



**ACADEMIC YEAR 2020-2021
CORE MODULES – 1st SEMESTER
(TOTAL ECTS 30 UNITS)**

1. INTRODUCTION TO FINANCE - (5 ECTS)

The course introduces fundamental concepts related to Financial Management, the time value of money, methods of forecasting financial gaps. Particular emphasis is placed on the role of cash flows in financial decision-making. In addition, methods of forecasting financial gaps are examined, highlighting their importance in the context of business planning. The module also examines issues of short-term financial planning, break-even point analysis and capacity utilization. Students are trained on practical applications on Excel. The course consists of lectures and practical applications - case studies.

2. MATHEMATICS I - (5 ECTS)

The aim of the course is to provide students with the necessary mathematical background to be able to analyze complex financial problems. Indicatively, the course outline is as follows: introduction to set theory, calculus of univariate functions, vectors, arrays, linear systems eigenvectors, eigenvalues, quadratic forms, linear programming, zero-sum games, calculus of multivariate functions. The course consists of lectures and practical applications – case studies.

3. INFORMATION SYSTEMS AND MODERN APPLICATIONS - (4 ECTS)

The aim of the course is to introduce the basic concepts related to the application of information technology on the organization of business structures and processes. Students should be able to understand the transition from existing to new environments and develop information systems to implement and support the strategy of an organization. Special emphasis is placed on the new IT technologies for businesses and particularly on the structure and the capabilities of modern Management Information Systems, as well as in their management and support procedures. The course aims at training students in MIS, in their use to gain a competitive advantage, in their management, in the efficient management of business processes as well as in promoting innovation. After the end of the module, the students will be able to apply their knowledge to develop processes and applications to support administrative, financial, productive and other business operations. The course consists of lectures and practical applications - case studies.

4. MICROECONOMICS - (4 ECTS)

The aim of the module is to provide students with the necessary analytical tools of modern Microeconomics to examine the behavior of the two fundamental economic units; consumers (households) and producers (firms). Moreover, it examines their interaction through the market mechanism. The course consists of lectures and practical applications - case studies.

5. INTRODUCTION TO FINANCIAL ACCOUNTING - (5 ECTS)

The aim of the course is to introduce students to the principles and methods of Accounting Science as well as to introduce the institutional framework governing the accounting function and monitoring. The topics covered, among others, include: theoretical framework of financial accounting, IFRS, IAS, preparation of financial statements: income statement, statement of financial position, statement of changes in equity, cash flow statement, notes to the financial statements, double-entry bookkeeping system, accounting event, the concept of account, account categories, calendar, ledger, balance sheet, accounting entries. The course consists of lectures and practices applications - case studies.

6. STATISTICS I - (4 ECTS)

The aim of the course is to facilitate students' understanding on fundamental concepts of statistics and their application to analyze stochastic financial problems. The course outline includes, among others, the following concepts: descriptive statistics, probabilities, random variables, discrete distributions, continuous distributions, standard normal distribution, sampling distributions, multivariate distributions. The course consists of lectures and practical applications - case studies.

7 (a). ENGLISH I: ACADEMIC READING AND VOCABULARY - (3 ECTS)

The aim of the course is for the students to familiarize themselves with the subject-specific terminology and writing of financial texts (ie articles from financial newspapers / magazines, excerpts from financial textbooks, economics-related articles from the internet, articles in scientific journals, advertisements etc), as well as the various figures and charts that accompany them. This familiarization aims at the development of the necessary skills for effective communication on issues related to the subject of Accounting and Finance. The course consists of lectures and practical applications - case studies.

7 (b). FRENCH I - (3 ECTS)

The aim of the course is for students to engage with the basic structures of French grammar (essentially, verbs, adjectives, tenses, etc.) - grammatical objectives, written and oral skills in everyday circumstances of social and professional life. Regarding language and communication objectives, students will be able introduce themselves, to open bank account, to understand an itinerary or classified advertisements, fill in various forms (registration, theft statement, etc.). Regarding self-development objectives, students will be able to engage in independent study through interactive web exercises.

7 (c). GERMAN I - (3 ECTS)

The aim of the course is to introduce students to the German language (beginners level) while, at the same time, raise awareness about German culture. At this level, teaching focuses on acquiring an elementary vocabulary to be able to communicate in simple daily situations in a German-speaking country (eg to be able to introduce themselves, ask for directions, shop, use transportation services etc.). It also introduces students to basic grammar structures and syntax. The course promotes the development of written and oral speech through guided exercises and the development of listening skills and the understanding of simple everyday phrases and dialogues.