

Courses offered in English - period 2019/2020

Program	Course Name	Level / semester	EC Credits
Administration	Total Quality Management	7	3
Administration	International Management	9	3
Administration	International Finances	8	3
Administration	Entrepreneurship Business and Management	9	3
Administration	International Marketing	9	3
Mechatronics	Engineering and Project Implementation III	9	3
Mechatronics	Research and International Certification Project	9	3
Mechatronics	Electronic VI (Microprocessors)	6	5
Mechatronics	Renewable Energy	8	3
Communication	Public Relations and Lobbying	9	3
Law	International Justice Systems		3
Psychology	Introduction to Psycho-rehabilitation	7	3
International Relations	International Cooperation	Elective	3
International Relations	Environment (English 70% Spanish 30%)	6	3
International Relations	European Integration	7	3
International Relations	Microeconomics (English 60% Spanish 40%)	6	3
International Relations	American Continental Integration (English 70% Spanish 30%)	7	3
International Relations	Public Speaking	6	3
International Relations	Contemporary World Literature	5	3
International Relations	Humanitarian Law	7	3
Biology	Sustainable Development	Elective	3

Administration

Total Quality Management

4th year

Total Quality Management (TQM) is a key tool in all industries; more and more companies have ISO 9001 certification or are in the process of achieving certification and have high-quality standards as one of their principles. Through this course, students will understand the principles that lead to quality management and total quality and how to relate these with other systems concerned with environmental quality management and work health and safety.

This course focuses on improving quality and performance, with the goal of adjusting or surpassing client expectations, which is achieved by integrating all functions and processes related to quality in a company. TQM covers all quality measurements used by a company, including management and development, control and maintenance, quality improvement and assurance. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work.

International Management

4th year

This subject covers the sui generis aspects of international management in the management of human, financial, and technological resources, but fundamentally in the organization and operation thereof, with a focus on internationalization. The management activities of export and import will be addressed with an internationalization perspective, as well as the strategic and operational vision that companies must address to face access to international markets, under different marketing modes. This course also focuses on the analysis of the international environment in which companies must operate and which is integral to competitive strategies. Extensive case-study analysis is carried out of successful Ecuadorian PYMEs, the evaluation of which is useful for the development of an international project based on real-world experiences.

Course objective: The core objective is to provide students with a set of tools and knowledge that allow them to identify the key areas of results of a company oriented towards internationalization, as well as its structure, organization and operation, strategic positioning and modes of entry into the global market. For this purpose, cases of multinational companies, challenging companies, and Ecuadorian PYMEs will be analyzed and applied in a case or project throughout the course.

International Finances

4th year

Knowledge of international finance is indispensable for successful participation in global business. The process of globalization is continuously integrating and affecting more countries, which require knowledge of the macroeconomics and its effect on exchange rates, interest rates, capital flows, and investments in different countries.

At the end of this course, students will understand how the international economy works through the correct management of finance. During the course, several cases of international crises and their causes will be studied to give students an idea of how international finances principles are used in the real world.

Entrepreneurship Business and Management

5th year

Levels of entrepreneurship worldwide, particularly in Ecuador, are high; however, startups have a high level of desertion and failure. This class will enable students to acquire specific knowledge about entrepreneurship and management, as well as current market conditions and levels of competitiveness.

It will also enable them to apply techniques for decision-making to detect and improve entrepreneurship opportunities, target market selection, and implement innovative products/services in the Ecuadorian market. EBM is meant to generate students' entrepreneurial spirits and improve the growth and competitiveness of those who already manage or wish to start their own businesses.

International Marketing

5th year

International marketing is an extremely useful tool within the context of a globalized economy. This course covers the analysis of market environments, focusing on adaptations for different international markets. Through international market research, students will create a database useful for determining different strategies companies should implement when entering international markets. Students will learn how to prioritize markets and select those which are most profitable. Students will also learn to manage international marketing.

Mechatronics

Engineering and Project Implementation III

4th year

This course guides students through the standards proposed by the Project Management Institute (PMI®), which is an international non-profit organization for professionals related to project management and its good practices.

The PMI has among its objectives: To formulate professional standards in project management; generate knowledge through research and promote project management as a profession through its international knowledge certification programs. The PMBOK® Guide, developed by the Project Management Institute, contains a general description of the fundamentals of project management recognized as good practices. This course will focus on studying and analyzing the contents of the PMBOK so that students are motivated in the achievement of international certification.

Research and International Certification

4th year

This course contributes knowledge and know-how in project management and financial evaluation of engineering projects. The PMP/CAPM certification preparation course is based on the PMBOK® Guide, fourth edition. The main challenge of project management is to achieve defined objectives and, at the same time, balance the main constraints that will face the development of the project, such as scope, schedule, and budget.

This program is designed for the training of those candidates for PMP and CAPM certification, who serve as project coordinators and multidisciplinary teams. PMP certification specifications are available at <http://www.pmi.org/Cerification/Project-Management-Professional-PMP.asp>

Electronic VI (Microprocessors)

3rd year

As our world gets more and more technical, we find ourselves surrounded by an almost infinite number of electronic devices. In this course, we will discuss these devices and how to use them in different scenarios. This course provides a broad introduction to application-specific processor system design and illustrates the use of such processors in the broader context of complex digital systems. An introduction to modern embedded architectures, such as ARM Cortex, Open RISC, Altera NIOS, and Xilinx picoBlaze will also be provided.

Furthermore, you will learn what types of problems you can solve with embedded devices, explore the different categories of devices and what they can do, write your code in C language and create embedded systems projects. Embedded systems are the small, specific computer systems that live within larger solutions all around us. A significant portion of class assessment is carried out through coursework in which students develop projects for a variety of applications. The modules will use the Raspberry Pi 3 device.

Renewable Energy

4th year

Renewable energy is the energy that is obtained from virtually inexhaustible natural sources, either because of the immense amount of energy that they contain, or because they are capable of being regenerated by natural means. Renewable energies include wind, geothermal, hydroelectric, tidal, solar, and biofuels.

In this course, the student will be provided with the basic knowledge necessary to understand and analyze existing renewable energy sources and how they could be used to meet the country's energy demand. The student is given the ability to consider a change of energy matrix within a company or industry sector for the best use of energy or the recycling of it.

Communication

Public Relations and lobbying

4th year

Public relations are understood as the strategic use of communication in order to shape and define the public image of an organization. Every institution, whether large or small, depends on stakeholders. Through the use of Public Relations, organizations shape their reputation within the market.

Lobbying is often considered the main component within government issues since they influence and affect the policy-making process. Every day around the world, lobbyists work in order to impact legislations and laws in the public atmosphere. Lobbying is understood as the political component of communication. As social action, it informs and directly persuades political leaders. Obviously, companies are the first ones to be interested in public relations and lobbying since their survival depends on their reputation among their stakeholders.

In this course, students will have the opportunity to learn about the history, the theory behind the practice and the strategies in order to design and plan effective Public Relations. Students will understand the basic tenets of Lobbying and Public Relations, through the use of theory and working knowledge of practices. The course is designed to allow students to discuss ethical principles behind public relations. They will also analyze the advocacy efforts of organizations and the role of lobbying strategies in each particular case.

Through academic and case study readings, the course aims to provide strategies and tools for future communication experts. At the end of this course, students will have gain working knowledge of public relations and lobbying practices and experience through simulation of cases.

Law

International Justice Systems

5th year

The role of international law has become prominent and essential as more countries, societies and individuals interact on multiple levels, from business transactions to foreign policy, from global flow of information to human rights protection. However, regulation is ineffective if it becomes unenforceable; therefore, this subject will focus on the evolution and practice of the contemporary international judicial system. Class material will consist of the case law of the International Court of Justice, the Interamerican Court of Human Rights, and other courts and international tribunals. Students will be expected to have read the material assigned for each

class session and participate actively in the discussion. Class materials, lectures, debates, and evaluations will all be conducted in English.

Environmental Law

5th year

Environmental Law was virtually nonexistent up to a few decades ago; countries' prioritization of industrialization, economic growth and development moved important considerations of environmental protection to the background. In more recent years, however, the international community has moved towards a more sustainable and environmentally sound model, with countries such as Costa Rica generating income from environmental preservation and Ecuador pioneering water as a human right, as well as the recognition of Nature itself as a bearer of rights, and the international community at large joining agreements such as the Kyoto Protocol, the Rio Declaration, and the Paris Agreement.

This class will provide an introduction and a deeper focus on basic and advanced concepts, definitions and practice in environmental law, both at the national and international levels with particular emphasis on theory and case law.

Psychology

Introduction to Psycho-rehabilitation

4th year

Psycho-rehabilitation focuses on understanding the bio-psycho-social principles of disability and their consequences in the family, educational, social and work environments. This course also examines the role played by specific factors in the rehabilitation and adaptation of these disabilities.

After this class, the student will be able to analyze the impact of a disability or deficiency on quality of life, family dynamics, and the social environment. Students will be able to participate and collaborate in the creation and application of programs for the rehabilitation and promotion of the rights of people with disabilities, and guide training informed by ethical values, solidarity, service, teamwork, empathy and interpersonal relationships.

International Relations

International Cooperation

Elective

The subject describes the origins and evolution of the concept of international cooperation since the first half of the 20th century. Readings and class material will help students understand "International Cooperation" as a key concept within International Relations. Therefore, the

approach will always begin from all theories of international relations. Additionally, the subject will also study the Ecuadorian case for international cooperation since the 70s, with several topics such as sustainable development, migration, economic growth, education, culture and sports. Finally, all students will critically analyze the impact of the discourse of development in the evolution of international cooperation.

Environment

3rd year

This course explores the foundations of resource and environmental economics. It provides the theoretical knowledge and empirical techniques to analyze environmental public policy. Global issues to be covered during this course include population growth, income distribution, natural resources, market failure industries, and conservation. This course is taught 70 % in English.

European Integration

4th year

The subject will historically review the origins of European integration processes since the end of the First World War. Subsequently, students will critically discuss general political, economic and defense agreements among western European countries in the second half of the twentieth century. Similarly, undergraduates will learn about the origins of the three main crises within the European integration process: empty chair, European defense community, and the euro crisis. Finally, the subject will analyze the foundation of the European Union in Maastricht, and the common political and economic decisions in the last twenty-five years. At the end of the course, lecturer and students will discuss Brexit and its consequences for European integration.

Microeconomics

3rd year

Microeconomics is an introductory course that teaches the fundamentals of microeconomics. The topics that will be covered in the course are: Consumer theory, producer theory, business behaviour, market balance, competition and monopoly, the government's role in the economy and welfare economy. This Course provides a solid foundation for economic analysis. Microeconomics is a compulsory class for the International Relations 'students. The subject is taught in Spanish, approximately 75% of the readings are in English.

American continental integration

4th year

The historical background and current processes of integration in the Americas are analyzed through different perspectives of regionalism and theories of international relations. The different levels and types of integration are examined to propose solutions to key challenges in the region. Moreover, this analysis is conducted within the framework of contemporary international

dynamics in order to determine how the Americas have faced them and to what extent organizations of integration have been successful in achieving competitiveness and benefits for each country.

The main objective of the course is to acquire the necessary tools to conduct a critical analysis of various regional institutions, as well as the role of Ecuador in some of them. 70% of this course is taught in English and 30% in Spanish.

Public speaking

2nd year

This course is an introduction to speech communication which emphasizes the practical skill of public speaking, including techniques to lessen speaker anxiety, and the use of visual aids to enhance speaker presentations. Civility and ethical speech-making are the foundations of this course. Its goal is to prepare students for success in typical public speaking situations and to provide them with the basic principles of organization and research needed for effective speeches (Will, L. 2008).

Contemporary World Literature

3rd year

The course will make students closer to the narratives of World Contemporary Literature with the goal of increasing aesthetic enjoyment, intellectual curiosity and humanitarian formation. Literature will be valued as the maximum expression of language and as the cultural expression of a nation.

The basic objectives of this subject will be to increase reading for pleasure, a correct type of writing and the development of creativity.

International Humanitarian Law

4th year

The International Humanitarian Law (IHL) aims to establish international regulations to armed conflicts. In this context, IHL seeks to establish principles and rules in order to preserve the integrity and safety of non-combatants, to establish parameters for the weapons used in conflict, and to provide guidelines for the treatment of prisoners of war, in order to limit the suffering caused by belligerent operations.

The primary focus of the course will be a review of selected topics in IHL to assess how it fits into the complex factual situations of contemporary conflicts. It will also endeavor to assess how new legal and philosophical approaches might be used to strengthen laws and provide enhanced protection to victims of war.

Biology

Sustainable development

Elective

The focus of the course is to present the bases for the knowledge of key sectors and issues related to sustainable development and how they apply to a more humane form of socio-economic development. The topics to be discussed include the 17 sustainable development goals, milestones that changed the course of human history, agreements and key documents of the UN. Other broad topics will also be examined, including global change, environment, social inclusion, and governance for sustainable development.