

Credits	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	Total
Basic subjects (B)	35	25			60
Compulsory subjects (O)	25	35	60		120
Optional subjects (including internships) (Op)			5	i4	54
Bachelor's Degree Final Project				6	6
Total					240

### First year

#### NOTE

Codes corresponding to the Type Column B: Basic subject matter O: Compulsory subject matter OP: Optional subject

Term	Subject	Туре	Credits	Description	Contents	Field
1 <sup>st</sup>	Introduction to Microeconomics	В	6	This subject will enable students to: - Understand the fundamental concepts and regulations in a market economy: demand and supply, equilibrium prices and quantities, elasticities, etc. The dynamics of seminars and experiments will help students become familiar with these concepts.	Introduction to the bases of economics. Supply and demand. Determining prices and quantities: market equilibrium. Comparative statics and elasticities. Economic efficiency and welfare. Imperfect markets and public economics: monopoly, externalities, minimum wages The role of the state in the economy.	Economics
1 <sup>st</sup>	Data Analysis	В	6	This subject will enable students to: - Handle databases and resources available at the university.	Computer tools to search for, store, process and communicate statistical and economic data.	Statistics



Term	Subject	Туре	Credits	Description	Contents	Field
				- Become familiar with the basic statistical concepts using computer applications, statistics and graphics.	Advanced use of spreadsheets. Analysis and description of numerical or categorical univariate data. Concept of centre and dispersion. Calculation and interpretation of simple and complex indexes, of rates and of percentages. Graphs and elementary analysis of time series. The relation between numerical variables (correlation and regression line), between a numerical variable and a categorical variable and between categorical variables; graphs, tables and interpretation.	
1 <sup>st</sup>	Mathematics I	О	5	This subject will enable students to:  - Understand the notation and algebraic manipulation in the context of univariate calculus.  - Acquire the basic concepts on the real line, real functions and univariate calculus.  - Understand the properties of real functions.  - Identify mathematical models applicable to the economy.	Real functions of a variable. Univariate differential and integral calculus.	-
1 <sup>st</sup> & 2 <sup>nd</sup>	Business Economics	В	9	This subject will enable students to:  - Get a general overview of the company and its key functional areas.  - Analyze news on current affairs and related to the company.  - Prepare a business case and public presentations.	Decision making within organisations. Behavioral assumptions for the analysis of organisations. The relation between enterprise and its economic environment. Organisations and markets. Decision and business strategy. Introduction to the functional areas: production, investment, financing and commercialization. Corporate finances: types of companies	-



Term	Subject	Туре	Credits	Description	Contents	Field
					and the role of limited liability. The management of organisations: coordination and motivation.	
2 <sup>nd</sup>	Introduction to Macroeconomics	В	6	This subject will enable students to: - Acquire the tools for a rigorous macroeconomic analysis and the use of models, and evaluate the economic and monetary policies.	Production, distribution and use of the GDP. Economic growth. The labour market. Money and inflation. The IS-LM model. The Phillips curve.	Economics
2 <sup>nd</sup>	Mathematics II	O	5	This subject will enable students to:  - Understand the notation and algebraic manipulation in the context of linear and matrix algebra and its application to differential calculus in several variables.  - Acquire the basic concepts on matrix algebra and Euclidean spaces.  - Understand the properties of differential functions, as well as the techniques of differential calculus. Also, concepts and optimization (without restrictions) on several variables.  - Identify mathematical models applicable to the economy	Introduction to linear algebra and differential calculus with different variables. Techniques of comparative statics. Introduction to mathematical programming.	
2 <sup>nd</sup> & 3 <sup>rd</sup>	Introduction to Business Law	В	8	The course will allow students to have a first contact with the law and their economic implications. In particular, insist on contract law in economic relations. Students will be introduced to the diversity of legal systems and the specificity of international transactions.	Alternative legal system: Civil Law and Common Law. General legal framework of economic and business activity: rules and actors. Legal status of the property. Real Estate. Intellectual property. Meal contracts. Contract in general. Main types of contract. Company Law. Structure and governance	



Term	Subject	Туре	Credits	Description	Contents	Field
					of the main types of companies. And capital markets law. Labor system of the company. Elements of taxation of the company. Elements of private and public international law.	
3 <sup>rd</sup>	Microeconomics I	0	5	This subject will enable students to: - Understand the consumer's decision making process Become familiar with the microeconomic variables that affect the performance of firms Study the firm's decision making process under different market structures.	Consumer decisions: preferences and budget constraint. Revealed preference, consumer surplus and aggregate demand. Producer decisions: technology, profit maximization and cost minimization. Perfect competition and market equilibrium. Comparative statics, efficiency and welfare. Theory of demand and production for the study of econometric applications.	
3 <sup>rd</sup>	Introduction to Financial Accounting	0	5	This subject will enable students to: - Carry out an accounting cycle Elaborate a balance sheet and an income statement Understand the workings of the double-entry accounting Account the most common financial transactions.	Balance sheet. Profit and loss account. Drawing up the accounting cycle.	
3 <sup>rd</sup>	Mathematics III	0	5	<ul> <li>Understand the notation and basic concepts on mathematical programming.</li> <li>Acquire the basic concepts on difference and differential equations, and their resolution methods.</li> <li>Interpret the graphical and symbolic form of constrained optimization problems.</li> <li>Identify mathematical models applicable to the</li> </ul>	Theory of optimization. Difference and differential equations.	



Term	Subject	Туре	Credits	Description	Contents	Field
				economy.		

### **Second year**

Term	Subject	Туре	Credits	Description	Contents	Field
1 <sup>st</sup>	Macroeconomics I	О	5	<ul> <li>Become familiar with the main macroeconomic aggregates and how they relate with each other.</li> <li>Analyze and synthesize when using macroeconomic models.</li> </ul>	Inflation and monetary policy. International macroeconomics in the Keynesian model. The Murdell-Fleming model. Optimal Monetary System and the European Monetary System.	-
1 <sup>st</sup>	Financial Statements Analysis	0	5	<ul> <li>Analyze the financial and patrimonial situation of a company.</li> <li>Analyze a firm's profitability.</li> <li>Study the different tools to contextualise (sector, size) the previous analysis.</li> </ul>	Analysis of financial and patrimonial structure. Profitability analysis. The main ratios.	-
1 <sup>st</sup> & 2 <sup>nd</sup>	Probability and Statistics	В	10	<ul> <li>Acquire the basic concepts of probability and statistical inference.</li> <li>Understand the basic statistical calculations and helpful IT tools.</li> <li>Identify the elements of a univariate statistical model.</li> <li>Use statistical packages and correctly interpret them.</li> </ul>	Probability and mathematical expectation. Conditional probability. Distributions. Descriptive statistics. Estimation. Contrast of hypotheses. Simple regression model. Use of statistic programmes.	Statistics
1 <sup>st</sup> & 2 <sup>nd</sup>	International Economic and Business History	В	9	- Get a general overview of the main trends and patterns in the economy and in the company over time, with greater emphasis on the factors that generated the industrial revolution, the spread of economic growth and the instability in the global economy during the	History of economics and business from the 17th until the 21st century.  Spanish and international economic history.	Economics



				20th century.  - Become familiar with the changing profiles in macroeconomic developments.  - Understand the relationship of these changes with the organizations and their microeconomic foundations, and how they have influenced economic change.	Microeconomic and business aspects, as well as macroeconomic matters (growth and current situation).	
2 <sup>nd</sup>	Introduction to Game Theory	В	6	<ul> <li>Get a general overview of the basic concepts of strategic analysis that game theory develops.</li> <li>Analyze and evaluate the alternatives, both in static and dynamic contexts, in the fields of economy and business.</li> </ul>	Introduction to game theory and its applications. What is game theory and what is it used for? Static games: Nash's equilibrium. Applications of static games. Dynamic games: perfect equilibrium in subgames. Applications of dynamic games.	Economics
2 <sup>nd</sup>	Economic Institutions and Markets	0	5	<ul> <li>Analyze the decision making process within organizations.</li> <li>Identify the environmental factors that influence the organizational design in business decisions.</li> <li>Get the methodological tools to study corporations, especially the economy of information.</li> <li>Analyze both case studies and articles.</li> </ul>	Decision making within institutions. The design of the institution: strategy and structure, different alternative organizational designs. Incentives within the company: adverse selection and moral risk, design of incentive mechanisms within institutions. Employment policy and human resources management, internal labour markets, hierarchies and promotions. The company and its environment. Market failures and the Coase theorem. Corporate social responsibility and the role of business ethics.	
3 <sup>rd</sup>	International Business	0	5	<ul><li>Understand the concept of globalization, and its scope and consequences.</li><li>Realize how important internationalization is as a</li></ul>	International business management. International trade and	



				competitive advantage.  - Learn the factors that make it convenient to operate in many different locations.  - Identify the different ways to internationalize and plan the internationalization process.  - Study the current situation of internationalized companies.	globalization. Horizontal and vertical expansion of business in the international environment. Models of internationalization: subcontracting, strategic alliances, etc. New markets. Adaptation to the market. The internationalization of Spanish enterprise. New markets: east Asia. China. Taxes.	
3 <sup>rd</sup>	Financial Economics	0	5	- Study the different investment tools and its financial risks.	Investment and financing. Financial markets. Revenue. Financial institutions. Risk and profitability. Portfolio decisions and diversification.	
3 <sup>rd</sup>	Microeconomics II	O	5	- Become familiar with the different models that study the decisions of firms under competitive conditions Understand the characteristics of public goods and externalities, as well as the role of the public sector in the economy.	Models of imperfect competition. Markets of factors of production. Models of general equilibrium: exchange economies, the fundamental theorems of welfare and the production possibilities frontier. Social welfare and the functions of social welfare. The problems of the aggregation of preferences. Arrow's impossibility theorem. Externalities and public goods. The role of the public sector.	



3 <sup>rd</sup>	Econometrics I	0	5	analysis and its main problems.	Multiple regression model: validity of estimates and dynamic formulation.	
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# Third and fourth years

Term	Subject	Туре	Credits	Requirements	Description	Contents
1 <sup>st</sup>	International Economics I	O	5		- Become familiar with the analysis of international trade and economic development models.	Contemporary European and world economics. Theory of international trade. Economic development. Ricardo's basic model. The mobility of international exchange factors. Income distribution. International commercial policy.
1 <sup>st</sup>	Marketing	O	5		<ul> <li>Become familiar with the basic concepts of marketing.</li> <li>Acquire the knowledge to analyze the environment and the market.</li> <li>Understand the main models of consumer behavior.</li> <li>Study the main marketing tools with which the company can commercialize its products and services.</li> </ul>	Definition of marketing and the historical evolution of the concepts and of the practice of marketing. Elements of the market and marketing tools: product, price, communication and distribution. Systems of information and commercial research. Analysis of the organisation, market, microenvironment and macroenvironment. The potential market: measurement and forecast of demand.
1 <sup>st</sup>	Finance	0	5		- Analyze the cash flows of the company and how to manage them.	Analysis of cash flow. Selection of investment projects in conditions of certainty and uncertainty. Project portfolio model.



1 <sup>st</sup>	Cost Accounting I	О	5		<ul> <li>Develop the skills to calculate the cost of a product according to different systems.</li> <li>Find budget deviations and their causes.</li> </ul>	Partial and complete costs systems Budgets and deviations. Decision-making. Environmental costs accounting. Quality costs. Calculation of the break-even point.
2 <sup>nd</sup>	International Marketing	O	5	it is recommended having taken Marketing	<ul> <li>Learn how to manage an international brand.</li> <li>Evaluate the alternative entry strategies in foreign markets.</li> <li>Understand that both the marketing tools and the Marketing Plan need to be adapted for an optimal commercialization of products in these markets.</li> </ul>	Analysis of segmentation and evaluation of international markets. Entry strategies to foreign markets. Adaptation of the product and of the line of products to foreign markets. International communications strategies. Distributions strategies in foreign markets. Adaptation of prices to foreign markets. The international Marketing Plan.
2 <sup>nd</sup>	International Finance	0	5		- Become familiar with the problems of international finance and exchange rate risk.	Forward rates. Forecast future exchange rates. Purchasing power parity. Covered and uncovered interest rate parity.
2 <sup>nd</sup>	Strategic Management I	0	5		<ul> <li>Analyze the main strategic problems in a company.</li> <li>Strengthen the knowledge of microeconomics and game theory and apply it to business strategy.</li> <li>Improve teamwork skills, and oral and written communication.</li> </ul>	Introduction: why study strategy? The horizontal and vertical limits of the company. Diversification and fusions. Structure of markets and competition. Dynamic competition. Strategic commitment. The threat of entry to market. Industrial analysis. Strategic positioning and competitive advantage. Sustaining the competitive advantage.
2 <sup>nd</sup>	Operations	0	5		- Study the different production activities and	Introduction to production management.



	Management			operations carried out by companies and institutions.  - Analyze how both strategic and tactical decisions are taken.	Process design and long term capacity planning. Location of production plants. Quality management. Inventory management. JIT. Aggregated planning. Material requirements planning (MRP) and capacity requirements planning (CRP). Short term scheduling techniques.
3 <sup>rd</sup>	International Financial Accounting	0	5	<ul> <li>Become familiar with the International Accounting Standards.</li> <li>Learn the main differences in accounting standards around the world: EU, US, Europe, South America.</li> <li>Study the main differences between accounting systems.</li> </ul>	The IASB and the Generally Accepted Accounting Principles (GAAP) in the United States: history and current functions. International accounting rules. Differences between Spain and the other countries.
3 <sup>rd</sup>	International Taxation	О	5	- Get a general idea of those fiscal issues that most affect the business environment, the location of income and residence sources -both for individuals and companies-, and the international trade. Some of these aspects are related to fiscal arbitration, some others to the results of harmonization processes or fiscal competition but, in any case, relevant to the economic agents' decisions.	Taxation of international economic relations. Processes of coordination and of conflict. Customs duties, indirect taxation on transactions, on personal and company income under double taxation treaties, compliance with European directives and with the jurisprudence of international law courts.
3 <sup>rd</sup>	Human Resources I	0	5	<ul><li>Elaborate organizational and individual strategies.</li><li>Apply techniques of personnel management.</li></ul>	Selection. Training. Remuneration. Incentives. Promotion of personnel.
3 <sup>rd</sup>	International Strategic	0	5	- Study the key concepts of strategic management and its international implications.	The nature and sources of competitive advantage. Positioning: advantage in



	<ul> <li>Face real business problems and develop skills to design strategic plans.</li> <li>Improve teamwork skills, and oral and written communication.</li> </ul>	costs and advantage in differentiation. The nature and sources of advantage in costs and its risks. Analysis of the advantage of differentiation with regard to supply and demand. The competitive advantage from an international perspective: changes, challenges and opportunities. Strategy and the environment. Strategies for emerging and for mature industries. Implementing strategy.
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# **Training profile in International Relations**

Subject	Туре	Credits	Description	Contents
Introduction to International Relations	OP	4	International relations as an academic discipline and international theory.	Theoretical and classical approaches. The most recent international theory. Basic concepts of the discipline. Power and structure. The international stakeholders: the State. International organisations as international stakeholders. Other international stakeholders (transnational companies; individuals, the civil society and international public opinion; transnational social movements; transnational organised crime groups; terrorist groups). The dynamics of international relations (conflict and war; cooperation and integration).
Contemporary International Relations	OP	6	The international system after the Second World War: the east-west split.	The north-south split: dependence and underdevelopment. The shaping of a new political world order: the United Nations. The evolution of the United Nations up to today. The Bretton Woods institutions and the multilateral trade system. The evolution of the Cold War: the distension (1962-1979) and the second Cold War (1979-1985). The end of the Cold War (1985-1991). Post-Cold War. Contemporary globalisation: scale, constitutive processes and consequences on political organisation. Global governance.



### Training profile in Business Organization

Subject	Туре	Credits	Requirements	Description	Contents
International Business Policy	OP	5		Become familiar with international business issues and get the tools to face ethical dilemmas in the company in an effective way.	Global companies and international law. Corporate social responsibility. Economic focus of ethics and profits. Theories of ethical rationality. International company and national policies. Ethics of the practice of marketing. Enterprise and global environmental issues. Global labour markets. Corruption. Financial and ethical crises.
Entrepreneurship	OP	5		<ul> <li>Develop the creative skills required to design new business concepts.</li> <li>Understand the ethical issues which are part of the entrepreneurship activities and learn how to handle them.</li> <li>Acquire skills for the research, evaluation and recognition of opportunities that can be transformed into feasible businesses.</li> <li>Apply the different steps in the development of an opportunity to a business model.</li> <li>Develop business strategies using a systematic approach based on a business model.</li> <li>Develop strategies to manage costs and generate revenues so as to build a sustainable business model.</li> </ul>	Who is the entrepreneur and what is entrepreneurship? Creativity and recognizing the opportunity. The business model. Business strategy. Market research and marketing strategy. Entry strategies, legal and professional ethic matters. The economics of new entrepreneurial actions. The importance of the management team.
Current Issues in Business Policy	ОР	5		<ul><li>Face real problems of business management and research articles.</li><li>Design strategic plans to solve problems.</li></ul>	The individual and the companies. Companies and institutional change. Novelties in quality management and



				regulation.  New means of integration and of vertical disintegration. The crisis of commercial brands. Divisionalisation. Electronic business (e-business). The fundamental asset: professional career management.
Organizational Behavior	OP	5	- Understand the different organizational designs and the behavior of individuals within organizations.	Analysis of the main problems of the sociopsychology of institutions from a variety of perspectives:  - The individual within the institution, basic aspects: personality, capacities, perception, ability to learn and motivation.  - The individual within the group, aspects for analysis: conflict, leadership capacity, communication, collective decision making, power and politics.  - Organizational design, organizational culture and change in organizations.
Social Corporate Responsibility and Business Ethics	OP	5	<ul> <li>Understand the impact of business activity in the society as a whole (environment, etc).</li> <li>Study the limits of the business activity regulation.</li> <li>Understand the role of CSR as an alternative to regulation.</li> <li>Think about business activity from an ethical point of view.</li> <li>Distinguish between the different groups of interest (stakeholders): capitalists, environment, employees, customers, etc.</li> <li>Match the concepts of CSR and building a</li> </ul>	Company and market. Conflict between company and society. Regulation and its limits. The concept of Corporate Social Responsibility (CSR). Corporate governance. CSR and business profitability. The problem of the sustainability of the competitive edge for a responsible company. Business ethics.



				sustainable competitive advantage for the company.  - Learn the main practices of CSR.	Environment. Sustainability. Company environmental management. People management and development. Human resources and the company. Working life - family life conciliation. Equality of sexes. Vulnerable groups and diversity. Occupational health prevention. Marketing and reputation. Activism and communications media. Responsible marketing. Sectorial perspectives. Socially responsible investments. SMEs. Tourism companies. The public administrations and CSR. Reports, verification and certification.
Foreign Trade I	OP	5		<ul> <li>Identify the advantages, limitations, and risks a firm faces when entering foreign markets.</li> <li>Understand and evaluate the alternative ways of entry and the processes to commercialize products in these markets.</li> </ul>	The international environment and globalization. Advantages and disadvantages of the internationalization of the company. Duties and customs in foreign trade. Foreign trade documentation. International transport. Means of payment in international markets. The financing of foreign trade. The international recruitment. Communication strategies and promotion in foreign markets.
Foreign Trade II	OP	5	It is recommended having taken	- Study the different entry and commercialization strategies in foreign markets.	Entry strategies in foreign markets. Export consortia.



			Foreign Trade I	<ul> <li>Evaluate the different distribution channels in foreign markets.</li> <li>Be aware of the different sources and information channels used by firms to understand and evaluate these markets.</li> <li>Identify the required investment processes.</li> </ul>	International commercial networks. Commercial agents. External networks. International commercial information. Investments abroad. Commercial delegations. Productive investments. International negotiation. Global communication strategies.
Management of the Family Firm	OP	5		- Translate many of the most general theories of business economics into specific assumptions -in this case in the management of the family firm.  - Deal with the dilemmas that may appear when managing a firm.	Definition, importance and characteristics of family firms. Business community and life cycle of the family firm. The family firm as a closed partnership. The family partnership contract. Statutory and extra-statutory agreements. Governing bodies of family firms. Ownership and management in family firms. Competitive strategies and the family firm. Financing the family firm. The company and assuming risks. Harnessing resources from without. Succession in the family firm. Stages in the process. Cession of ownership and cession of management.
Management of Sport and Leisure Firms	OP	5		<ul> <li>Translate into specific assumptions many of the general theories of business economics.</li> <li>Get the tools to deal with management dilemmas in an effective way.</li> </ul>	Delimitation and classification. Market services and their importance in the economy of Catalonia as a whole. Evolution of the sector.



Production, employment and productivity. Specialisation in the services sector. Use of free time: activities and leisure. Details of the activities of the sector in Catalonia and in Spain. Typology. Communications media and leisure. Games. Sport. Theme parks and recreational areas. The culture industry. Public and private supply. Concept and typology of sport. Sports products. Sports facilities and equipment, complementary services and products. The flow generated by sport activities. Measurement of the economic impact of sport activities. The professional sports market. Components of the income of sports entities. Factors determining attendance at sports events. Analysis of the demand for complementary products and services. Demand and new technologies. Sports supply. Federative institutions, clubs and associations. Major sporting events and their economic impact.



Business Games	ОР	5	<ul> <li>Get a general overview of business activity, and the means arranged in a changing environment that requires optimal management, decision making and conflict resolution.</li> <li>Analyze how firms achieve their goals and interact with the environment, and the positive and negative effects it may have.</li> <li>Identify the functional areas in a company, their function and the connections between them.</li> <li>Interpret and evaluate some companies' growth strategies, internationalization and relocation, considering their role in the context of a globalized economy.</li> </ul>	Synthesis subject.
Business Internationalization	OP	5	<ul> <li>Understand the concept of globalization, and its scope and consequences.</li> <li>Realize how important internationalization is as a competitive advantage.</li> <li>Learn the factors that make it convenient to operate in many different locations.</li> <li>Identify the different ways to internationalize and plan the internationalization process.</li> <li>Study the current situation of internationalized companies.</li> </ul>	International business management. International trade and globalization. Horizontal and vertical expansion of business in the international environment. Models of internationalization: subcontracting, strategic alliances, etc. New markets. Adaptation to the market. The internationalization of Spanish enterprise. New markets: east Asia. China. Taxes.
Social Entrepreneurship	ОР	5	<ul> <li>Know the difference between a social enterprise and a traditional company and the role of the social entrepreneur.</li> <li>Analyze the various existing models for the development of social enterprises and their range of action and social participation.</li> </ul>	Introduction to social entrepreneurship. Its importance in the economic world. The definition of mission and goals of a social enterprise



			- Appreciate how social entrepreneurship promotes social change and sustainable development.	Classification of social enterprise  Operational models of social enterprises  Social problems and social entrepreneurship in practice. Approaches to address social problems through viable and sustainable enterprises.  Social Enterprise Strategies: Marketing, financial, cultural and
Psychology and Business	OP	5	The aim of the course is to provide students a basic psychological knowledge can give people better understand the business environment in both the cognitive and emotional level (includin themselves, colleagues, competitors and third parties)	generation of entrepreneurial  Content includes fundamentals of teaching principles of social psychology.
				Fundamentals of social psychology: Social perception, social cognition, impression formation, social influence and persuasion.  Creativity: Generating ideas, methods of evaluation and selection



				of ideas. How creativity affects group processes, organizational culture and structure.  Negotiation: Negotiation principles, negotiating face to face negotiation teams.
Innovation and Technology Management	ОР	5	Become familiar with the research and innovation activities. Understand the different aspects and mechanisms of innovation management. Implement R&D programs in a company.	Research as a business activity and its interactions with the other areas of the company.  The strategic dimension of R&D activities in the company.  Selection, assessment and funding of R&D projects.  Planning and control of the R&D programme.  The human team and the R&D department.  Protection of technology via patents and brands.  Marketing in innovation management.

# **Training profile in Economics and Public Management**

Subject	Туре	Credits	Requirements		Contents
Business Taxation	OP	5		<ul> <li>Identify the main taxes that have an effect on business activity and their regulation.</li> <li>Consider any fiscal implication on a firm's activity (restructuration, dissolution) and develop the knowledge to optimize taxation in decision making.</li> </ul>	Study of the suppositions of tax matters assumed by businesses at each stage or time of their development, from their constitution, development, patrimony and transformation until their extinction.  Corporate taxation in the Spanish tax system, as a descriptive complement of the dynamic



				- Develop a multidisciplinary approach in the analysis of efficiency and business decisions.	perspective: the most important legal aspects of corporate tax and VAT, as well as of the other taxes of importance for tax collection or economic importance or simply complementary to the previous ones, such as IRPF - income tax (and its retentions), IRNR (tax on non-residents) and ITP (wealth transfer tax).  Fiscal incentives of SMEs, the effects of taxation on company accounting, fundaments and/or principles that justify corporate tax., internal and international double taxation, economic bases of VAT, etc.  The effects of taxation in business decision making: optimisation of amortisation policies, taxation alternatives of business investment, tax incentives of SMEs. Effects of taxation in company accounting.
Principles of Public Economics	OP	5		- Think about what motivates public intervention, on the basis of specific assumptions of the economic situation Identify if the means used are optimal for achieving the purposes of efficiency and equity.	Basic theorems of welfare economics. Market failures. Financial, budgetary and regulatory activity. Analysis of intervention instruments: direct production, transfers; taxes: type and economic effects. Multijurisdictional public treasuries (international and territorial aspects of fiscal federalism).
Applied Public Economics	ОР	5	It is recommended to have completed Principles of Public Economics.	- Study the state intervention in the economy, specially from the budget management through its multiple agents (central, regional and local administration, and social security). Both costs and revenues are going to be considered in the analysis, emphasizing the effects on the economic agents' behaviour.	Budgetary and regulatory policy, economic effects of public income based on the realities of western tax frameworks (contributors) and of payment for public services supplied (rates and public prices for users), of the different modalities of expenditure (from direct to contracted public production or that based on transfers and vouchers), in respect of different programmes (of unemployment, of fighting poverty, educational, health, etc.).



Analysis of Public Policies	ОР	5	It is recommended to have completed Principles of Public Economics.	<ul> <li>Evaluate the different forms of intervention after analyzing some cases of public policy, in which the alleged market failure is accompanied by a failure of the State itself.</li> <li>Obtain quantitative and qualitative skills for the study and assessment of specific policies and programs.</li> </ul>	Functional classification of public spending. Budgets for tasks, programmes and results. Transversal policies: immigration, education, health, ageing and dependency, public-private partnerships, agreements, vouchers, contests and different ways of evaluating based on cost-profit analysis (cost-effectiveness, cost-utility, etc.), and of those other policies of an individual or collective style through the life cycle: policies with intergenerational effects, and altruism in successive generations.
Spanish Fiscal System	ОР	5		- Get a general idea of those aspects of taxation that most affect the economic environment and the economic agents' decisions Understand that taxation is required not only as a financial instrument of an expenditure policy, but also as a tool to prevent or correct market imperfections and a means of economic policy.	Characteristics of personal and company taxation. Profile of direct income in multijurisdictional treasury plans.
Management of Public Firms	ОР	5		<ul> <li>Evaluate the different forms of intervention after analyzing some cases of public policy, in which the alleged market failure is accompanied by a failure of the State itself.</li> <li>Obtain quantitative and qualitative skills for the study and assessment of specific policies and programs.</li> </ul>	Public management-private management. Mitigable limitations in public management. Introduction of competition and new management techniques. Management of the public firm and business activity of the public sector. Prices and programme contracts. Economic-financial evaluation. Analysis of efficiency. Budgets for tasks, programmes and results. New forms of management: administrative reform, privatisation, public-private partnerships, agreements, vouchers, contests
Management of Health	ОР	5		- Apply many of the main theories of economic public policies to health economy,	Health macromanagement and public health. The burden of illness and the most efficient actions.



Institutions			practice, ed health ecor	gap between theory and conomics and management, nomy and health policy, what bublic and what should be	Institutional mesomanagement of services and techniques of business management. Health centres and their environments. Health micromanagement: motivation and incentives in efficiency and clinical practice.
Non-profit Organisations Management	OP	5	convention institutions and practic profit and r	ny of the main theories of al economics to the non-profit, closing the gap between theory e, economics and management, non-profit motivation, what public and what should be	Functions of production and product measurement.  Maximisation, satisfaction, fulfilling the targets set in the mission of non-profit organisations.  Diversity of fields and justification of actions.  Typology.  Organizational forms.  Coordination and motivation of agents and alignment of incentives.  Taxation.  International aspects.
Public Sector Finance	OP	5	concepts by - Do resear	the study of some general the analysis of topical articles. The analysis by putting the nowledge into practice.	Economic effect of the different types of tax. Optimal taxation. Financing the social security system. Public debt and its consequences. Fiscal federalism: autonomous community and local treasuries in Spain and in the comparative system.
Public Management	OP	5	manageme	mechanisms of public nt both from a microeconomic oeconomic point of view.	Management of the exchequer. Economic analysis of tax. Impact of fiscal policy. Public policies.
Management for Service Firms	OP	5	- Study the service firm	specific problems faced by as.	Analysis of the goals of service companies. Organisation, structure and functions.



### **Training profile in Quantitative Techniques**

Subject	Туре	Credits	Requirements	Description	Contents
Econometrics II	ОР	5		- Study the main problems of the regression model and its solutions, as well as time series models. A rigorous analytical approach and some practical examples are provided for a better understanding of both models, together with the help of econometric packages.	Macroeconometrics. Simultaneous equation models. Time series analysis and forecasts.
Econometrics III	OP	5		- Estimate economic problems by using microeconometric models. The purpose is to discuss each model with a reading and a case study with real data Become familiar with the microeconometric's most common techniques.	Discrete choice models. Censored models. Duration models. Data panel models.
Applied Econometrics	OP	5	It's compulsory to have completed Econometrics I, Econometrics II and Econometrics III	Analysis of the use of econometric tools in empirical analysis for decision-making or evaluation of the effects of certain policies.  To this end, we'll discuss in detail various applied studies, emphasizing the different phases of the applied economic analysis: approach to the issue to be answered, presenting the theoretical / conceptual framework where the analysis is done, type of data available for the exercise, econometric tools necessary given the kind of question approached and the characteristics of the data, interpretation of results and formulation of conclusions.	Study of different cases (empirical exercises) Increasing knowledge about the econometric methods needed to make different studies Using econometric package that the students should be familiar with and knowledge and access to different existing databases (real)  Undertake an applied work that requires econometric instrumental discussed in the course.
Multivariate Analysis	ОР	5	It's compulsory to have completed	- Learn algebraic notation within the context of matrix calculation.	The main components and other methods of multivariate analysis



		Probability and Statistics	<ul> <li>Acquire the basic concepts of statistics and matrix representation in multivariate models.</li> <li>Study the main multivariate techniques and when to apply each type of data, the necessary calculation to understand its implementation, the form of data input and interpretation of the results in statistical packages.</li> <li>Identify the elements of a multivariate statistical model.</li> </ul>	
OP	5	It's compulsory to have completed Econometrics I and Econometrics II	- Become familiar with time series and their characteristics.	Time series analysis. Autoregressive models. Error analysis. Co-integration.
OP	5		- Become familiar with the use of the main advanced computer programs.	An in-depth look at the knowledge and use of the main computer programme packets for advanced users in the field of economics and business.
ОР	5			
OP	5		Graph Theory and Social Networks  Game Theory  Markets and Strategic Interaction on Networks  Network Dynamics: Population Models  Network Dynamics: Structural Models  Institutions and Aggregate Behavior	
	OP OP	OP 5	OP 5 It's compulsory to have completed Econometrics I and Econometrics II OP 5	representation in multivariate models Study the main multivariate techniques and when to apply each type of data, the necessary calculation to understand its implementation, the form of data input and interpretation of the results in statistical packages Identify the elements of a multivariate statistical model.  OP 5 It's compulsory to have completed Econometrics I and Econometrics I and Econometrics II  OP 5 Become familiar with time series and their characteristics.  OP 5 Graph Theory and Social Networks  Game Theory  Markets and Strategic Interaction on Networks  Network Dynamics: Population Models  Network Dynamics: Structural Models



				movements	
Real Analysis	OP	5	It is recommended to have completed Mathematics I, II and III	<ul> <li>Read and understand a rigorous mathematical exposition in the field of real analysis.</li> <li>Understand the concepts of real analysis: its definitions, along with a derivation of its basic properties.</li> <li>Understand the principles, prove the main theorems of real analysis, and develop small demonstrations in the resolution of problems.</li> </ul>	Sets. Topology in metric spaces. Theory of real functions, differential and integral calculus.
Linear Algebra and Dynamic Systems	OP	5	It is recommended to have completed Mathematics I, II and III	<ul> <li>Read and understand a rigorous mathematical exposition in the fields of algebra and linear dynamic systems.</li> <li>Understand the elements that comprise dynamic systems: numerical and exact solution methods and the basic properties that characterize them.</li> <li>Relate the characteristics of dynamic systems to problems of economics and management.</li> </ul>	Linear algebra. Stability and convergence in dynamic systems.
Modern Statistical Computing in R	OP	5		General introduction to statistical computation and R. Objects and elemental functions in R. Basic statistics and graphics. The input/output of data and the interface with other statistical software (stata, spss, excel, etc.). Basic statistics and graphs. Exploratory analysis with R. Probability distributions and statistical simulation. Advanced graphs. Basic programing. Examples of personal programming with R. Functions for general statistical analysis. The library of statistical functions of R (R packages). The practice of linear and generalized linear models. Other aspects of the use of R.	
Dynamic Pricing and Revenue Management	OP	5		Dynamic Pricing and Revenue Management" focuses on how firms should make pricing and product availability decisions in order to maximize profitability. Through a combination of theory lectures, case studies, and in-class presentations and games, the course aims to develop a "working knowledge" of dynamic pricing	



				and revenue management, i.e., to provide students the necessary background, quantitative models, fundamental insights, and data analysis skills that will allow them to identify and exploit opportunities for profit maximization in a variety of business contexts.	
Introduction to Mathematical Economics	ОР	5	It is recommended to have completed Mathematics I, II and III	- Apply mathematical models in economic problems.	Convexity and optimisation. Compact spaces. Hahn-Banach theorem. Basic theorems of welfare.

# **Training profile in Financial Economics**

Subject	Туре	Credits	Requirements	Description	Contents
Statistics for Finance	OP	5	It is compulsory to have completed Financial Economics	- Get a general overview of the statistical behavior of financial markets and risk distribution.	Measurement of the profitability and risk of portfolios. Statistical models for the analysis of finance. Statistical models of business financing.
International Finance Operations	OP	5	It is compulsory to have completed Financial Economics	- Understand the financing mechanisms of international trade, and its implications in terms of insurance, exchange rates risk and counterparty risk.	International financing instruments. Risk of exchange.
Markets and Derivatives	OP	5	It is compulsory to have completed Financial Economics	- Become familiar with the problems of international finance and exchange rate risk.	Forward rates. Forecast future exchange rates. Purchasing power parity. Covered and uncovered interest



					rate parity.
Business Valuation	OP	5	It is compulsory to have completed Financial Economics	- Study the different business valuation methods.	Business valuation.
Banking and Financial Institutions	OP	5	It is compulsory to have completed Financial Economics	- Understand how banks and insurance companies work.	Banking and the creation of money. Deposits and other liability instruments. Financial contracts. Insurance companies.
Corporate Finance III	OP	5	It is compulsory to have completed Financial Economics. Besides, it is recommended having completed Finance and also International Finance.	- Understand the mechanisms of mergers and acquisitions.	The control market. Legal and regulatory aspects. Protection against takeovers.
International Finance Economics	ОР	5	It is compulsory to have completed Financial Economics	- Understand how the market exchange rates work and the relationship between currencies and macroeconomic determinants.	Capital exchange and flow relations. Problems of debt. International financial institutions.
Mathematics for Finance	OP	5	It is compulsory to have completed Financial Economics	- Deal with the statistical aspects of financial contracts.	Cash flow discount methods. Net present value of a contract.
Investment	OP	5	S'ha d'haver cursat Financial Economics	- Learn to manage a portfolio Calculate the expected return and risk, including both operational and liquidity risk.	Risk and profitability. Choice of shares. The efficient frontier. Free investment funds (hedge funds). Investment in the emerging countries. Residual risk.



Current Issues in OP S Corporate Finance	5		A specific program will be annually determined, according to the latest developments in the markets and institutions. Currently, the main issue would be corporate governance.	Current topics in financial management.
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# **Training profile in Marketing**

Subject	Туре	Credits	Requirements	Description	Contents
Marketing Research I	OP	5	It is recommended to have completed Marketing	<ul> <li>Study the different sources of information used by the company to get familiar with its markets.</li> <li>Learn the different stages that make up a market research.</li> <li>Get a better understanding of the whole process by developing a market research.</li> </ul>	Determining the necessary information for decision making. Type of information. Sampling processes. Variables measurement scales. Questionnaire design. Information collection process. Sources of error. Univariate description of populations. Cross tables. Introduction to multivariate analysis methods.
Marketing Research II	OP	5	It is recommended to have completed Marketing Research I and Marketing	<ul> <li>Learn the statistical methods used in market segmentation, product positioning and new product development studies and their evaluation.</li> <li>Learn the qualitative marketing research methods.</li> </ul>	Factorial analysis and its main components. Drawing perceptual maps. Cluster analysis. Discriminant analysis. Joint analysis. In-depth interviews.



					Group dynamics. Commercial observation techniques.
Product Management	OP	5	It is recommended to have completed Marketing and International Marketing	<ul> <li>Learn the analytical and managerial tools of a product manager.</li> <li>Become familiar with the activities and tasks of a product manager.</li> <li>Acquire the needed knowledge on the different stages of development and commercialization of new products.</li> </ul>	Product management and the marketing department. The product's life cycle model. Strategies throughout the product's life. Planning, development and launching of new products. Product management and decisions concerning the line, price, communication and distribution.
Consumer Behaviour	OP	5	It is recommended to have completed Marketing	<ul> <li>Understand the cognitive, learning, assessment and decision making processes carried out by consumers, and their implications for the commercialization of goods and services.</li> <li>Understand the major behavioral models that explain these processes.</li> </ul>	The scientific study of consumer behaviour. Consumer memory. Assessment processes. Decision-making processes. Attitude development. Social influence. Pro-social behaviour. Internet and the consumer behaviour patterns.
New Topics in Marketing Management	OP	5		- Get a general overview of the latest trends in marketing and in the management of a long term relationship with customers (CRM) Understand the characteristics of services management and its marketing strategies Become familiar with the new tools of interactive marketing Acquire the skills and knowledge to develop an interactive marketing plan for an existing product or service.	The marketing of services. Tools for customer relationship management (CRM). Interactive marketing. E-marketing. Mobile marketing.



Price Policy	OP	5	It is recommended to have completed Marketing and International Marketing	<ul> <li>Become familiar with the pricing policies used by companies.</li> <li>Acquire the basic knowledge to analyze the effects of pricing decisions on the results of the company.</li> <li>Learn the main pricing methods.</li> <li>Understand the interactions between pricing and the other marketing tools.</li> </ul>	Strategic pricing. Financial analysis: pricing to obtain profits. Pricing strategies in conditions of competition. Pricing for market segments. Pricing and marketing mix: integrated strategies. Measuring perceived value and price sensitivity.
Direct Digital Marketing	OP	5		Learn the available sources of information to segment the market effectively.  Design and manage advertising campaigns so as to generate a market response as well as measurable results for the company.  Become familiar with the use of all the new communication channels available via digital media: Internet, mobile devices or interactive television.  Study the latest trends in digital marketing so that they can be successfully incorporated in the marketing strategy of a company: search engine optimization, mobile marketing, e-commerce, and social networks.	Direct and digital marketing in marketing mix. Databases and customer analysis. Direct marketing campaign assessment and management. Customer acquisition strategies. Loyalty making strategies and customer retention. Analysis and assessment of digital media.
Marketing Services	OP	5		<ul> <li>Understand the characteristics and limitations of marketing services</li> <li>Be familiar with specific tools of the marketing mix of services: service production, service quality, internal marketing, and relationship marketing.</li> <li>Ability to develop marketing strategies for a service.</li> <li>Knowing methods of assessing the quality of services.</li> <li>Mastering communication strategies and promotion of a service.</li> </ul>	Features of services The expanded marketing mix: from 4 to 8 p Sales Management and Technical Services The Merchandising Services Consumer Behavior Managing Claims and Guarantees The Customer Loyalty
E-Business	ОР	5		- Understand the cost structure of information goods Understand the demand as a reference for price	Prices and cost structure of information.



	setting.  - Analyze several cases of information goods so as to understand that the theory of Networks is applicable beyond social networks.  - Study the nature and characteristics of those investments that optimize technology.  - Identify the natural rhythm the market has regarding the adoption of innovations.  - Think about the intellectual property protection from a business perspective.	The theory of Networks. Lock-In (application of transaction costs). Economic analysis of rights' management.
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## **Training profile in Accounting**

Subject	Туре	Credits	Requirements	Description	Contents
Cost Accounting II	OP	5	It is compulsory to have completed or Cost Accounting I	- Become familiar with the different costing systems and learn their legal effect and on the result.	Calculation of the costs of the elements that make up a product or service. Systems for inputting indirect costs. The problem of joint costs.
Auditing	OP	5		<ul> <li>- Understand the role of external auditors.</li> <li>- Learn the basic auditing techniques, as well as analyze the reports.</li> </ul>	Internal control of the company. Development of an accounts audit. Basic auditing techniques. The external auditor's report.
Corporate Accounting	OP	5		- Learn how to account legal transactions that a firm may have to deal with: constitution, variations in capital, suspension of payments Account transactions according to the legal form of the company: corporation, limited liability, cooperatives, etc.	Constitution and variation of capital; transformation of companies. Dissolution and liquidation. Suspension of payments and bankruptcy.
Consolidation of	OP	5		- Standardize the accounting information.	Regulatory framework of



Financial Statements			<ul> <li>Consolidate the financial statements according to different methods.</li> <li>Analyze the consolidated financial statements.</li> </ul>	consolidation. Homogenisation of the information for consolidation. Eliminations. Methods of consolidation. Domains.
Public Accounting	OP	5	<ul> <li>Study the function and procedure of public accounting.</li> <li>Understand the importance of the budget as a starting point in public accounting.</li> <li>Account the main transactions.</li> </ul>	The budget. The conceptual framework of public accounting. The accounting process. Analysis of financial magnitudes. Accounting and public management. Control procedures.
Management Control	OP	5	<ul> <li>Understand the importance of indicators as elements of control and motivation.</li> <li>Implement a balanced scorecard to track and monitor.</li> </ul>	Management control. Objectives and strategic management. Motivation and incentives. Centres of responsibility. The balanced scorecard.
Current Issues in Financial Accounting	OP	5	<ul> <li>Become familiar with the institutions that approve the accounting standards.</li> <li>Implement the sectoral adaptations of the GAAP.</li> <li>Deal with the impact than inflation has on the accounting.</li> </ul>	Accounting standardisation in Spain: ICAC, AECA. The influence of inflation on accounting. Sectorial adaptations of the PGC. Queries to the ICAC.
Current Issues in Management Accounting	OP	5	- Understand the importance of management accounting as a tool for control and motivation Implement the most sophisticated tools in management accounting: quality costs, balanced scorecard of intellectual capital, documental management.	Intellectual capital management: measurement tools, management and limits. Document management. Quality and non-quality costs. Unquantifiable costs.



## **Training profile in Macroeconomics**

Subject	Туре	Credits	Requirements	Description	Contents
International Macroeconomics I	OP	5		<ul> <li>Become familiar with the main macroeconomic aggregates and how they relate with each other.</li> <li>Analyze and synthesize when using macroeconomic models.</li> </ul>	Inflation and monetary policy. International macroeconomics in the Keynesian model. The Mundell-Flemming model. The optimal monetary system and the European monetary system.
International Macroeconomics II	OP	5		- Analyze macroeconomic models in an open economy.	The balance of payments. Interior and exterior equilibrium. Macroeconomic equilibrium, competitiveness and balance of payments.
International Economics II	OP	5	The student must previously have taken Advanced Macroeconomics I	- Become familiar with the analysis of international finance models for the study of economic issues: movements and control of capital, and fixed and variable exchange rates.	Movements of capital. Determining the short and long term exchange rate. Models of overshooting. Fixed and variable rates. Capital control. Balance of payments crisis.
Applied Macroeconomics	OP	5		<ul> <li>Develop and apply macroeconomic analysis for a better understanding of current issues in applied macroeconomics.</li> <li>Be fluent in the use of macroeconomic data and its applications.</li> </ul>	Taxes on capital, labour and consumption in the world. Optimal taxation in partial equilibrium model of periods. Ramsey's rule. Temporal consistency. The role of public debt. Taxes and excess job supply.



	Optimal taxation in the neoclassical growth model (general equilibrium, infinite horizon).  Taxation on savings and accumulated capital. Quantitative effects on the taxation reform. Inflationist tax. Redistributive effects on tax policy. Inequality and redistribution. Economic determinants of redistribution. Alternative mechanisms of redistribution. Regional policy. Regulation and competition policies of the labour market. Fiscal policy and macroeconomic results: empirical evidence.

## **Training profile in Operations Research**

Subject	Туре	Credits	Requirements	Description	Contents
Information Systems	ОР	5		- Organize and implement information systems for decision making.	The value of information. Strategic planning of information systems. Information engineering. Information systems analysis. Construction of information systems. Founding technologies. Systems architecture. Telecommunications, networks and Internet.



				Applications. Computer assisted decision making systems.
Quality Management	OP	5	- Study quality management practices in industries, and apply the necessary tools to develop systems for companies of any size.	ISO 9000:2000.
Business Logistics	OP	5	<ul> <li>Learn how to manage the available resources so as to opitimize customer satisfaction.</li> <li>Organize and manage the purchasing and supplying processes of organizations.</li> <li>Manage and control the outcome of an industry.</li> <li>Manage stock in the most effective was as well as transport and distribution processes.</li> <li>Study the latest technologies in logistic management.</li> <li>Design and implement tools that optimize the logistics management of an organization.</li> </ul>	Warehouse management. Transport management. Information systems for logistics management. Current issues in logistics and commercial distribution.
Operations Research	OP	5	<ul> <li>Use quantitative models to solve management and administration problems.</li> <li>Understand how some of the existing techniques can help solving problems that arise in any organization.</li> </ul>	Introduction to optimisation. Linear programming I: formulation of problems and applications to enterprise. Linear programming II: obtaining solutions and practice using a computer. Linear programming III: sensitivity analysis.



				Solving cases. Integer programming. Formulation of problems and applications in business logistics. Multicriteria programming: efficient points and methods of solution. Programming by goals. Project administration: PERT and CPM. Queue management.
Programming I	OP	5	<ul><li>Become familiar with operating systems.</li><li>Learn the basic programming tools.</li></ul>	Introduction to operating systems and to programming.
Programming II	OP	5	<ul> <li>Become familiar with the main languages and techniques in programming.</li> <li>Operate and work with database managers.</li> </ul>	Languages and techniques of scientific programming and of databases.
Supply Chain Management	OP	5	Understand the evolution of logistic systems over time. Apply the logistic systems in the industrial and services sectors. Design the supply chain both in goods and services firms. Study inverse logistics and their application in business.	Evolution of the supply chain.  Development of strategies in the supply chain management.  Supply channel management.  Inverse logistics.  Direct and inverse management of the chain.

# **Training profile in Human Resources**

Subject	Туре	Credits	Requirements	Description	Contents
Labour Economics	ОР	5		- Become familiar with the factors that determine the working population, employment and unemployment.	Labour supply and demand. Economic policies and their impact on employment and unemployment
Human	OP	5		- Elaborate organizational and individual	Multidisciplinary approach: psychology, sociology and



Resources II			strategies Apply techniques of personnel management.	business management. Planning of human resources, contracting, compensation, assessment and development, the separation of employees and the international management of human resources.
Current Issues in Human Resources	OP	5	Learn the new human resource management practices in a company. Understand the peculiarities and limitations of services commercialization. Be aware of the opportunities that changes in the environment and within the organization may generate. Study the latest trends in human resource management: downsizing, globalization, new technologies, etc.	Analysis of jobs. Current sources and methods of the recruitment of human resources. Human resources training programmes: methods and assessment of training. Trends in the management and in the planning of careers. Current methods of assessing performance. Current methods of the design of pay systems.

### **Training profile in Microeconomics**

Subjects	Туре	Credits	Requirements	Description	Contents
Innovation and Technological Change	ОР	5		<ul> <li>Develop and apply macroeconomic analysis to a better understanding of innovation and technological change problems.</li> <li>Be fluent in the use of economic data and its applications.</li> </ul>	Why do economists study science, technology and innovation? The historical perspective. What is it in a society that makes one a successful innovator? The macroeconomic perspective. Science and technology as growth factors. The macroeconomic implications of the dissemination of innovations. The microeconomic perspective. Are innovation goods different? The outlook of the 21st century. Is the "New Economy" new?



				The market and regional perspectives. The market as a selection mechanism. The region as a source of information. The perspective of enterprise and of industry. The evolution of innovation and of industry. The administration of innovation: which R&D and which innovation strategy should be followed by companies, and how must they be administered? The legal point of view. Should the inventor be protected? How? Economic policy and the perspective of public policies. Who resists innovation? How should R&D policies be designed? The perspective of the European Union. Empirical analysis of competition in R&D between companies. Technological change in the functions of production. Measuring technological change. Scale, concentration and innovation. Standards and network externalities.
Law and Economics	OP	5	<ul> <li>Apply the tools of economic analysis to the study of law.</li> <li>Study the legal institutions and the economic implications of different legal systems.</li> </ul>	Comparative legal systems: common law and civil law. Economic theory of ownership. Economic theory of the contract. Economic analysis of the legal procedure. Economic analysis of offence and punishment. Law and social rules. Discrimination and positive discrimination. Political rights.



Negotiation	OP	5	<ul> <li>Acquire a wide range of negotiation skills based on experiences in real environments and analytical structures.</li> <li>Improve the ability to take decisions and negotiate.</li> </ul>	Understanding what happens during negotiations and in decision making. Developing good habits for negotiation. The need to take the initiative and to be active.  Negotiation, conflict, power and ethics.
Information Economics	OP	5	Analyze the relations between economic agents when they have imperfect and asymmetric information	Measures of risk. Models of asymmetric information. Adverse selection. Moral risk. Applications.
Environmental Economics	OP	5	- Become familiar with the models that study the design and economic impact of environmental policies, focusing on market imperfections that affect the environmental variables.	Market failures. Correction by means of a tax. Correction by means of the creation of an allowance market. Environment policies.
Experimental Economics	OP	5	<ul> <li>Become familiar with the experimental methodology and its applications.</li> <li>Learn some techniques to carry out experiments.</li> </ul>	Use of the lab for experimental economics. Techniques for carrying out experiments. Analysis and replication of results in classic experiments.
Regulation and Competition Policies	OP	5	- Get a general overview of the economic aspects on which market and firms regulation is based, as well as the antitrust policy and the economic analysis of market competition.	The regulatory framework and its applications. Competition policies: theory and applications.
Topics of Applied Economics	OP	5	<ul> <li>Develop and apply economic analysis so as to understand the current issues in applied economics.</li> <li>Become fluent in the use of economic models and their applications.</li> </ul>	
Political Economics and Political Institutions	OP	5	- Apply the analytical tools to study the behavior of economic agents and political institutions.	The behaviour of stakeholders and political institutions.



Economics			- Study the political and electoral institutions, and economic and social implications of different political systems.	Theories of social decision and of electoral competition in democratic systems. Electoral and political institutions. The strategic choice of institutions and democrastization processes. Implications of different political systems on economic policy, development and welfare.
Game Theory and the Design of Institutions	ОР	5	- Become familiar with the strategic decisions on the various problems studied in Game Theory: zero sum games, games with N players, sequential games, cooperative games and design of mechanisms.	Zero sum games. Mixed strategies and the Minimax theorem. Simultaneous games with N players. Dominated strategies. Nash equilibrium. Correlated equilibrium. Bayesian equilibrium. Sequential games with perfect information. Sequential games with imperfect information. Design of mechanisms. Matching. Cooperative games.
Applied Economy	OP	5	<ul> <li>Develop and apply economic analysis so as to understand the current issues in applied economics.</li> <li>Become fluent in the use of economic models and their applications.</li> </ul>	National accounting. Input-output analysis. Balance of payments. Foreign sector and European integration. Public sector. Labour market. Income distribution. Wealth and poverty.
Industrial Organization	OP	5	Become familiar with the theory of industrial organization, which will allow a better understanding of how firms behave under monopoly conditions, and the effect this may have on social welfare.	Monopolies, oligopolies and imperfect competition. Product differentiation. Entry strategies. Regulation and competition policies.



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		Market structures, patents and
		innovation.

# **Training profile in History**

Subject	Туре	Credits	Requirements	Description	Contents
Present and Future of European Integration	OP	5		- Understand the current situation of the European Union (main policies and institutions) and their most immediate projects.	Historical evolution of integration. Community institutions: make-up, functioning and attributions. The decision making process. The budget of the Union and its current financial outlook. Community legal order and the legal protection system. The free circulation of goods, people, the free rendering of services and companies and individuals' right of establishment. Common trade policy and multilateral agreements in the framework of the WTO. Defence of competition policy. The common agricultural policy. Monetary integration and the coordination of macroeconomic policies. The integration of the financial markets. The harmonization of taxation. Economic and social cohesion policy and the structural base. Cultural and consumer protection policy. The extension of the European Union and the neighbourhood policy. Foreign policy and common security and European policy on security and



				defence. Policies on the environment and energy, on immigration and asylum, and judicial and police cooperation. Strategic targets of the European Union: competitiveness, growth and cohesion. EU research policy. The Union reform process: the Treaty of Lisbon. The concept of European citizenship: a reflection from Catalonia.
Financial Institutions History	OP	5	<ul> <li>Understand the greater sensitivity of financial institutions and organizations due to systemic impacts.</li> <li>Study the foundations and evolution of financial institutions, for a better understanding of the financial system.</li> </ul>	History of banking, savings banks, financial markets and insurance.
History of Business Thought	OP	5	<ul> <li>Understand the evolutionary and adaptive character of business management, through the knowledge of the greatest authors and schools of thought.</li> <li>Acquire a more mature business culture and become aware of its own past through direct contact with the original texts of some authors.</li> </ul>	Major waves of business thought. The predecessors Smith and Marx. Taylor and the scientific organization of work. Human resources; Mayo, Herzberg and McGregor. Directives in the organization and in society.
European Economy	OP	5	- Study the development of the European economies during the second half of the 20th century, emphasizing on the mechanisms of connection between them, and the emergence of a European economy itself.	Overview of European economic growth during the 20th century. The post-war and reconstruction. The regionalization of economic cooperation in Europe. The formation of the Soviet economic bloc. The golden age of European capitalism. The collapse of Bretton Woods.



				Contrasts in economic policy during the 1980s. From the single market to the common currency. The transition from centralised planning towards the economy. The European economy in globalization.
International Economic History	OP	5	<ul> <li>Understand the different procedures of globalizing drivers and the antiglobalizing reactions in the international economy.</li> <li>Study the historical evolution of the global economy and formulate hypotheses.</li> </ul>	International economic history. Globalization and anti-globalization.
International Business History	OP	5	<ul> <li>Understand the patterns of historical processes of business internationalization.</li> <li>Study the historical evolution of international business and become familiar with the history of the internationalization and multinationalization processes.</li> <li>Formulate and dominate historical cases.</li> </ul>	Business organisations in theory and in history. Medieval origins. The international business in the modern era, between privilege and specialization. From the first to the second industrial revolution. The free standing company. The emergence of modern multinationals. Governments and international business: the era of the nationalizations; the era of regulation; the era of privatizations and of deregulation. New multinationals in the new globalisation.
Topics in Economic History	OP	5	- Study a specific program based on the latest developments in the field of economic historiography.	In-depth analysis of current issues in the field of economic history.
Economic History of	ОР	5	- Get a general overview of the economic	Latin America in the global economy: a



Latin America			development of Latin America and its main problems and current limitations through a historical perspective.	quantitative balance from a bisecular perspective. Starting conditions: colonial institutions and economic growth of the Empire. The struggle for the Independence and its economic consequences. Economic behavior of the new republics during their first 50 years. Internationalization of Latin American economies during the first globalization. Barriers to growth in the era of liberal capitalism. Pattern of productive specialization. The Great Depression and the collapse of the primary exporting model. Consequences of the world wars. Industrialization led by the State (I): ideas and institutions and (II): a forced industrialization as a result. Latin American versions of the Welfare State: populism and reformism. The external debt crisis and the < <lost decade="">&gt;. Inequality and poverty: dynamics and persistence. Reorientation towards the market through structural reforms. Crisis and convulsions during the second globalization. National experiences of economic transformation during the early years of the 21st century.</lost>
Economic History of Asia	OP	5	- Get a general overview of the economic development of all Asian countries in the contemporary age, with special emphasis on how this great transformation affects the world economy.	Introduction to Asia and its main economies. Rice economy. The economy of pre-colonial India.



				Impact of western colonization in Asia. Independent India. China before the revolution. Communism in China. China's reform. The origins of modern Japan. The Japanese economic miracle. Japan after the stock market crisis of 1980. The model of the Asian tigers (South Korea, Taiwan, Hong Kong and Singapore). Introduction to the economies of Southeast Asia (Philippines, Indonesia, Malaysia, Thailand and Vietnam). Asia and the second globalization.
History of Economic Thought	OP	5	<ul> <li>Find out the motivations that, over time, the developers of economic science have had, and whi evolution patterns have influenced them.</li> <li>Acquire a more mature economic culture and become aware of its own past through direct conta with the original texts of some authors.</li> </ul>	

### **Training profile in Private International Law**

Subject	Туре	Credits	Requirements	Description	Contents
Conflict of Laws	OP	4			Introduction: the legal heterogeneous. Sources of production rules: Community private international law, conventional and autonomous. Heterogeneous traffic regulation. Direct regulation techniques: standard special material, the right uniform, internationally mandatory ruleor law officers. Technical indirectregulation: the rule of conflict. The problems



			of application of the rule of conflict analysis: application of trade, forwarding, sending plurilegislatius systems, the preliminary question. Determination of the content of foreign law. Exceptions to the application offoreign law: fraud law, public order, adaptation.
International Civil Procedure	OP	5	Introduction to international litigation. Sources of production rules: Community private international law, conventional and autonomous. Internationaljurisdiction: concept and sources. Community system of jurisdiction. Autonomous regime of internationaljurisdiction. The system of civil elementimmigration process. The InternationalJudicial Assistance: Community schemes and autonomous relating tointernational judicial and extrajudicialnotification and obtaining evidence abroad. Recognition and enforcement ofdecisions: concept and plurality of regimes. Foreign judgments susceptible to recognition and enforcement. Classesrecognition. Conditions of recognition and enforcement. The procedure forrecognition and enforcement.
International Trade Law	ОР	5	Concept and sources of law in international trade. Subject of international trade. International arbitration. International contracts. Determination of the law governing the contract. Specific international agreements: International Sale of Goods, distribution agreements, technology transfer agreements, financing of international trade operations.

### **Training profile in Public International Law**

Subject	Туре	Credits	Requirements	Description	Contents
International Economic Law	OP	4			Concept, sources of international economic law. International legal regime of trade: institutions, dispute settlement rules. International FinancialSystem: The Bank, IMF and other international institutions. International legal regime for foreign investment. International economic sanctions.
European Union Law	ОР	6			The process of European integration. Structure of the European Communities. The normative function: the Council, Commission and



			Parliament. The Court and the Court of Auditors. The sources of the law of the European Union primary law, general principles of law, international agreements made by the European Community secondary legislation. The application of European Union law: the direct effect, the primacy of the principle of State responsibility for breach of Community law, the implementation of EU law. Thelegal guarantee of the right of the European Union:  The EU dispute the preliminary ruling. The internal market and freedom of movement of persons, services and capital. The Right of establishment. Common policies. The area of freedom, security and justice.
International Public Law	ОР	6	The international community and its members. International treaties and unilateral acts. The relationship between international law and domestic law. The subjects of international law: states, international organizations, non-state entities, peoples and individuals. Relations between states: the territorial jurisdiction (the territory, airspace and seaspace), personal competence. The diplomatic and consular relations.  Diplomatic protection. Means of dispute resolution: diplomats and legal. International cooperation. International responsibility of the State and individuals.

### **Training profile in Law**

Subject	Туре	Credits	Requirements	Description	Contents
Corporate Law	OP	6			The partnership. The legal status of the companies. Trading companies: type, irregularity. Companycollectively and limited partnership: internal and external relationships. Corporation and limited liability company: constitution, contributions, nullity, and capital stocks / shares, a partner, bodies (general meeting and administrators) and statements of profits, modifications and structural changes of statutes, dissolution and liquidation. Sole proprietorship. Corporate groups. Companiesapply. Economic interest group. Cooperative societies.
Collective Labour	ОР	4			The Collective Labour Law as a historical process of the labor movement: origins,



Law			development and current framework of collective rights. CollectiveLabour Law from a multilevel law and internationalsocial work and social right to irradiation nationwide. Constitutional model of social rights. Right tofreedom of association, subject, and contentprotection. Representation rights. Unitaryrepresentation of workers through committees andstewards. The fundamental right to strike, subject, methods and effects, alternative ways of resolution. The collective bargaining: subject, content and legal effect of the different manifestations of collective agreements.
Legal English	ОР	5	Preparing students to communicate in English law. Reading and writing of legal texts. Understanding and oral communication of legal matters.

### **Training profile in Engineering**

Subject	Туре	Credits	Contents
Programming Fundamentals	OP	8	Syntax and semantics of languages. Imperative languages. Design and analysis of algorithms. Practices and program development. Functional tests. Abstract data types. Data structures and manipulation algorithms. Files.
Databases	ОР	4	Databases. Their models and their management systems. Information systems. Data structures with relational and transactional models. Classification, storage and organization of information.
Structure of Data and Algorithms	OP	4	Recursion. Analysis algorithms, search and classification. Down design. Abstract data types. Trees, stacks and queues.
Digital Logic and Computers	ОР	6	Levels of description. Functional units. Register transfer level. Instruction interpretation. Firmware. Input- output concepts. Principles of operating systems.
Differential Equations	OP	4	Linear differential equations. Equations of first and second order. Solutions in power series and Fourier series. Elementary numerical solution methods. Partial differential equations, Laplace equation, heat and wave. Boundary value problems and solutions by separation of variables. Elementary numerical methods.
Projects Based on Open	ОР	4	Models of software development and marketing. Free software model. Migrating software. Creating and



Source Software		managing communities. Participation and modification of free software projects.
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#### **Training profile in Humanities**

Subject	Туре	Credits	Requirements	Description	Contents	Competencies
Modern and Contemporary History of Islamic Countries	OP	5		Study and interpretation of the fundamental episodes, as well as their presuppositions and consequences, of the history of the Islamic countries during the modern and contemporary eras.		
War and Violence	OP	5		A study of war and of violence from the point of view of their historical and social reality, of their cultural elaboration and of their symbolic performance.		
Mediterranean World	OP	5		A study of the Mediterranean world from the point of view of its geographical, historical and social reality, its cultural elaboration and its symbolic performance.		
Philosophy of Science	OP	5		A study of the fundamental elements and problems, as well as of the most important historical episodes, currents and authors, of reflection on the principles of scientific knowledge.		
Modern and Contemporary History of Latin America	OP	5		Study and interpretation of the fundamental episodes, as well as their presuppositions and consequences, of the history of Latin America during the modern and contemporary eras.		

### **Training profile in Communication (as from 2015-2016)**



Subject	Туре	Credits	Description
Strategic and Operational Marketing	OP	6	Introduction to the basic concepts of marketing and of the process of commercialising products and services in market economies.
Direct and Promotional Marketing	OP	4	Study and application of the main kinds of personalised commercial communications techniques.
Strategy and Brand Management	OP	4	Study of the main theoretical models that enable managing brands. An in-depth look into the methodology that enables measuring brands' image and positioning.
Organisation Protocols	OP	4	Study of the rules established and the codes governing organisation. Understanding professional development in reference to the sphere of official protocol as well as its business aspect.
Pressure Groups and Stakeholders	OP	4	Study and analysis of the tools to manage the relations between the organisation and its key publics (authorities, regulators, trade unions, activists, others) and, especially, analysis of the techniques of lobbyingin different scenarios.

# **Synthesis**

Subject	Туре	Credits	Requirements	Description	Contents
Seminar Paper	OP	5	<ul><li>Put the teamwork skills into practice, as well as oral and written communication.</li><li>Carry out field work on any economic aspect that may be of interest.</li></ul>	Fieldwork. Oral and written presentation.	
Internship I	OP	5	It is required to have passed the first and second year, and have successfully completed at least 50% of the credits.	Become familiar with the world of business and put what they have learned during their studies into practice.	
Internship II	OP	5	It is required to have passed the first and second year, and have successfully completed at least 50% of the credits.	Become familiar with the world of business and put what they have learned during their studies into practice.	
Internship III	ОР	4	It is required to have passed the first and second year, and have successfully completed at least 50% of the	Become familiar with the world of business and put what they have learned during their studies into	



	credits.	practice.	

### Fourth year

Subject	ECTS credits	Description	Contents
Bachelor's Degree Final Project	6	Students apply the competencies acquired throughout the Degree.	Application, integration and development of knowledge, skills and abilities acquired throughout the degree.

(\*) The range of optional subjects is defined on an annual basis