics.
- Able to deploy interdisciplinary knowledge and demonstrate specialist competence in the field of business informatics.

Applying knowledge and understanding

- Able to critically, independently and creatively solve problems in new, unseen or unfamiliar environments within the multidisciplinary context of real business or organizational environment.
- To plan, perform and evaluate independent research in the domains of the business implementing correspondent computing tools, environments and technologies.
- Creativity and originality in interpretation of knowledge of business processes and with appropriate usage of computing tools and environments based on well defined techniques of research and enquiry.

Making judgement

- Ability to creatively integrate and synthesize knowledge across several areas related to business processes and using appropriate computing tools and techniques.
- Ability to deal with complex issues related to business processes, to address appropriate specialized instances both in business and informatics domains, make sound judgments in situations which lack complete information or data, and based on personal, social and ethical responsibilities linked to the application of their knowledge and understanding.

Communication skills

- Able to clearly and unambiguously communicate conclusions, results, study outcomes and knowledge to both specialist audiences from the business and informatics fields along with the ability to appropriate the style and form of expression to non-specialist audience.
- Have competency for critically independent and creatively argued research, to evaluate methodologies and develop critiques and, where appropriate, to propose and defend new hypotheses.
- Demonstrate an ability to initiate, lead and take responsibility for the work of individuals and groups in cases where

business and informatics competences are crucial.

Learning skills

- Able to identify personal needs and directions for individual and autonomous study, and to perform it in self-directed and autonomous manner of common business and informatics areas.
- Able to take responsibility for continuous individual learning in specialized business and informatics fields within the networked economy.

List of courses

Semester 1

- [CCS-203] [6.0 ECTS] **Programming**
- [CCS-101] [6.0 ECTS] **Introduction to Computer Sciences**
- [CBI-103] [6.0 ECTS] **Introduction to Economics**
- [ACS-103] [6.0 ECTS] **Linear Algebra**
- [3.0 ECTS] **Albanian/Macedonian Language**
- [3.0 ECTS] **English Language**

Semester 2

- [CCS-102] [6.0 ECTS] **Internet Technologies**
- [CCS-303] [6.0 ECTS] **Object - Oriented Programming**
- [ACS-204] [6.0 ECTS] **Calculus**
- [3.0 ECTS] **Albanian/Macedonian Language**
- [3.0 ECTS] **English Language**
- [6.0 ECTS] **Elective course (Language, Skills or Culture)**

Semester 3

- [CBI-201] [6.0 ECTS] **Management Principles**
- [CBE-102] [6.0 ECTS] **Principles of Marketing**
- [CBI-203] [6.0 ECTS] **Discrete Structures**
- [CCS-301] [6.0 ECTS] **Algorithms and Data Structures**
- [6.0 ECTS] **English for Specific Purposes**

Semester 4

- [CBE-201] [66.0 ECTS] **Principles of Accounting**
- [CCS-403] [6.0 ECTS] **Databases**
- [CCS-402] [6.0 ECTS] **Applied Probability and Statistics**
- [CBI-403] [6.0 ECTS] **Information Systems Fundamentals**
- [6.0 ECTS] **Elective course (Language, Skills or Culture)**

Semester 5

- [CCS-501] [6.0 ECTS] **Web Programming**
- [BE-501] [6.0 ECTS] **Corporate Finance**
- [CCS-502] [6.0 ECTS] **Software Engineering**
- [6.0 ECTS] **Elective course (Professional)**
- [6.0 ECTS] **Elective course (Professional)**

Semester 6

- [CBI-605] [6.0 ECTS] **Business Intelligence**
- [ECS4060] [6.0 ECTS] **Human - Computer Interaction**
- [CBI-603] [6.0 ECTS] **Business Information Systems**
- [6.0 ECTS] **Elective course (Professional)**

- [6.0 ECTS] **Elective course (Professional)**

Semester 7

- [EMI-201] [6.0 ECTS] **Information Visualization**
- [CCS-701] [6.0 ECTS] **Project Management**
- [BI-701] [6.0 ECTS] **Business Process Modeling**
- [6.0 ECTS] **Elective course (Professional)**
- [6.0 ECTS] **Elective course (Professional)**

Semester 8

- [BI-801] [6.0 ECTS] **Digital Marketing**
- [CBI-607] [6.0 ECTS] **Capstone Project**
- [6.0 ECTS] **Elective course**
- [6.0 ECTS] **Elective course (Professional)**
- [6.0 ECTS] **Elective course (Professional)**

Description of courses

Core courses

- **Programming**
  The course offers an introduction to programming and covers concepts such as basic data types, arithmetic, operators, input-output commands, conditional structures, loop structures, functions, recursion, algorithms dealing with arrays and matrices, search and sorting algorithms, pointers and pointer operations, declaration of custom data structures.

- **Introduction to Computer Sciences**
  This course presents a wide, integrated introduction to fundamental concepts of computer sciences. The following subjects are covered: history of computing; digital logic and digital systems; introduction to computer architectures, basic algorithmic, problem solving and data structures; introduction to programming languages, operating systems, databases, networks, web and software engineering; application types, including specific software descriptions (word processors, database, browsers, etc.); traditional and multimedia data processing.

- **Introduction to Economics**
  The course is designed to familiarize students with the external and internal environment of the enterprise. However, attention will be given to the financial, marketing function and organizational function of the enterprise. In addition, it recognizes the impact of enterprise on the community in which operates.

- **Linear Algebra**
  This course is designed to train students with the concepts and methods that form the basis of the linear algebra. Linear algebra actually occurs everywhere. Concepts of the subject are used continuously anywhere without being named as such. Integral is linear, the derivative is linear and so on. Most applications of mathematics in the "real" world come to expression only by taking their linear part. This is very important knowledge that will always be important for students in this direction. After completing this course students will be able to use and apply linear equalities and their resolution. Algebra for matrices. Linear transformations and how they are used for the application. Vector spaces. Inherent values and vectors of the real matrix. Determinants and orthogonality. The important goal is to link linear algebra with other areas with or without the use of mathematics.

- **Internet Technologies**
  The main objective of the course is to give students a practical knowledge of basic mechanisms, services and protocols of the global network - Internet. The course provides mastering of the overall architecture of an effective, scalable and secured web page. The students will acquire deep technical knowledge of XML, XHTML (lists, tables, figures, multimedia and forms), CSS (formatting, styles and layouts), and JavaScript (variables, conditions, loops and functions).

- **Object - Oriented Programming**

The course objective is to introduce the student to the basic concepts of object-oriented programming through the C++ programming language. For that purpose the concepts of objects and classes are introduced. Students will be introduced to class inheritance, hierarchy and polymorphism. The student will be capable, upon the completion of the course, to understand the principles of object-oriented programming and capable for programme writing by using the C ++ programming language.

- **Calculus**
  Through this subject students learn about and fully master the concepts: function (as a separate mapping), ways of setting a function, and continuity of essential functions. Also will be able to find the limit of a function (limes), derivatives, solving problems for the determination of the monotonicity and finding the maximum and minimum value of real functions. This is done in order to finally be able to plot graph of a function from which you can also read all the properties and characteristics of functions. It also aims to familiarize students with the notion of integral and it will be applied to various practical problems.

- **Management Principles**
  The purpose of this course is to familiarize students with the basics of management, its genesis, definition and basic principles which should be based on the work of any future manager. This course also aims to acquaint students with knowledge of the basic functions of management as planning, organizing, coordinating, motivating and controlling. Mastery of this subject will provide students with the ability: - To learn the basics of management and to enable them to give concrete examples. - To be able to see the mastery of this subject as the need and acquiring knowledge to be in the context of practical application of learning. To think of an effective way this will help them to face with business problems in their future life.

- **Principles of Marketing**
  The purpose of this course for students is to acquire knowledge of basic concepts that are embedded in the marketing functions of modern organizations. The focus is on concepts and issues associated with marketing products and services to consumers. Specifically, the goal is for students to learn about the marketing environment by analyzing the market and implementing successful marketing strategies in this environment. Students will also be able to apply scientific concepts to design a complete marketing plan for their product. This course enables students to be familiar with various activities in the field of marketing, which contributes company to be competitive and successful in the market.

- **Discrete Structures**
  The objective of this module is to provide students with mathematical knowledge that have direct application in the Business Informatics field. Some of the concepts provided in this course are already familiar to the students, but the objective here is even greater, to formalize these concepts to an even higher level that will allow them to enrich their range of ideas and apply them while solving various practical problems.

- **Algorithms and Data Structures**
  Through this course, students will learn about fundamental concepts and principles of algorithm analysis and design, and in using different data structures. It reviews different algorithms for solving the same problem. It reviews in details the time and space complexity of algorithms and establishing criteria for finding the best algorithm. It studies the design of different, well-known data structures (linear and nonlinear) and considers the possibility of creating new data structures, as well as their concrete application. The final part of the course represents an introduction to graphs and reviewing of basic models for graph-algorithms. Students become familiar with different abstract data types and algorithms, which allow further direct involvement in analyzing, designing and application of specific software projects.

- **Principles of Accounting**
  The purpose of the course is to help students understand the essence of accounting, to learn the basics of accounting concepts and principles of accounting. Specifically, students will gain knowledge and understanding of financial statements, their components, the basic rules of recording of accounting data, and the utilization of accounting documents.

- **Databases**
  The course is an introduction to the database concepts and systems. After completing this subject, students will be able to use models and concepts while designing databases. They will be able to use and design simple specific databases, based in the relational database model, use MS SQL Server system for managing databases (DBMS),

SQL language and implementation of queries.

- **Applied Probability and Statistics**
  The course objective is to provide students with the required knowledge of probabilities and statistics that have direct application in computer sciences. The goal is to learn about the processing of statistical data, their rules and presentation, and the laws for appropriate conclusions based on processed data. Furthermore, the students will learn about basic principles of probability and their application in different areas of everyday life, especially in the field of computer science.

- **Information Systems Fundamentals**
  Course objectives: - To learn the basic concepts and terminology of information systems: Hardware, Software, Networks; E-World: e-business and e-commerce; Development Processes. - To learn more about information systems and technologies that are improving business values and various business processes in organizations. - To implement e-concepts with various managerial disciplines in the process of analysis, interpretation, evaluation, and decision making. - To understand the process of organizations redesigning using information systems. - To describe the role of information systems in decision making. - To examine data security, as well as ethical and social issues. - To get introduced with Internet, e-commerce and e-business. - To enable students to work on projects, either individually or as part of a group, which can be: case studies, scientific research projects, development projects or practical work.

- **Web Programming**
  This course covers the design and development of web applications, covering both server-side and client-side programming. The course also deals with the design of databases for the web, web programming languages, data integration in web applications.

- **Corporate Finance**
  The aim of the course is transferring knowledge and skills of students in the area of financial management, as well as training students with contemporary theoretical knowledge and experience in the analysis of fundamental concepts of corporate finance, financial and real investment projects and their evaluation money through the time dimension. The aim of the course continues with training students how to use adequate sources of financing, efficient capital management and determination of proper structure, determining appropriate policy allocation of profits dividend policy and finalize the financial planning and forecasting, etc. Achieving the intended goals of the subject, students create new opportunities for competitive access to the labor market or effectively manage their own real businesses.

- **Software Engineering**
  The course objective is to provide students with in depth, critical and systematic understanding of principles and techniques of software specification, analysis and design, programming, testing and evaluation, maintenance and management with projecting effective software applications. Students will capture clear understanding of tools and methodology for developing software solutions.

- **Business Intelligence**
  Aims of the course: To prepare the students with facing contemporary challenges in regard to designing, implementation and management of business intelligence solutions (BI). Students will learn about the basic tools and methods of developing BI systems, data gathering, analysis, data mining, data visualization and their application in business environments. Furthermore, students will learn how to manage BI projects, data warehouses, ETL processes, prediction systems and development of BI applications.

- **Human - Computer Interaction**
  This course aims to enable students with knowledge of the theory and practice in software development related to the communication between humans and computers, with the goal of creating usable application interfaces. The course deals with the psycho-motor aspects that influence the way people communicate with machines. Through concrete examples of user interfaces, students should understand the principles and be able to apply them while designing their applications.

- **Business Information Systems**
  Course objectives: - Students will gain knowledge in understanding the ERP (Enterprise Resource Planning) systems, the options of ERP software, as well as integration of processes and transactions in the ERP system. - To enable students to understand the challenges associated with successful implementation of Supply Chain

Management systems. - To enable students to understand the challenges associated with successful implementation of Customer Relationship Management systems. - To develop analytical and organizational skills of the students through the use of business case studies and team work.

- **Information Visualization**
  The aim of this course is to introduce students to the field of data visualization. Students will learn visualization design and evaluation principles, and learn how to acquire, parse, and analyze large datasets. Students will also learn techniques for visualizing multivariate, temporal, text-based, geospatial, hierarchical, and network/graph-based data. Additionally, students will utilize Processing, D3, R and ggplot2, and many other tools to prototype many of these techniques on existing datasets.

- **Project Management**
  The course introduces the area of software project management, presenting techniques and approaches and aims to develop a critical awareness of the challenges and shortcomings of the area. The module is based on knowledge of Software Engineering and in other Information systems courses.

- **Business Process Modeling**
  Processes are the core technologies of all organizations for producing and delivering products and services that satisfy customer needs. Increasingly, in order to continue to serve their customers and remain competitive, organizations are required to continuously analyze, redesign, and improve their end-to-end core business processes in shorter and shorter time frames to achieve operational goals. Realizing this end-to-end business process integration requires an IT infrastructure that enables people, processes, and information to be integrated in a flexible manner. This course will explore how organizations can model business processes as the first step in achieving flexible and integrated business processes. The course will also examine the information technologies and architectures that show promise for enabling this business process integration. The course will provide students with the following: • A framework for understanding the design, control and improvement of business processes. Much of this material will be drawn from the field of operations management. • A methodology for analyzing, modeling, and designing business processes, including the use of simulation for measuring and comparing performance of various models. • Knowledge of the current and emerging information technologies and architectures as enablers of business process improvement, integration and automation.

- **Digital Marketing**
  The aim of the Digital Marketing Course is to provide students with the knowledge about business advantages of the digital marketing and its importance for marketing success of an organization. Digital marketing is where marketing meets the internet and other forms of new media. It includes online advertising and participating in social media, different digital media and how to create marketing content; how to optimize a Web site and SEO optimization; to get basic knowledge of Google Analytics for measuring effects of digital marketing and getting insight of future trends. The gained knowledge, skills and competences will help students to design and evaluate a digital marketing plan in order to manage a digital marketing performance efficiently.

- **Capstone Project**
  In this course, students will work on completing an applied or theoretical project. The aim of the course is to enable students to integrate the knowledge gained from the courses across the curriculum, in order to deliver a ‘product’, such as software or thesis. At the end, students document their works in form of written reports and oral presentations, which are evaluated by a faculty committee.

Elective courses

- **Macedonian Language for Beginners 1**
  The programme Macedonian Language for beginners 1: reading, writing, listening and speaking. Through special exercises and lectures introduction to basic communication in Macedonian language is provided, i.e. introducing, greeting, presentation, enriching vocabulary and write and understand short texts. When we created this program we took into the consideration that students can apply the acquired knowledge further. The material is processed under the principle of combined lectures and exercises, and continuous tasks through which students are actively involved during class and participate with their questions and suggestions.

- **Macedonian Language for Beginners 2**

The programme Macedonian Language for Beginners 2 includes: reading, writing, listening and speaking activities. In this course the following issues are covered: daily routines, planning activities for the next period, description of persons, places and objects. When we created this program we took into the consideration that students can apply the acquired knowledge further.

- **Macedonian Language Intermediate Level 1**
  The curriculum for Macedonian Language intermediate level 1 includes: reading, writing, listening and speaking through which the students: will enrich the vocabulary through appropriate texts for daily activities (in a bank, in a library, in a ministry, etc.) and will improve the skills for professional writing and speaking that are necessary for clear and effective communication in their further professional career. A special, continuous emphasis on the overall activity is placed on the linguistic elements, that is, on the spelling and grammar of the Macedonian standard language. Experts as one of the key elements for good written expression state the correct use of language.

- **Macedonian Language Intermediate Level 2**
  The curriculum for Macedonian Language intermediate level 2 includes: reading, writing, listening and speaking. Special emphasis is placed on the development of students' communication skills, or the use of language in daily activities and professional context, enriching the vocabulary and acquiring knowledge about the structure and types of professional texts. Different communication styles will be covered, with the goal being for students to establish good communication with the audience through their texts and to attract and retain their attention.

- **Macedonian Language for Professional Purposes 1**
  Upon completion of the course Macedonian for Professional Purposes 1, students are expected to broaden and strengthen their abilities for more advanced written and oral expression in Macedonian in the context of the different professional settings. Students are expected to be able to read, write and comprehend various professional texts in Macedonian. They are also expected to acquire knowledge and skills about the general terminology from the field of law, business and economy, administration, computer sciences, language and communication and to be able to use that terminology in the framework of their future professions. Besides accomplishing these professional aims, students are expected to become more autonomous language learners and be able to think critically about different topics in a multilingual and multicultural environment.

- **Macedonian Language for Professional Purposes 2**
  Upon completion of the course, Macedonian for professional purposes 2, students are expected to reconfirm and expand further their abilities for advanced written and oral expression in Macedonian, in the context of their future professions. They should be able to read, write and comprehend different kinds of professional texts in Macedonian, to analyse and discuss those texts, as well as to create their own documents, including professional biography in Macedonian (CV). They should also expand the knowledge of specific terminology from the field of law, business and economy, administration, computer sciences, language and communication and be able to use that terminology in simulation of authentic situations from the professional environment, in debates and exchange of opinion regarding different aspects of these professions.

- **Albanian Language for Beginners 1**
  Albanian Language course for beginners 1, 2 is prepared with the purpose to enable the students, who do not have basic knowledge of the Albanian language, to get to know the characteristics of this language, to gain knowledge of the linguistic structure of the Albanian language, and to extend and apply their knowledge in everyday situations. Correspondingly, they will gain knowledge on the structure of the Albanian language, will overcome a modest set of various lexical and grammatical categories which will enable simple conversations.

- **Albanian Language for Beginners 2**
  Albanian Language course for beginners 1, 2 is prepared with the purpose to enable the students, who do not have basic knowledge of the Albanian language, to get to know the characteristics of this language, to gain knowledge of the linguistic structure of the Albanian language, and to extend and apply their knowledge in everyday situations. Correspondingly, they will gain knowledge on the structure of the Albanian language, will overcome a modest set of various lexical and grammatical categories which will enable simple conversations.

- **Elementary English**
  By the end of this course students are expected to be at A1 level of the Common European Framework (CEF) and should be able to understand and use familiar expressions and very basic phrases aimed at the satisfaction of needs of a concrete type; ask and answer questions about personal identification and personal relations; students should be able to introduce themselves and others by using pronouns and possessives, use greetings, name things in the classroom, distinguish between singular and plural. Students should be able to describe a typical day, recognize and

use simple constructions in order to describe their daily routine; talk and write about their everyday lives, leisure; ask and answer questions about food and drink. students should be able to give dates, use appropriately the vocabulary related to months in the year, make polite requests, describe places; choose a destination and give directions; discuss likes and dislikes.

- **Pre-Intermediate English**
  By the end of this course students are expected to be at A2 level of the Common European Framework (CEF) and should be able to understand and use correctly expressions and phrases aimed at the satisfaction of needs of a concrete type; ask and answer questions about personal relations, describe different jobs, talk and ask about people's working lives, ask about and describe someone's job and make appointments. They should be able to talk about events in the past, describe places, travel and personal histories; choose a destination and give directions; to talk about everyday office activities, express obligation, talk about daily journey. They should be able to talk about things and jobs in the house, understand and give advice and express their opinions; discuss likes and dislikes.

- **Intermediate English**
  By the end of this course students are expected to be at B1 level of the Common European Framework (CEF) . They should be able to ask and answer questions about university degrees, job skills and situations; invite and respond to invitations. Students should be able to ask about or describe family relationships and marital status and they should be able to recognize and use appropriately vocabulary related to degrees and university education, art, travelling and sport.

- **Upper-Intermediate English**
  By the end of this course students are expected to be at B2 level of the Common European Framework (CEF); They are expected to be independent users of English language and to implement some of the following language functions: give advice; ask and answer questions about university degrees, job skills and situations; invite and respond to invitations, read and listen for gist, detail and comprehension.

- **Advanced English**
  Upon successful completion of the course, the students' proficiency level should be at C1 according to Common European Framework. As a result, the students should be able to deliver successfully oral presentation, participate in an online debate/ discussion forum stating their opinion and arguments and give feedback to others in a constructive manner. In addition, the students should be able to listen and read for gist and detail and write an argumentative paragraph and essay stating their opinion. They should write a problem solution paragraph and essay.They should be able to present visual information in a form of Power Point poster presentations for a given topic.

- **German Language**
  After completing this course, students will be able to gain appropriate knowledge according to the European Language Framework (specifically and concretely determined by level). In addition, students are expected to become more autonomous and more responsible language learners. By the end of the course, students will be able to think critically and make conclusions about different topics based on the texts that they have read, as well as to express their thoughts and opinions in written and spoken German.

- **Italian Language**
  The purpose of the course is for students to get acquainted with the Italian culture, the Italian civilization and the Italian language. The idea is for students to know a slightly different reality, which may help them to become aware of themselves, as well as in creating a better picture for themselves and for their future. Corresponding to the level (from A1 to B2), which students choose, or the levels that they will follow in the semesters they have at their disposal for a free elective subject, the matter progresses deeper. The first level starts from basic settings such as: orthography (spelling), pronunciation, vocabulary for managing simple, everyday language situations (personal presentation, presentation of others, orientation in space and in time, communication expressions in a bar, restaurant, supermarket, on the market), and it is reaching more complex constructions in the continuing stages, which refer to the expression of attitude, desire, need, telling past events, talking about future actions, etc. Grammar is introduced inductively (through awareness of situations (audio recordings, videos, films, various texts) and conclusions), in which the students themselves playing the key role, with their active participation in the lectures.

- **French Language**
  The purpose of this course is for students to strengthen their language skills and competencies, as well as to develop four communication competencies, particularly in the following areas: • to be able to express an opinion, • to be able to express their feelings, • to understand the essence of an expression, thought or idea, • to be able to argue and

defend their opinion. • to manage different situations, • to maintain a simple and coherent speech, • to tell an event, • to talk about a dream or experience, • to present the reasons for a project or idea, • to communicate spontaneously.

- **Human Rights and Freedoms**
  Aims of the course: The struggle for human rights begins with the historic efforts to identify them. Over the time, the corpus of rights and freedoms that are incriminated by laws or international treaties is expanding but it certainly does not prove that the same are respected in practice. Human rights at the first were considered as internal matters of states (under the principle of absolute sovereignty of states) and only in more recent times have gained the title of jus cogens norms. This course will study how to develop doctrine on human rights, types and categories of human rights and will be studied the relevant documents that regulate certain rights. The purpose of this course is: to introduce students to the concept of international law on human rights, implementation of the same, influence in the formulation of national policies; This will encourage students to critically reflect on the relationship between international law and national law; make them aware of current international events, how they affect the daily lives of people in the world; encourage students to contribute in matters of drafting laws for the protection of human rights.

- **Assisted Reproductive Technology and Law**
  Aims of the course: This course aims to emphasize the fact that in the modern society, there is no one universal, generally accepted model of family and parenting. By studying the subject 'Assisted reproductive technology and Law', students will gain knowledge about new artificial reproductive technologies that are part of the contemporary natal policy. In more detail, students will be introduced to all artificial reproductive technologies, such as artificial insemination, in vitro fertilization, surrogate motherhood, the birth of children from a woman with sperm donation, posthumous reproduction, co-parenting, 'three parent' baby technique, cryopreservation of gametes or embryos. Students will have the opportunity to be informed that there are many other opportunities offered by science but are forbidden, for example, cloning, gender selection, improvement of the physical, intellectual or other capacities (eugenics) of the future child, etc. By studying this course students are expected to develop their critical thinking by debating the complex set of moral, ethical and legal dilemmas regarding these new reproductive technologies.

- **Intercultural Communication**
  Having completed this course the students will able to identify global questions and problems from the perspectives of different cultures, the communication dynamics in the other cultures, the similarities and the differences between their values and those of other cultures, as well as the similarities and differences between their communication practices and those from other cultures. In addition, students are expected to become more aware of the stereotypes that society has for different cultures and as a result will better understand their place in the global community. The students will start thinking critically about topics related to their ethnicity, gender identity, class, religion, national origin, age and other demographic characteristics and their impact on the communication process. After finishing, the students will also gain communication skills for working in groups through participation in research projects and will acquire the necessary skills to present their research projects.

- **Web Creation**
  Aim of this course is developing even a simple web page according to current standards, requires knowledge of Hypertext Markup Language (XHTML) and Cascading Style Sheets (CSS). Most of the websites also use images, whether in the form of banners, buttons, logos, photos or scans. Adobe Fireworks is built as a tool to create and manipulate images from the web and to allow the makers to optimize these images in order to reduce the file size. Firework also provides an excellent integration with Dreamweaver. This series provides a comprehensive introduction to XHTML, CSS and creating web graphics.

- **Digital Media Design**
  The aim of this course is designing and processing raster and vector graphics through the leading programs Adobe Photoshop and Illustrator, as well as designing and publishing commercial materials for print using Adobe InDesign.

- **IT Skills Office Productivity**
  This program builds skills that help students improve their classroom and careerIT productivity. The program offers a wide range of modules that include: COMPUTER ESSENTIALS - skills and concepts relating to the use of devices, file creationand management, networks and data security. ONLINE ESSENTIALS - skills and concepts relating to web browsing, effective informationsearch, online communication and e-mail. WORD PROCESSING - skills to accomplish everyday tasks associated with creating,formatting and finishing word processing documents, such as letters, CVs, and otherdocuments. SPREADSHEETS - skills to perform tasks associated with developing, formatting,modifying and using a spreadsheet, to use standard formulas and functions, and to competently create and format graphs or charts. PRESENTATION - create professional standard presentations. Perform tasks such as creating, formatting, modifying and preparing presentations using different slide layouts for display and printed

distribution. USING DATABASES - use a desktop database effectively. Understand the main concepts of databases and demonstrate the ability to use a database application: creating and modifying tables, queries, forms and reports, and preparing outputs ready for distribution. Learning to relate tables and to retrieve and manipulate information from a database by using query and sort tools.

- **Microsoft Office Access**
  Microsoft Official Academic Course (MOAC) for Access 2016 provides the hands-on experience to increase your personal productivity skills. This program is divided into 15 lessons cover all product areas required. to pass MOS exam 77-730.

- **Microsoft Office Excel**
  Microsoft Official Academic Course (MOAC) for Excel 2016 provides the hands-on experience to increase your personal productivity skills. This program is divided into 15 lessons cover all product areas required to pass MOS exam 77-727.

- **Microsoft Office PowerPoint**
  Microsoft Official Academic Course (MOAC) for PowerPoint 2016 provides the hands-on experience to increase your personal productivity skills. This program is divided into 11 lessons resources cover all product areas required to pass MOS exam 77-729.

- **Microsoft Office Word**
  Microsoft Official Academic Course (MOAC) for Word 2016 provides the hands-on experience to increase your personal productivity skills. This program is divided into 11 lessons resources cover all product areas required to pass MOS exam 77-725.

- **Legal Writing and Reasoning**
  Aims of the course: The course purpose is to provide the basic knowledge of legal writing and justification to the first year students of Legal studies and Criminalistics and Security studies. In this course, there will be gained knowledge for the legal writing and reasoning principles and basic guidelines for it, by applying the various methods of legal writing of normative legal acts (regulations, laws, decisions, judgments, contracts, wills etc.) and acts (CV, claim, competition, application, notification, plaint etc.). For law students this course is more than necessary. They have to take advantage of the proper legal writing skills and the proper reasoning of what they are writing legally, because the mastery of legal writing is essential to any lawyer in his upcoming professional work.

- **Information Technology (IT) Law**
  Aims of the course: The main goal is for students to become familiar with the possibilities of applying information and communication technologies in the legal profession. Students will be introduced to the general conceptual foundations of legal informatics. Special emphasis is on acquiring skills, that is, practical knowledge in finding and using legal information with the help of new technologies, databases and search engines. Students will also be familiar with the basic issues of e-governance, e-commerce, e-procurement, e-justice and e-democracy.

- **Professional Career Development**
  The course is designed to develop and improve the abilities and skills of students to search for work and to succeed in their workplace. This course includes a package of materials, practical exercises and experience of people in practice in order to better prepare students for the labor market, which is more and more competitive. The course aims at enabling students to produce a quality CV, a motivation letter, and prepare them for the interview. Additional fields that are addressed in this course are: self-assessment, workplace analysis, job description etc. So students at the end of the course are provided with a portfolio of documents that will be needed to apply for job and to have a competitive advantage in the labor market.

- **Administrative Terminology and Nomotechnics**
  In this course, students will acquire basic knowledge about the scientific discipline of Administrative Terminology and Nomotechnics, legal issues in the creation of draft acts of national legislation. Also, students will learn the techniques of creating international legislation, the procedures for adopting legal acts (laws, by-laws) etc.

- **Social Skills Development**
  In this course, students will acquire basic individuals with interpersonal skills, build positive working relationship with others through understand emotions, share differences, resolve conflicts, giving or receiving feedback in a constructive manner. They interact successfully to gain consensus from stakeholders and decision makers and foster positive communication climate within the challenging workplace environment. They rise to the top in their personal

effectiveness, help to reduce the cost of rehiring and training cost and contribute significantly to the organizational growth.

- **Career Search Strategies**
  This course is designed to be beneficial to all students, both for those who are actively in the job search and for those who are already employed. The course has been extremely helpful to students making the transition from an academic environment to a career setting. Transitions involve change and change brings on a flurry of questions about the unknown. Sometimes the unknown relates to options, starting salary, earning potential, risk, security, location, training, lifestyle considerations, etc. Career planning is like a “wheel” with four spokes, rolling continuously and collecting new career-related information as it moves. The information collected provides data, enabling you to answer questions and ease the transition.

- **Selected Chapters in Computing**
  This course presents a wide, integrated introduction to fundamental concepts of computer sciences. The following subjects are covered: history of computing; digital logic and digital systems; introduction to computer architectures, basic algorithmic, problem solving and data structures; introduction to programming languages, operating systems, databases, networks, web and software engineering; application types, including specific software descriptions (word processors, database, browsers, etc.); traditional and multimedia data processing.

- **Web Technologies**
  The main objective of the course is to give students a practical knowledge of basic mechanisms, services and protocols of the global network - Internet. The course provides mastering of the overall architecture of an effective, scalable and secured web page. The students will acquire deep technical knowledge of HTML (lists, tables, figures, multimedia and forms), CSS (formatting, styles and layouts), and JavaScript (variables, conditions, loops and functions) important in building web pages.

- **Academic Writing in English**
  In this course, students’ academic writing skills will be enhanced in a variety of ways. Students will be enabled to communicate their ideas in a clear, fluent and effective way in order to produce a piece of writing. Students’ academic writing skills will be developed through activities that promote writing like: writing different types of paragraphs and essays. In addition, students will be introduced to paraphrasing and citing rules as well as will be made aware of what plagiarism is. Giving feedback on students’ pieces of writing will involve self-correction, peer-correction and teacher-correction of content, organization and language errors.

- **Academic Writing in Albanian**
  By the end of each level, the students are expected to write an essay and a research paper based on the rules learned during the semester. Specifically, from them it is expected to know the function, the structure and the different types of paragraphs, ways of choosing research topics, collecting the material, the rules for source documentation and the final model.

- **Academic Writing in Macedonian**
  After finishing this course, the students are expected to gain appropriate knowledge and advanced communication in Macedonian language with particular emphasis on writing skills. In addition, it is expected that students will become more autonomous and responsible learners. Moreover, students will be able to improve their writing skills in more levels and thereby they will become more confident and more competent when writing in Macedonian. They will be able to reflect critically on different topics, to make conclusions and they will develop skills for excellent written and oral communication in Macedonian.

- **Albanian Language for Specific Purposes**
  The subject aims at improving and perfecting the expression of Albanian language (speaking and writing). Specifically, the course aims to introduce students to specific terms, the possibilities of its use, with the most common errors in daily speech, but also for communication in specific circumstances. The students will learn about the conditions in which the rules work, so they can use them not only for tasks related to the subject but also in their future profession.

- **Practical English Grammar**
  This course is intended mainly for intermediate and upper-intermediate students, students who have already studied the basic grammar of English. It concentrates on those structures which the named students want to use, but which often cause difficulty. It can serve both as a basis for revision and as a means for practising new structures. While students expect and need to learn formal rules of a language, it is crucial that they also practice new structures in a

variety of contexts in order to internalize and master them. To this end, this course provides an abundance of both controlled and communicative exercises so that students can bridge the gap between knowing grammatical structures and using them.

- **Conversational English**
  Conversational English is a one semester course designed for intermediate-level English speakers and above, and will be available to students in all semesters. English is an international language that facilitates communication in a variety of contexts around the world, ranging from business meetings and transactions to casual conversations between friends and interactions during travel. Conversational English will build students' listening and speaking skills, providing grammar, vocabulary, pronunciation, and fluency practice needed for common types of spoken English interactions. This course will cover topics related to professional conversation, casual conversation, and everyday interactions, providing students with conversational confidence in a variety of contexts. Professional conversation will include formal and polite varieties of speech used in contexts such as work meetings or discussions with colleagues. Casual conversation will include practice with language used while socializing with friends or family and other informal situations and will include slang and informal speech. Everyday interactions will include conversations at stores, during travel, and asking for or providing assistance. Methods of learning will focus on practice and will include listening activities, dialogues, role-plays and simulations, debates, and discussions.

- **Digital and Online Literacy**
  Digital and Online Literacy is a one-semester course meeting 3 class hours per week, offered in the undergraduate studies. The course is designed according to students' needs and it includes a number of 21st century skills related to using technology appropriately and effectively. The course will encompass the three categories of the 21st century skills. By the end of the course students will be able to search for and access online information successfully using variety of digital tools, critically evaluate the reliability of online resources and distinguishing between credible and untrustworthy sources, demonstrate understanding of ethical issues related to academic context, understand proper referencing in order to avoid plagiarism, learn how to effectively communicate in a professional manner, understand the basics of being safe online and the positive and negative aspects of creating an online identity, investigate cyber bullying and identify possible solutions for reducing online harassment.

- **Consumer Protection**
  Aims of the course: The main goal is for students to become familiar with the concepts, Sources, Relationship with other branches of law, Entities (natural and legal persons), Legal institutes for consumer protection, protection through the application of liability due to physical defects in the item, protection of legal deficiencies in the item, protection of normal functioning the welding, by the use of administrative networks by administrative bodies, protection by setting standards, protection through private legal measures, consumer protection procedures.

- **Trade Law**
  Aims of the course: The main goal is for students to become familiar with the entities of commercial law (trader, sole proprietor, trade companies), connection of trade companies, termination of trade companies (liquidation and bankruptcy), trade agreements, industrial property rights, securities).

- **Domestic Violence**
  Aims of the course: Domestic violence is a social phenomenon of wide scale and widespread in contemporary society. It is present in all states and societies regardless of their development and emancipation. Immune to this phenomenon is neither our country nor the region in which we live. Therefore, law students through this course gain knowledge of what is domestic violence, the forms in which it is manifested, the legal arrangements in the country, the region and the international sphere as well as the ways of preventing it. Through this course, students at the end of the course will be able to identify domestic violence, identify criminal offenses that are incriminated in the Criminal Code as domestic violence, and develop critical thinking about this problematic. This course enables the future jurisdiction to handle issues of this sphere of high sensitivity as well as to provide the most adequate assistance and protection for the victims of these criminal offenses in the exercise of his future profession as a judge, prosecutor or lawyer.

- **Cyber Security**
  Aims of the course: Cyber security in context will explore the most important elements that shape the playing field on which cyber security problems emerge and are managed. The course will emphasize how ethical, legal, and economic frameworks enable and constrain security technologies and policies. It will introduce some of the most important macro-elements (such as national security considerations and the interests of nation-states) and micro-elements (such as behavioral insights into how people understand and interact with security features). Specific topics include policy making (on the national, international, and organizational level), legal frameworks (including duties of

security, privacy issues, law enforcement access issues, computer hacking, and economic/military espionage), standards making, and the roles of users, government, and industry.

- **Social Media and the Law**
  Aims of the course: By the end of the semester students will be able to:identify their individual rights, specifically those who refer to social media; describe the ways in which new communication technologies are reshaping, and continue to influence, national and international legal order; develop a picture of how social media, internet, television and other communication technologies affect our understandings of law and justice; classify legal issues that companies from different industries may face when integrating social media into their business practices; to recognize the potential positive and negative consequences of their personal presence in the media.

- **Business Communication**
  The purpose of this course is to introduce students to the concepts of business communication. This course is an attempt to improve students' communication skills with theoretical indicators and first of all with practical demonstrations of the right way of communication in an organizational environment with employees and managers, as well as holding meetings, interviewing, how to respond during the interview, negotiation and motivation of everyone in their circle.

- **Leadership and Organizational Development**
  The course aims to enable students to identify how leaders and managers are developing and implementing the achievement of the mission and vision of an organization in the public sector; develop values required for long-term success and their application through appropriate activities and habits; how leaders and managers are personally involved in providing assurance that the systems for managing the organization will be developed and implemented. Also, about how the organization implements its mission and vision through a clear strategy based on the views of all interested parties, supported by all relevant policies, plans, goals and processes.

- **Communication Skills**
  The course Communication Skills is designed to enable students to practically apply interpersonal communication. Students will have the opportunity to learn interpersonal skills (such as perception, listening, verbal and non-verbal communication); public speaking (such as organization, delivery and the basics of writing public speeches) and small group communication (such as leadership, self-confidence and listening). The course will also focus on providing basic knowledge and understanding of the job hunting process through written and oral communication by doing tasks such as writing a resume and a cover letter, conducting interview simulations etc.

- **Critical Thinking Development**
  Students identify and use critical thinking skills, processes and techniques that will assist them in their careers and personal lives. Students develop their ability to investigate and evaluate thinking from different viewpoints and synthesize their own positions based on the evidence available. Also, students practice techniques that enable them to maximize the results they create in any long-term learning experience, while identifying, analyzing and formulating solutions to problems as they arise. They will develop critical thinking strategies and apply them to reading, writing, and listening. Students will apply questioning strategies, engage in reflective thinking, problem-solving, and testing arguments.

- **Public Relations and New Media**
  The course focuses on the development of those communication skills and techniques that are essential for effective functioning in the era of globalization. Students will elaborate the process of globalization, social, political, economic and cultural aspects of modern phenomenon, the consequences and impacts in the communication sphere marked an era of postmodernism, particularly the impact of new social media, their structure, Multi-language functions of social networks, the effects and consequences in the modern world communication realities.

- **English for Information Technology 1**
  This course is offered with the aim of improving the four main language skills such as reading, writing, listening and speaking in the content-specific area as well as revision and advancement of selected intermediate and upper-intermediate grammatical items and vocabulary in the field of computer sciences and technologies. This is done to enable students to comprehend more complicated texts in the mentioned area and enable them to communicate fluently with colleagues and experts in the field. Special attention is paid to the use of authentic materials in order to follow the latest trends and achievements in this field.

- **English for Information Technology 2**

This course is offered with the aim of improving the four main language skills such as reading, writing, listening and speaking in the content-specific area as well as revision and advancement of selected intermediate and upper-intermediate grammatical items and vocabulary in the field of computer sciences and technologies. This is done to enable students to comprehend more complicated texts in the mentioned area and enable them to communicate fluently with colleagues and experts in the field. Special attention is paid to the use of authentic materials in order to follow the latest trends and achievements in this field.

- **Research Methodologies in Business**
  This course provides a comprehensive introduction to research methodology, the research theories and protocols, and writing research proposals. Students in this subject will learn about the cyclical nature of applied research and iterative process of research and writing. The course teaches students how to identify the subject of study, formulate questions and hypotheses, organize literature review and choose the appropriate research methodologies. By the end of the course, students will complete a proposal that includes an introduction, statement of the problem (the significance of the study), literature review, methodology section, references, and the project timeline.

- **Basics of Trade Law**
  Aims of the course: - to provide students with fundamental and advanced knowledge from the area of trade law. The main focus of the program (syllabus) is directed on offering students a thorough grounding on three major fields of trade law: company law, commercial law contracts and negotiable instruments (bill of exchange and cheque); - to provide students general with knowledge on the foundation and organization of commercial entities, including the fulfillment of general conditions for the foundation, registration and termination of these entities (sole proprietors and trade companies); - to offer students basic professional knowledge for trade law relationships, including the types, components and participants of these relationships;

- **Web Analytics**
  The purpose of this course is to enable students to master the Internet as a business tool by understanding the basics of web analytics. Since the goal of every website is to attract customers and to increase the importance of the content that is presenting, it is necessary to conduct an analysis of the factors that are important to users. For this purpose we should collect data about the interaction of users with the web content in order to understand their online behaviour and to prepare a list of recommendations for website redesign.

- **Risk Management**
  Upon completing this course, students should be able to: - Identify and categorize the various sources of risk. - Design process for risk management. - Understand the role of the Risk Manager. - Understand the importance of Risk Management for shareholders and other stakeholders. - Learn how to bring the business decisions to achieve the highest risk-returns level. - Conduct measurement and assessment of risk by implementing appropriate techniques and (VaR, scenario-analysis, stress-test etc.) - Apply Integrated Risk Management.

- **E-Commerce**
  Course objectives: - Understanding and application of concepts of electronic commerce – electronic business. - Identification of business needs for adaptation of constant and continuous changes in the field and the importance of incorporation of Information Technology in the most important business processes. - Improvement of their current operational efficiency to transform into a competitive advantage. - Developing strategic, administrative and operational planning for new businesses or improving current planning with their technology. - Explaining the growth of e-business to date, the term business consumer and the business-business model; using relevant business, managerial and social science theories. - Examining the interaction between technological trends and social business-context of e-business, including the diffusion of Social Networks and the Web 2.0 developments.

- **Business Applications Development**
  This is a course in computer programming concepts for students that have substantial programming experience and can attend this course and if they want to learn how to apply that experience to Visual Basic NET. The course will provide a working knowledge of computer programming and application of programming fundamentals to problem solving techniques using Visual Basic NET and to obtain an organizational pattern for programming. It will extensively promote the usage of design patterns, OO methodologies thus aiming to teach students best practices in application development.

- **Organizational Behavior**
  Aim of the course: “Organizational behaviour” is one of the basic courses taught in management and business

schools and departments worldwide. The main purpose of this course is to introduce the students to the language of organizational behaviour and organizational psychology. Thus, students should gain knowledge in fields such as leadership, power, authority, teamwork, conflicts etc. In broad terms, the following actives are for this course: ? Gaining factual knowledge (terminology, classifications, trends); ? Learning fundamental principles, generalizations, or theories; ? Learning to apply course materials (to improve thinking problem solving and decisions); ? Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course; ? Acquiring skills in working with others as a member of a team; ? Developing creative capacities; ? Developing skill in expressing oneself orally or in writing; ? Learning how to find and use resources for answering questions or solving problems ; ? Developing a clearer understanding of, and commitment to, personal values; ? Learning to analyze and critically evaluate ideas, arguments and points of view; ? Acquiring an interest in learning more by asking questions and seeing answers;

- **Data Analysis and Decision Making**
  Aims of the course: To build a capacity for conceiving a project in the filed of Business Informatics. To create a Capstone (final) project in the area of Business Informatics on a subject proposed by the student and approved by the course leader. The Capstone project is composed of: 1. Project proposal, 2. Final written report and 3. Presentation.

- **Business Processes Analysis and Development**
  The course addresses the methods and techniques required to analyze, design, implement, automate, and to evaluate business processes. The course is structured around the stages of the business process management (BPM) lifecycle in which students learn to analyze the efficiency of the organization from the perspective of business processes, redesign of processes in terms of value, the design of business processes and implementation of the BPM systems, as well as simulate the design of new processes. After completing this course, students will be able to assess the efficiency and effectiveness of an organization from the process perspective, to implement projects to improve processes, and determine the role of technology in support of corporate processes.

- **Business Models**
  The aims of the course are to explain the growth of the different business models and especially e-business to date, both business-to-consumer and business-to-business, using relevant theories from business, management and the social sciences. This course also examines the interaction between technological trends and the business and social context of e-business, including the diffusion of social networks and web 2.0 developments. Students identify innovations within the domain of e-business by presenting cases of the innovative use of e-business technologies; they present relevant theories from business, management and the social sciences that help to explain the development and growth of e-business. This course discusses the different business models and strategies, including global supply chain management and electronic markets. Students are introduced with the notion of new organizational forms, such as virtual organizations, electronic markets and open source production, which depend upon e-business technology. The overall aim of the subject is to develop a critical and reflective appreciation of the impact of e-business technology and innovation on business activities.

- **Business Project Application and Design**
  The course highlights key issues for understanding and dealing with different organizational characteristics and design issues in organizations and in society. It integrates profound theoretical insights with practical applications in a learning environment characterized by active student participation, both individually and in groups. Students will deal with established planning and organizing techniques, examine the relationship between projects and between the project and the surrounding organization, and critically reflect upon the role of projects in wider society. This course also aims at critical reflection on how strategy, multiple stakeholder interests, and new emerging forms and/or fashions influence what we consider as proper organizational design.

- **Operations Research**
  Course objectives: - Cautions regarding the inclusion of variables and their definition; and assess data related to the quantification of variables and determining their interaction. - Developing the necessary skills and intuition of managers to recognize the essence of the problem and the solution of his own success; - Knowledge of definitions about the values that these variables can have. - Communicating ideas and harmonization of teamwork - Creation and clear solution models equipped with clear objectives and sensitivity analysis in decision- making; - Identification and registration of alternative decisions that affect the objectives, and the interaction between them.

- **Enterprise System Architecture**
  Information Technology has become an integral part of the successful business strategy. Enterprise system architecture (ESA) is fast emerging as a key function that enables synergy between IT and business strategy and

delivery. ESA is the next step in the learning of young professionals who have a strong background in algorithms, software engineering practices and database, networking and other software development technologies. This course applies these learnings and introduces topics like: solution architecture, technology architecture and business architecture skills. This is the first of two courses for building EA skills. The course will focus on: • Evolution of enterprise architecture concepts - the business, technology and strategy perspectives. • Architectural styles and their role in fulfilling architectural requirements. • Business architecture and capability models. • Project work to practice the concepts and use of tools to build architecture.

- **Introduction to ERP**
  The aim of this course is to introduce student to Enterprise Resource Planning (ERP) systems and its functionalities. It also introduces students how business works and how information systems fit into business operations. More specifically, it is about looking at the processes that make up a business enterprise and seeing how ERP software can improve the performance of these business processes.

- **Personal Finance**
  This course offers a practical introduction to personal financial management. Using a structured, step-by-step approach, students learn how to save and invest, manage student loans, file taxes, decrease credit card debt, and plan for the future. Real-life scenarios, covering a wide range of financial challenges enable students to appreciate the relevance of key concepts, and useful advice from personal finance experts helps them apply those concepts in their own lives. Many math-based examples clearly illustrate the critical importance of achieving long-term financial goals through investing. The course engages students and focuses their attention on critical concepts they need to succeed in class and to manage their finances wisely for a lifetime.

- **Managerial Economics**
  Aims of the course: - To enable students to approach managerial decision problems using economic reasoning; - To present business practice topics by using an analytical approach, using equations and numerical insight;

- **Managerial Accounting**
  The purpose of the course is for students to gain knowledge of accounting, which is used by managers when making decisions. Specifically, to familiarize students with the concepts of accounting for the managers and the necessary tools for making managerial decisions. Prerequisites for entering the course: Principles of accounting.

- **Operational Management**
  The purpose of the course is for students to acquire knowledge to be able: - To prepare and make decisions in which products and services are made. - To prepare and make decisions in which products and services are controlled. - To find a suitable approach to solve any situation connected with the complex problems of products and services. - To learn about various activities of the organization and functioning of the overall system operating management. - To prepare and make decisions that create conditions for products and services. Prerequisites for entering the course: Principles of Management.

- **Knowledge Economy**
  The course program enables students: - to develop a holistic vision of the state-of-the art, the tendencies and the challenges of the knowledge-based economy; - to introduce the basic ideas, theories and industries of knowledge-based economy; - to examine the main knowledge management provisions and to give a grounding in the best knowledge management practices and techniques; - to introduce knowledge technologies used by businesses, being the basis of an effective knowledge management system; - to demonstrate how to identify knowledge processes in practice, manage them using IT; - to specify the criteria of human capital formation and development; to analyze best practices, challenges and opportunities of the implementation of knowledge-based economy in Macedonia and other countries by reviewing and assessing the features of the modern state of knowledge-based economy development; - to prepare students to operate in a dynamic enterprise environment in the context of intellectual capital management.

- **Basic Econometrics**
  Aims of the course program: - To develop an understanding of the use of regression analysis and related techniques for quantifying economic relationships and testing economic theories; - To equip students to read and evaluate empirical papers in professional journals; - To provide students with practical experience of using mainstream regression programs to fit economic models;

- **Principles of Banking and Finance**
  Aims of the course program: - to enable discussion about financial systems, why they exist, and how are they structured; - to explain why the relative importance of financial intermediaries and financial markets is different

around the world, and how bank-based systems differ from market-based systems; - to understand why financial intermediaries exist, and discuss the role of transaction costs and information asymmetry theories in providing an economic justification; - explain why banks need regulation, and illustrate the key reasons for and against the regulation of banking systems; - discuss the main types of risks faced by banks, and use the main techniques employed by banks to manage their risks - explain how to value real assets and financial assets, and use the key capital budgeting techniques (Net present Value and Internal Rate of Return); - explain how to value financial assets (bonds and shares); - to understand how risk affects the return of a risky asset, and hence how risk affects the value of the asset in equilibrium under the fundamental asset pricing paradigms (Capital Asset Pricing Model and Asset Pricing Theory); - to discuss whether stock prices reflect all available information, and evaluate the empirical evidence on informational efficiency in financial markets;

- **Human Resources Management**
  The purpose of this course is to acquaint students with the importance and role of human resource management in contemporary business organizations. Within the framework of this course students will become familiar with the process management of human resources both in theory and practice of international and domestic companies. Prerequisites for entering the course: Principles of management.