

**YEAR 1:**  
**CONTENT OF AVAILABLE COURSES**  
**2021/2022**  
**DEGREE IN BUSINESS ADMINISTRATION**

The following information is subject to changes.

For more details regarding the courses, please, contact the coordinating professor.

Updated 18/04/2022

**ASIGNATURA: ESTADÍSTICA**  
**SUBJECT: STATISTICS**

**CONTENTS**

1. Introduction to the Concept of Probability
2. Conditional Probability
3. Random Variables
4. Characteristics of Random Variables
5. Random Vectors
6. Probability Distribution Models
7. Unidimensional Descriptive Statistics
8. Statistical Analysis of two Variables
9. Introduction to Sample Inference through Simulation
10. Application of Statistical Methods with Statistical Software

**ASIGNATURA: INTRODUCCIÓN A LAS FINANZAS EMPRESARIALES**  
**SUBJECT: INTRODUCTION TO BUSINESS FINANCE**

**CONTENTS**

1. Basis of Financial Transactions
2. Financial Transactions of Capitalization
3. Discount Financial Transactions
4. Financial Income and its Valuation
5. The Financial Subsystem of the Business
6. The Economic-Financial Structure of the Company: Working Capital
7. Investment in the Business
8. Methods for Evaluating an Investment Project

**ASIGNATURA: FUNDAMENTOS DE CONTABILIDAD FINANCIERA**  
**SUBJECT: BASIS OF FINANCIAL ACCOUNTIN**

**CONTENTS**

- TOPIC 1. Financial accounting and accounting regulation.  
TOPIC 2. The patrimonial structure or managerial wealth.  
TOPIC 3. The results.  
TOPIC 4. The accounting method.  
TOPIC 5. Traffic operations I: service companies.  
TOPIC 6. Traffic operations II: commercial companies.  
TOPIC 7. The accounting cycles.

**ASIGNATURA: INTRODUCCIÓN AL MARKETING**

**SUBJECT: INTRODUCTION TO MARKETING**

**CONTENTS**

1. Marketing: Society and Business Company. The Marketing Concept. For-Profit and Non-Profit Marketing.
2. The Market and the Planning of Business Strategies
3. The Consumer's Purchasing Behavior
4. The Marketing Environment
5. The Marketing Information System
6. Basic ideas of Segmentation and Positioning
7. Product and Brand
8. Pricing Considerations and Approaches
9. Integrated Marketing Communication
10. Management of Distribution Channels

**ASIGNATURA: MATEMÁTICAS**

**SUBJECT: MATHEMATICS**

**CONTENTS**

1. Linear algebra block.
  - 1.1. Topic 1. Matrices and determinants.
    - 1.1.1. Basic concepts and operations with matrices.
    - 1.1.2. Determinants. Rank of an array.
  - 1.2. Topic 2. Systems of equations
    - 1.2.1. Basic concepts.
    - 1.2.2. Discussion and resolution of systems.
  - 1.3. Topic 3. Diagonalisation.
    - 1.3.1 Eigenvalues and eigenvectors.
    - 1.3.2 Diagonalisation of a matrix.
2. Block Functions of a variable.
  - 2.1. Topic 4. Differential calculus.
    - 2.1.1. Basic concepts.
    - 2.1.2. The derivative and its applications.
  - 2.2. Topic 5. Integral calculus
    - 2.2.1. Basic primitives.
    - 2.2.2. Definite integral.
    - 2.2.3. Applications.
3. Block Introduction to functions of several variables.
  - 3.1. Topic 6. Functions of two variables.
    - 3.1.1. Concept of the function of two variables. Graphs and level curves.
    - 3.1.2. Partial derivatives.
    - 3.1.3. Optimisation.

**ASIGNATURA: INTRODUCCIÓN A LA ECONOMÍA DE LA EMPRESA**

**SUBJECT: INTRODUCTION TO BUSINESS ECONOMY**

**CONTENTS**

Topic 1: The company as a socioeconomic reality

- 1.1. Concept and resources of the company
- 1.2. Types of companies
- 1.3. Business goals
- 1.4. The figure of the entrepreneur
- 1.5. The company as a system

Topic 2: The Administration subsystem I. The functions of the administrative process

- 2.1. Administration and management skills
- 2.2. The functions of the administrative process
- 2.3. Decision making in the company
- 2.4. Roles of the managerial job

Topic 3: The Administration subsystem II

- 3.1. Planning
- 3.2. Organization
- 3.3. Direction
- 3.4. Control

Topic 4: The Production subsystem

- 4.1. The production function: basic concepts
- 4.2. Objectives of the production subsystem
- 4.3. Main decisions of the production subsystem
- 4.4. Types of production processes
- 4.5. Productivity analysis
- 4.6. Deadlock Analysis

Topic 5: The Commercial subsystem

- 5.2. Concept and elements of marketing
- 5.3. Strategic marketing
- 5.4. operational marketing

Topic 6: The Financial Subsystem

- 6.1. Introduction to the financial function
- 6.2. The economic cycles of the company

- 6.3. The profitability of the company
- 6.4. The financial environment of the company

Topic 7: Environment and growth of the company

- 7.1. Business environment
- 7.2. Optimum size and dimension
- 7.3. Capacity, occupancy, and operating leverage
- 7.4. Business centralisation