

## **FINANCE COURSE DESCRIPTION**

### **AD01 INTRODUCTION TO BUSINESS**

#### **Credits: 3**

This course teaches the basic concepts in management: Business and managers, Globalization and Business, Planning, Organizing, Control, Strategic Management, and it goes through each of the main departments that compose the business environment: Human resources, marketing, finance, etc

### **AD06 OPERATIONS MANAGEMENT**

#### **Credits: 4**

Students will learn the different techniques involved in the management of operations in product or service related firms. Students will learn about timings, production aspects, logistics efforts, results analysis, etc

### **AD07 ENTREPRENEURSHIP 1**

#### **Credits: 3**

This is a course that integrates concepts learned in previous marketing, management, accounting and finance courses, through the use of a live simulator where students form a company with its operational areas, and have to set in operation through the semester.

Bibliography: DAVID: Strategic Management Concepts.

### **AD23 HUMAN RESOURCES**

#### **Credits: 3**

This course presents an interdisciplinary focus, emphasizing in providing students with the basic concepts engaged in the HR management: Recruiting and selection, job description, interviews, training and coaching, performance management, career planning, firing, etc

Bibliography: DRESSLER - Personnel Management.

### **AD26 STRATEGIC PLANNING**

#### **Credits: 3**

This course concentrates on the technique involved in the strategic planning process: Environmental analysis, SWOT analysis, scenarios, planning, implementation methods and control

### **AD29 EXPERIMENTAL STATISTICS**

#### **Credits: 4**

The course Experimental Statistics for Business Administrators includes the study of the most used basic methods of inferential statistics, which are important tools in the decision-making process. The topics covered are also base for other disciplines studied during the career. The theory is complemented with lab practices, using the statistical software SPSS.

*Sampling distributions / Punctual estimation and estimation by intervals / Proof of hypothesis for independent and dependent samples / Use of the chi-square distribution in tests of independence of criteria and goodness of fit / Analysis of variance / Factorial analysis / Simple linear and non-linear regression / Correlation analysis / Multiple regression analysis / Time series.*

Bibliography: MASON y LIND: Statistics for Administration and Economics ; WEBSTER: Applied Statistics to Business and Economics ; LEVIN, RUBIN: Statistics for Business Managers. MENDENHALL: Statistics for Business Managers.

### **AD73 VALUE BASED DECISION MAKING**

#### **Credits: 3**

This course not only analyzes the principles of business ethics, but it provides students with a practical methodology in order to handle dilemmas, not only on the business arena but also on their personal lives.

### **AD77 BUSINESS TOPICS: E-BUSINESS**

#### **Credits: 3**

Students will learn the main topics involved in the electronic business world: Language, denominations, technological concepts, business models, etc. At the end of the semester students will be able to develop their own portal on an introductory level.

### **AD105 ORGANIZATIONAL BEHAVIOR**

#### **Credits: 3**

This course analyses the role of firms and the development of the person within its structures and culture: The organizational system, organizational climate and culture, motivation, power, teamwork, change management.

Bibliography: ROBBINS – Organizational Behavior. BECKHARD – What Firms Should do For a Total Transformation

### **AD106 QUALITY AND PROCESS MANAGEMENT**

#### **Credits: 3**

This course introduces students to the importance of process management in order to have a quality oriented firm. Students will be able to develop processes manuals and to understand the principle of quality circles.

### **AD107 ADVANCED MANAGEMENT: LEADERSHIP**

#### **Credits: 5**

Students will learn about the difference between management and leadership. The importance of personal leadership: Self-motivation, self-esteem, time management, pro-activity, perseverance, etc and Managerial Leadership: Teamwork, negotiation, conflict management, risk management, etc

Bibliography: BRANDEN: The 7 Pillars of Self-Esteem. DYER: Your Sacred Self. DYER: Your Erroneous Zones. COVEY: The Seven Habits of Highly Effective People. FISHER: Getting to Say Yes. GOLEMAN: Emotional Intelligence at Work.

### **AD108 ENTREPRENEURSHIP 2**

#### **Credits: 3**

This course integrates all of the business, marketing, finance and accounting courses studied until up to 100 credits. Students have to make real life decisions through the application of a simulator.

### **AD109 ENTREPRENEURSHIP 3**

#### **Credits: 3**

The objective of this course is to integrate in a practical way, all of the contents studied throughout the student's career. They have to form a company and make it function for real. The course is designed to have assessment meetings that monitor the handling of the firm.

### **AF03 PRICING**

#### **Credits: 3**

This course focuses on the synergy and associations that exist between micro economic and marketing concepts in order to determine prices. Students will learn pricing techniques that maximize profits bearing in mind the marketing objectives that can be affected by pricing, such as product positioning.

### **AF07 BANKING**

#### **Credits: 3**

Students will learn all of the different aspects involved in banking decisions and the banking system in general: Regulatory agents, organization of commercial banks, the credit process, treasury, credit analysis, corporate banking, banking operations, etc

Bibliography: AMBROSINI: Introduction to Banking. HAZEL JONSON: Financial Institutions and Markets. CHASE MANHATTAN BANK: Credit Analysis Program. CATES, LYON, INC.: Bank Analysis.

### **AF09 RISK MANAGEMENT**

#### **Credits: 3**

Students are provided with the complete risk analysis framework, as well as with the tools needed to make risk related decisions. Students will identify possible sources of risk, they will quantify risk, they will learn about risk portfolio management, etc

Bibliography: JOEL BESSIS : Risk Management in Banking.

### **AF11 PROJECTS EVALUATION**

#### **Credits: 3**

Students will learn advanced project evaluation techniques, developing an acute vision to understand investment projects, strategies, effects on revenue, economic evaluations, cost of capital etc

Bibliography: NASSIR SAPAG CHAIN: Project Preparation and Evaluation.

### **AF14 FINANCE MANAGEMENT**

#### **Credits: 3**

This course integrates all of the subjects studied in previous finance and accounting courses, through the use of cases.

Bibliography: FRED STONE and EUGENE BRIGHAM: Fundamentals of Finance Management. SCOTT BESLEY, EUGENE BRIGHAM – Fundamentals of Financial Management. ROSS WESTERFIELD & JORDAN – Fundamentals of Corporate Finance. DOUGLAS EMERY & JOHN FINNERTY - Corporate Financial Management.

### **AF16 FUTURES AND OPTIONS MARKET**

#### **Credits: 3**

Forwarding contracts, futures market, swap operations, speculations,

Bibliography: BLACK SCHOLES - Risk and Risk Management. HULL JOHN: Options, Futures and other Derivates

### **AF17 INTERNATIONAL FINANCE**

#### **Credits: 3**

The course analyzes the different financial aspects involved in international business: Monetary policies and systems, exchange rates, balance of payments, interest rates, global cost of capital, global financing methods.

Bibliography: EITEMAN, STONEHILL: Finance in Multinational Firms.

### **AF21 INTRODUCTION TO FINANCE**

#### **Credits: 3**

Students will learn about the different financial institutions that operate within the business and governmental environment, as well as the main products they handle. (Banking, insurance, stock exchange, etc). Students will also learn how to calculate interest rates

Bibliography: AMBROSINI: Financial Institutions. CARLOS ALIAGA: Mathematics for Finance.

### **AF22 MACROECONOMICS**

#### **Credits: 4**

Students will learn the basic concepts of macroeconomics: Supply and Demand, types of markets and economies, external sector, etc

Bibliography: PARKIN: Microeconomics and Macroeconomics

### **AF23 SHORT TERM FINANCE**

#### **Credits: 3**

Students will learn the main short term financing options in order to make adequate decisions: What is financing, risk analysis, the cost of money, etc

Bibliography: EMERY, FINNERTY: Corporate Financial Management.

### **AF24 MICROECONOMICS**

#### **Credits: 4**

Students are provided with the necessary tools in order to make appropriate decisions, analyzing the factors that affect consumers and firms: supply and demand, price elasticity of supply and demand, production costs, etc

Bibliography: PARKIN: Microeconomics

### **AF25 LONG TERM FINANCE**

#### **Credits: 3**

Students will learn the main long term financing options in order to make adequate decisions: Investment decisions, return on investment, risk and revenue analysis, planning, long term debts, etc

Bibliography: BREALEY & MYERS: Principles of Corporate Finance.

### **AF26 ECONOMIC TOPICS FOR BUSINESS**

#### **Credits: 3**

This course makes students analyze more deeply the relationship between firms and the economic environment, including the government and its regulations.

Bibliography: PARKIN: Macroeconomics.

### **AF27 STOCKS & BONDS**

#### **Credits: 3**

Students become familiar with the stock exchange market and the way it functions, as well as its use for financial decisions

Bibliography: JUAN MIGUEL BAKULA – Curso integral de formación de mercado de valores. FABOZZI F. & FRANCO MODIGLIANI - Capital Markets: Instruments And Institutions

### **AF28 CORPORATE FINANCE**

#### **Credits: 3**

This course concentrates on the programming of corporate finances and the main activities a Finance Manager has to handle: Relationship between finance and accounting, cash flow management, inventories, accounts receivable and accounts payable, treasury management, long term debt management, short term debt management, chapter 11, mergers, reports to stockholders, etc.

Bibliography: SCOTT BESLEY, EUGENE BRIGHAM: Fundamentals of financial management. ROSS WESTERFIELD & JORDAN: Fundamentals of Corporate Finance. DOUGLAS EMERY & JOHN FINNERTY: Corporate Financial Management.

### **AF30 MERGERS AND ACQUISITIONS**

#### **Credits: 3**

This course introduces students to the basic knowledge and handling of mergers and acquisitions, as well as to the concept of globalization. It analyzes strategies of growth, and it measures the integration process in order for the firm to acquire the economic and financial objectives.

Bibliography: KOUSES AND POSNER: The Leadership Challenge. WEEKS: 8 Steps to Solve Conflicts. FISHER: Getting to Say Yes. GOLEMAN: Emotional Intelligence at Work.

### **AF40 FINANCIAL MATH**

#### **Credits: 4**

Students are exposed to basic financial concepts: interest rates, annuities, the value of money.

Bibliography: BODIE MERTON: Finance. CARLOS ALIAGA: Mathematics for Finance.

### **AF41 PORTFOLIO MANAGEMENT**

#### **Credits: 3**

The course concentrates on securities' evaluation, the management of an investment portfolio and the analysis of the different investment alternatives available.

Bibliography: TERRY BRIAN: International Finance and Investment.

### **AM01 MARKETING**

#### **Credits: 3**

This course is an introduction to the basic concepts in marketing. The students will learn about the concepts engaged in the marketing / commercial process: Planning, strategies, positioning, segmentation, the 4P's, etc. All the concepts are taught at an introductory level.

Bibliography: KOTLER, Philip: Principles of Marketing. RIES & TROUT: Positioning. RIES & TROUT: The war of marketing

### **AM23 ORGANIZATIONAL METHODS**

#### **Credits: 3**

The course provides students with the concepts to organize a department and firm: Structures, process design, etc

Bibliography: HODGE – The Organization Theory.

### **CA01 ACCOUNTING**

#### **Credits: 4**

This is the introductory course on accounting. Students will learn the accounting system and its use in the business world: Basic concepts, transactions, registry, the accounting process, and financial statements.

Bibliography: HORNGREN – Accounting

### **CA02 ACCOUNTING PROCEDURES**

#### **Credits: 5**

This course emphasizes the four basic financial statements and it develops each of the accounting information cycles: Cycles of sales, purchases, payments, etc

Bibliography: HORNGREN, HARRISON, ROBINSON – Accounting

### **CA03 COSTS ACCOUNTING**

#### **Credits: 4**

This course enables students to understand the behavior of costs needed in order to elaborate budgets and costing systems: Cost – Volume – Revenue, Value Chain costing, ABC, Process costing, etc

Bibliography: BACKER, JACOBSEN, RAMIREZ – Cost accounting

### **CA04 ADVANCED ACCOUNTING**

#### **Credits: 4**

In this course, students analyze specific accounting situations so that they can apply the principles of accounting to them. They also see subjects such as: Financial statements, inventories, intangibles, short and long-term liabilities, inflation, etc

Bibliography: COLEGIO DE CONTADORES PUBLICOS DE LIMA – NIC's

### **CA05 ADVANCED COSTS ACCOUNTING**

#### **Credits: 3**

This course helps students determine, calculate and analyze costs in order to maximize profits within a firm.

Bibliography: HORNGREN, FOSTER, DATAR – Cost accounting: A managerial perspective.

### **CA09 MANAGERIAL ACCOUNTING**

#### **Credits: 4**

This course aims teaching the students to handle efficiently the financial and accounting information and reports used in the decision making process, evaluating variables such as the cost – revenue ratio, etc

Bibliography: POLIMERI, FABOZZI, ADELBERG – Cost accounting

### **CA14 ANALYSIS AND PROJECTION OF FINANCIAL STATEMENTS**

#### **Credits: 5**

This course teaches students the different tools that are used in order to analyze financial statements and to interpret the meaning of its results. The course also focuses in enabling students to project financial statements relating them to the firm's budgeting processes.

Bibliography: BERSTEIN – Financial Statement Analysis

### **CO01 CREATIVITY WORKSHOP**

#### **Credits: 3**

The students will have the opportunity of developing creativity as an ability and a necessary attitude for life. Moreover, it is expected that the students integrate their knowledge with their abilities to solve every day living problems, and integrate personal with professional values.

*Method of solving problems / Creativity: definition, techniques for generating ideas, creativity in Peru / the creative person: investments, theories and techniques / The creative product: criteria and techniques / The creative process: models and examples / The creative situation: organization and techniques.*

Bibliography: ARIETI: Creativity: magic synthesis. DE BONO: The lateral thought: creativity handbook and six hats for thinking. DUAILIBI and SIMONSEN: Creativity and Marketing. FORNS and LUNA: Teaching materials for the course.

### **DE57 BUSINESS LAW 3**

#### **Credits: 3**

The course endeavors to give the student the basic knowledge about the principles and rules of the tax law and of the national tax system, with special emphasis in business taxes that allow the students of finance

and accounting know the existence of tributary costs in business and transactions that could influence in the decision making of the enterprises.

*Brief summary of the national tax system / Tributary Constitutional Law / De Facto Budget, the act generator of the tribute and the tax base, demand of the obligation / The Juridical Tributary Relation / Liquidation and Determination of the Tributary Obligation / The Illicit Administrative Public Prosecutor/ Income, Sales and Patrimony Taxes / Other tributes that affect the payroll*

Bibliography: No bibliography .

### **DE91 TAX LAW**

#### **Credits: 3**

It includes finance science study, tributary system, the taxes, the general principles of tax law, the constitutional tax law, material tax law, formal or administrative tax law, procedural tax law, international tax law and criminal tax law.

*Basic concepts of tax law / Constitutional tax law / Tax code / Substantive tributary law / Formal tax law / Procedural tax law / Criminal tax law.*

Bibliography: ATALIBA: Hypothesis of tax incidence. DANOS: The tax regime during contraction. JARACH: Public Finance and Tax Law. LUQUI: Tax obligation. RUBIO: 1993 Political Constitution Study. VIDAL: Rates and Public Prices.

### **DE93 FINANCIAL LAW**

#### **Credits: 3**

The course aims to give the student the skills to understand, analyze and apply the financial and taxation variables that surround every business decision.

*Introduction to financial tools management / Business financing alternatives / Financial statements analysis and taxation framework.*

Bibliography - LOPEZ ALIAGA: Investment Banks in Peru. FORROUGE: Financial Law; URRUNAGA, HUAROTE: Future options and their implementation on the Lima Stock Exchange.

### **DE119 BUSINESS LAW 1**

#### **Credits: 3**

The student will have a basic knowledge about law, the same which will include the structure and functioning of the Peruvian State as well as the vision and juridical mentality that underlies in the professional exercise of law.

*State, Division of Powers and Democracy / The Legislative Power / The Executive Power / The Judiciary / Autonomous Constitutional Organisms / Approximation to the legal instruments / Structure of the Juridical Rules / Legal Rule Application*

Bibliography: ISASI: Political Culture and Constitution. CHIRINOS SOTO: 1993 Constitution. VALLE RIESTRA: Constitutional Responsibility of the President. PANIAGUA: 1993 Constitution, Analysis and Commentaries. RUBIO CORREA: Juridical System. Introduction to Law.

### **DE120 BUSINESS LAW 2**

#### **Credits: 3**

The purpose of the course is that the student be able to understand and manage the different aspects of Law that have practical incidence in the development of business activity.

*Economic Regime / Regulating Mechanisms of the Market / Corporations / Contracting / Guaranties/ Securities / Business Financing: The Financial System and Securities Market / Investments Promotion Regime / Business Restructuring / Tributary Matters related to the Business / Controversy Solutions /*

Bibliography : BOZA Investing in Peru. ARIAS SCHEREIBER: The contractual technique and its contractual model. BONFANTI: Banking Contracts. CAIVANO: Negotiation, conciliation and arbitration. ELIAS LAROZA: Peruvian Law of Societies. MONTOYA M.: Commercial Law.

### **HU01 UPC'S EDUCATIONAL PHILOSOPHY**

#### **Credits: 2**

The students recognize the importance of ethical training in their professional education, considering current ethical problems and the possibility of solution through their ability to communicate

*Professional Competence / Ethical Concept / Ethical Reflection / Debates and perspectives to solve ethical problems / Dialogue's needs and conditions / Argumentation / Recognition of the other / Citizenship / Final evaluation*

Bibliography: BRUNET: Let us talk of ethics. CORTINA: The ethical task. Jacobs and others: Ethics and politics. The art of living and cohabiting. SAVATER: Ethics for Amador. Ethics, politics and citizenship. Politics for Amador.

### **HU02 RESEARCH METHODS 1**

#### **Credits: 2**

The students develop and apply basic abilities for research (analysis, synthesis, criticism, information management and information research, organization, discipline, creativity and intellectual honesty) in the creation of research academic texts

*Bibliographical research / Search, selection and information compilation / Information management in the creation of academic texts / the state matter.*

Bibliography - GALLEGOS: Ethics. Engineering. MELNIK: Advertising: principles, means and purposes. PRIESS: Ethics and responsibilities: considerations for journalists. SEN: About ethics and economics.

### **HU03 LANGUAGE AND COMMUNICATION (SPANISH 1)**

#### **Credits: 4**

The students describe, explain and interpret the nature and use of the linguistic knowledge; likewise, they develop their written and oral abilities in formal registry and value their importance in the academic environment.

*Grammatical theory: scientific knowledge, acquisition of the language, particular grammar, theory about the use of the language: pragmatics / Workshop: Reading, writing and oral expression: the written registry as formal communication vehicle, the process of writing, punctuation, the structure of the text, the design of an effective oral exposition.*

Bibliography: AGUIRRE, ed: Teaching materials. CHOMSKY: Language knowledge. Its nature, origin and use. ESCANDELL VIDAL: Introduction to pragmatics. HERNANZ and BRUCAT: Syntax. SERAFIN: How to write a subject.

### **HU04 LANGUAGE AND COMMUNICATION (SPANISH 2)**

#### **Credits: 4**

The students understand the historic and social nature of the language considering the close relationship between the linguistic and social phenomena, cultural and historic. They acquire conscience of the complexity of the Peruvian linguistic reality and respect the linguistic diversity as one of the forms of conservation of the cultural plurality. Likewise, they manage adequately different verbal tools for an efficient communication in different communicative levels.

*Theory: historical study of the language; formation, consolidation and extension of Spanish; Spanish in America; linguistic panorama in Peru; Peruvian educational policies, role of the State / Workshop: analysis and commentaries of texts, written communication.*

Bibliography: CERRÓN-PALOMINO: The challenge of multi-linguistics in Peru. Linguistics themes in America-India. DE GRANDA: The Spanish language and its expansion in the age of the Tordesillas Treaty. Valladolid: Board of Castilla and Leon. NARANJO, ed.: Teaching materials. RIVAROLA: The linguistic formation of Hispanic-America.

### **HU05 PERUVIAN CULTURE**

#### **Credits: 3**

The students know and understand the Peruvian past as indispensable tool to accept and value the cultural heterogeneity of the country. Recognize and interpret the present as a result of a historical process that allows them to compromise with it and its future possibilities.

*The historical knowledge / Incan Economy / Andean destructuring in the XVIth century / Colonial system / Changes in the colonial order / The Emancipation / XIXth Century: The Republic / Aristocratic Republic / The eleven years of the government of President Leguía / Crisis of the oligarchical state / The “Peruvian Revolution” / Present Peru.*

Bibliography: ARANÍBAR and others: New general history of Peru. BASADRE: History of the Peruvian Republic. COFIDE: Our history collection. CURATOLA and others: Peruvian History and Culture. KONETZKE: Latin-America. Colonial age. MACERA: Historical vision of Peru. MILLONES: Colonial Peru: from Pizarro to Tupac Amaru II.

### **HU09 RESEARCH METHODS 2**

#### **Credits: 2**

The students produce a monographic research work that reflects the development of their capability of argumentation, coherence, rigor, academic competence, integration of knowledge and creativity; at the same time, the development of the monographic work demands responsibility, critical attitude, flexibility, tolerance, intellectual curiosity, self-demand, honesty and respect for intellectual property.

*Introduction / Discursive abilities: definition and hierarchy, evaluation and elaboration of reports and research projects / Execution of the research project: collection and organization of the information, writing of the chapters. / Final stage of the research work: conclusions, introduction, summaries, oral exposition, results evaluation.*

Bibliography:ECO: How do you make a thesis? Techniques and studies procedures, research and writing. RIVAS GALARRETA: Bibliographic Research Methodology. FERNÁNDEZ SAMPIERI and others: Research methodology. REALE and ANTISERI: History of the Philosophical and Scientific Thought.

### **HU32 BUSINESS AND SOCIETY**

#### **Credits: 3**

The fact that the students realize the existing relations between the organizations and the social environment where they belong, is the main achievement of this course. Although the emphasis is put on the society analysis, a permanent relation with the enterprise reality is settle, in order to achieve a perspective organizational analysis, with a greater amplitude respect to what the traditionally administrative theory offers.

*Relations between enterprise and society / Operation of the organizations: the individual, the groups and the culture (revision and extension of concepts). / Political, social and demographic structure of Peru. / National Identity, the system of collective beliefs, the hierarchical value structuring and the attitudes in the Peruvian society / Superstructure and its relation with the operation of the organizations.*

### **HU36 GENERAL PSYCHOLOGY**

#### **Credits: 3**

Students will learn basic notions of cognition, perception, intelligence, memory, personality, attitudes, etc. relating them to personal, group and organizational situations.

MORRIS – Psychology, a practical focus

## **HU80 COMMUNICATION IN THE ORGANIZATIONS**

### **Credits: 3**

The students write with coherence, clearness and correctness the most important and usual documents in the organizational ambit, and value the importance of a written communication with such characteristics. Likewise, design and realize oral efficient presentations and acquire conscience of the importance that oral communications have in the labor ambit.

*Written Communication: the pragmatic model; differences between speaking and writing; the normative; grammar; punctuation; the paragraph; documents: report, letters, memorandum, curriculum vitae. / Oral communication: its importance in the organizations; design of an exposition; exposition, explication and motivation techniques: impacting; employment of audio-visual media; the lecturer (expositor), verbal construction; the visual contact; the audience.*

Bibliography: BOTTA: Written communications in the enterprise. How to master business writing. ESPINEL MERTZ: How to understand the oral and written communication. LA FUERZA: The art of public speaking: how to speak with persuasive power and voice invigoration MARTÍN VIVALDI: Writing course. From the thought to the word. PIKE: Creative Training Techniques Handbook.

## **MA42 BASIC MATH FOR BUSINESS**

### **Credits: 5**

The course Basic Math for Business covers the basic mathematical tools that allow the students of Business Administration to undertake successfully the following courses of mathematics in their career and, at the same time, to become familiarized with its applications in economy and business administration.

*Equations / Inequalities/ Functions / Graph of functions / Exponential and logarithmic functions / Matrices / Determinants / Conics / Systems of equations and inequalities / Introduction to linear programming / Applications to the economic field.*

Bibliography: LIAL, MARGARET L. Mathematics for Business Administration and Economy 7th Ed.

## **MA43 CALCULUS**

### **Credits: 5**

The course Differential and Integral Calculus (Adm), on the basis of the thorough knowledge of the functions of one variable, gradually provides the tools that enable a quantitative analysis of economic, administrative and social phenomena. This is achieved through the application of the derivative and the integral.

*Modeling of economic functions / Limits and continuity / Derivatives / Applications of derivative / Graphs of functions / Optimization of economic functions / Indefinite integral / Applications on business / Differential equations / Optimization of functions of two variables.*

Bibliography: HOFFMAN: Calculus for Administration, Economy and Social sciences ; HEAUSSLER: Mathematics for Administration, Economy, Social and Life Sciences.

## **MA89 STATISTICS FOR BUSINESS**

### **Credits: 5**

This course includes the study of the most used basic techniques of descriptive statistics, which are important tools in the decision-making process. The topics covered are also base for other disciplines studied during the career. The theory is complemented with lab practices, using the statistical software SPSS.

*Stages of scientific research / Data collection / Organization and presentation of qualitative and quantitative data / Measures of central tendency, dispersion and position / Index numbers / Probability theory / Random variable and expected value / Binomial, Poisson and Normal Distributions / Sampling distribution and Central Limit Theorem.*

Bibliography: WEBSTER: Applied Statistics to Business and Economics ; LEVIN: Statistics for Business Managers ; MASON: Statistics for Administration and Economics ; CORDOVA: Descriptive Statistics.

#### **MA94 QUANTITATIVE METHODS FOR BUSINESS**

##### **Credits: 4**

The course Quantitative Methods for Business is orientated towards the understanding of the basic process of decision-making and how to use the mathematical formulation, based on the optimization of resources, to analyze and interpret the models of general administrative problems, improving the process of decision-making due to the help that complements the experience and the judgment of the one who decides.

*Linear mathematical models / Graphical method / Algorithms of solution / Decision Theory under uncertainty and risk / PERT-CPM / Programming and control of projects / Queues Theory in real situations / Applications of the techniques in a real case of decision-making.*

Bibliography: ANDERSON SWEENEY AND WILLIAMS: Quantitative Methods for Business ; EPPEN AND GOULD: Operations Research in the Administrative Science. MATHUR SOLOW: Operations Research. The art of decision-making.

#### **SI45 COMPUTING FOR MANAGEMENT**

##### **Credits: 3**

The purpose is to learn to use the computer in the solving of problems in administrative applications, in real situations in a such a way to participate in the development of projects with subjects treated in other matters of his career.

*Introduction to Computer Science / Windows / MS Excel / MS Access*

Bibliography: BEEKMAN: Computer Confluence: Exploring Tomorrow's Technology. TABINI: Cibertec Courses. ALIAGA: Financial evaluation with Excel functions: exercises and solved problems. CATAPULT: Access® 2000 Step by Step.

#### **SI 130 INFORMATION SYSTEMS**

##### **Credits : 3**

The course highlight the manager's role in the conception of an Information System and how it must be related to the support of the process inside the business as well as to the backing of the institutional strategy. For this purpose, the students will conceive an Administrative Information System on an enterprise of their election.

*Information Systems Fundamentals / Information Technology / Information Systems for business operation / Internet and e-business / Intranet, extranet and enterprise collaboration / Information Systems for decision making / Information Systems for strategic advantage / IT management: ethical and security challenges.*

OBREIN: Sistemas de Información Gerencial. MC LEOD: Management Information Systems. LAUDON & LAUDON: Management Information Systems.

#### **SI 137 INFORMATICS FOR BUSINESS**

##### **Credits: 3**

The course guides the students in the intensive use of personal software and accounting-financial information for decision-making. Elaboration of business models for simulation. Optimization and integration of software. Introduction to use of projects management software.

*Applications of MS Excel / Common applications / Marketing applications / Accounting applications / Financial applications / Management presentations and application integration*

Bibliography: ALIAGA: Financial Math. HAYAT, SAN MILLÁN: Finance with Excel. Financial Math.