



FACULTY

OF CONTEMPORARY SCIENCES AND TECHNOLOGIES

STUDY PROGRAMME FOR POSTGRADUATE STUDIES

(Master of Science)

NAME OF THE PROGRAMME:

BUSINESS INFORMATICS STUDIES

PROGRAMME DESCRIPTION

Business Informatics (BI) is a widely known discipline in continental Europe. Even though it is similar to Information Systems, it focuses more on the technical issues, including Information Systems and structural approaches for modeling and analyzing of the business processes and problems.

BI is particularly important in the field of economy and enterprise environment, which is characterized by strategic joining, outsourcing, physically distributed operating environments and global business partnerships. New strategies, techniques, tools and technologies for the development of an appropriate field such as BI will be the main objective of the programme at the South-East European University.

Understanding both business and informatics is of huge importance to the work of all business professionals, including the executive managers who determine the strategic organization direction, the information professionals who design and deliver new information services; accountancy and finance managers who use information systems for managing the finances and business reports; and marketing and sale managers who use information systems to follow customer purchase and promote new products.

Business Informatics is a study of the Information Technology in business context. The information have become the key business resource which lead to the creation of new careers for the individuals who understand how to operate with the information. These “knowledgeable workers”- people who understand how to store, retrieve, analyze and inform information- currently have a promising and productive career which is imposed on them.

With the Master of Science in Business Informatics at the South-East European University, 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.

Modifications and supplements of study programmes

The courses of the Business Informatics programme at the South-East European University strive to provide balance between subject theory and practice.

This balance also reflects the relation between the theoretical and practical subject content acquired through lectures, instructions, seminars, sessions in computer laboratories and self- study. The course knowledge is acquired through different approach methods including exam sessions, in-class tests, tutorials, individual tasks, group work and presentations. Students are expected to demonstrate inventiveness and originality aspects.

The instruction objective is to provide students with quality study experiences which will provide them with best possibilities to understand the course fields and realize their maximum potential.

All the instructors at our Faculty are highly respected professionals who remain active in their fields, and realize personal contacts in the region and surroundings. A quality designed programme is also offered, in which the instruction entails real world experiences, practical work and cooperation with successful companies from the business field which will lead to fast employment.

PROPOSED CURRICULUM

Semester 1	Credits	W/S	Lectures:	Tutorials:	Overall classes:	Group size
Organization Information Systems	6	W	45	0	180	30
Specialized Elective 1*	6	W	15	30	180	30
Specialized Elective 2*	6	W	15	30	180	30
Specialized Elective 3*	6	W	15	30	180	30
Specialized Elective 4*	6	W	15	30	180	30
Total	30				900	

*Students with the Computer Science knowledge are required to take the following elective courses:

1. Economic Systems Basics
2. Business Finances
3. E- Accounting
4. Business Process Management

*Students with Business knowledge are required to take the following elective courses:

1. Programming concepts (Specialized Elective 1+2)
2. Database Concepts
3. Computer Systems

Semester 2	Credits	W/S	Lectures:	Tutorials:	Overall classes:	Group size
Strategic Information Technology Management	6	S	45	0	180	30
Database Management System	6	S	15	30	180	30
E-commerce	6	S	15	30	180	30
Advanced Elective 1*	6	S	15	30	180	30
Advanced Elective 2*	6	S	15	30	180	30
Total	30				900	

*All the students are required to choose two of the following advanced elective courses:

1. Object-oriented Software Engineering
2. Advanced Business Application Programming
3. Knowledge Management and Decision Support Systems
4. Business Modeling and Process Innovation

Modifications and supplements of study programmes

Semester 3	Credits	W/S	Lectures:	Tutorials:	Overall classes:	Group size
Business Process Analysis for Entrepreneurial Resource Planning	6	W	30	15	180	30
Information Technology Project Management	6	W	15	30	180	30
System Analysis and Design	6	W	15	30	180	30
Advanced Elective 1*	6	W	15	30	180	30
Advanced Elective 2*	6	W	15	30	180	30
Total	30				900	

*All the students are required to choose two of the following advanced elective courses:

1. Advanced Software Design/ Software Quality
2. Advanced Algorithms
3. Service-oriented Architectures
4. Financial Applications of Information Systems
5. Corporation Information System Management

Semester 4	Credits	W/S	Lectures:	Tutorials:	Overall classes:	Group size
Masters Thesis Writing	30	S	/	/	180	30
Total	30				900	

Notice: the distribution of theoretical and practical classes depends on the proposed course curriculum which may be subject to change depending on the course development plans and scientific trends.

COURSE DESCRIPTION

Organization Information Systems

Introduction to the basic Information System (IS) concepts and principles in the context of business decision making. This course entails research in the field of Information Systems, as well as explanation of their importance within the contemporary organizations. The main course objective is to provide students with knowledge on how managers can develop and manage the potentials of the Information Technology in their personal professions and the strategic benefits for their companies.

Strategic Information Technology Management

The course describes the general concepts of information management and supports the development of skills and knowledge required for information managers. The most important management and strategy concepts are integrated, and problems such as management function and concepts, the strategy, organization and planning, as well as the examination of the method of using information systems as a strategic tool are also covered. The course objectives are to primarily generate introduction to the key elements of strategic management, the planning and organization in order to further develop understanding of the basic concepts and frames of strategic management through which the potentials of strategic information systems may be identified and evaluated.

Database Management Systems

Thorough research of the Intelligent Management Systems with databases in support of business decision making. Research on all the aspects of data modeling, database design and implementation of relational, object-oriented and semantic database. Relational database systems: architecture, theory and application. Relational data structures, integrated rules, mathematical description and data manipulation.

E-commerce

Commercial transactions in an electronic era, understanding of technology, transactions, marketing and trade, business, management and technical implementations of E-commerce. Students will first acquire leadership, planning and team management skills included in the initiation and development of highly technological endeavors.

Business Process Analysis for Entrepreneurial Resource Planning

Modifications and supplements of study programmes

The course provides students with introduction to the basics of Entrepreneurial Resource Planning Systems, with a special emphasis on how integrated information systems enhance business operations. The course is a detailed description of examining

the principles required for understanding the data integration through different departments in every organization.

Information Technology Project Management

Overview of the practice for Information Technology Project Management, software, context, and processes. The topics include project methodology implementation, resource selection, project risks and damage: technical personnel project management, project management tools, techniques and issues related to the external project origin.

System Analysis and Design

Understanding of the tools for system analysis and design creators, analysis techniques and methods, information system design and implementation. The use of theory and applied projects for building an efficient interpersonal and communication skill which is of vital for interaction with clients, users and other team members, involved in the development, operation and maintenance of information systems. Approaches for system development and other techniques, necessary for quality system creation.