

List of courses taught in English at Miguel Hernández University of Elche 2024-2025

Program	Course name	Course description	Course code
<u>Bachelor's in Business Administration and Management (Elche Campus)</u>	<u>MARKETING PLAN (Elche)</u>	Elaboration of a marketing plan, environmental analysis. Competitor analysis. Market research. Marketing strategy development. Marketing objectives and the marketing plan.	2195
<u>Bachelor's in Business Administration and Management. Orihuela Campus</u>	<u>MARKETING PLAN (Orihuela)</u>	Elaboration of a marketing plan, environmental analysis. Competitor analysis. Market research. Marketing strategy development. Marketing objectives and the marketing plan.	1530
<u>Bachelor's in Business Statistics</u>	<u>MACROECONOMICS</u>	Models for determining income in a closed economy. Money. Inflation. Growth. Open economies. Analysis of economic policy instruments.	1490
<u>Bachelor's in Business Statistics</u>	<u>STRATEGIC DECISION MODELS</u>	Introduction to game theory. Non-cooperative models. Solution concepts. Practical applications.	1488
<u>Bachelor's in Computer Engineering in Information Technologies</u>	<u>FREE SOFTWARE TOOLS</u>	Free software tools. Implementation of free software in the public and private sectors. Actual cases of free software implementation.	2820
<u>Bachelor's in Electrical Engineering</u>	<u>HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS (HVAC)</u>	Cooling and heating. Design and calculation of air conditioning and heating systems.	2236
<u>Bachelor's in Electrical Engineering</u>	<u>LIGHTING AND ILLUMINATION</u>	Physical fundamentals of lighting. Measuring lighting magnitudes. Interior and exterior lighting installation design. Energy savings in lighting.	2238
<u>Bachelor's in Electronic Engineering and Industrial Automation</u>	<u>HIGH FREQUENCY CONVERTERS</u>	Simulation, analysis, and design of DC/DC high frequency switching converters. High frequency DC/AC converters.	1781
<u>Bachelor's in Electronic Engineering and Industrial Automation</u>	<u>RECONFIGURABLE ELECTRONICS</u>	Design of configurable analog and digital electronics systems. Field-programmable analog array and field-programmable gate array devices.	1784
<u>Bachelor's in Electronic Engineering and Industrial Automation</u>	<u>STATE-SPACE CONTROL</u>	Modern control theory. State-space representation. Controllability and observability.	1785

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<u>Bachelor's in Environmental Science</u>	<u>METHODS AND MODELS IN ECOLOGY</u>	Formalization of ecological problems. Experimental design and sampling in ecology. Process modeling.	1601
<u>Bachelor's in Journalism</u>	<u>MEDIA STRUCTURE</u>	Structure, historical development, and culture of the media, and their implications for professional practice.	1850
<u>Bachelor's in Labor Relations and Human Resources</u>	<u>THE INTERNET AT COMPANIES</u>	Internet services. Web 2.0. Web information systems for customer relationship management (CRM). Web systems for enterprise resource planning (ERP).	1920
<u>Bachelor's in Computer Engineering in Information Technologies</u>	<u>AGILE SOFTWARE DEVELOPMENT TECHNIQUES</u>	Description of agile techniques and resources used in managing teams and adaptable to the software development industry. Its origins and its implementation through software engineering. Refactoring, version management and continuous integration help maximize product quality and minimize time to delivery functional software.	2818
<u>Bachelor's in Mechanical Engineering</u>	<u>ACOUSTIC ENGINEERING</u>	Characterization of industrial noise sources, conditioning rooms, sound insulation, methods of noise correction, and environmental acoustics.	1819
<u>Bachelor's in Mechanical Engineering</u>	<u>ENERGY EFFICIENCY AND RENEWABLE ENERGY</u>	Efficient energy management. Renewable energy sources.	1820
<u>Bachelor's in Telecommunications Technology Engineering</u>	<u>MOBILE AND WIRELESS COMMUNICATIONS</u>	Mobile communication systems. Mobile channel model, multiple access techniques, modulation, coverage, and capabilities. Wireless communication systems for different ranges and in distinct frequency bands.	2275
<u>Bachelor's in Telecommunications Technology Engineering</u>	<u>EMBEDDED ELECTRONIC SYSTEMS</u>	Integration of autonomous electronic systems.	2271
<u>Bachelor's in Environmental Science. Plan 2016</u>	<u>WATER QUALITY AND SAFETY</u>	Quality parameters of drinking, recreational, and other waters.	1603
<u>Bachelor's in Telecommunications Technology Engineering</u>	<u>TELECOMMUNICATIONS SYSTEMS APPLICATIONS</u>	Radiodetermination and radiolocation systems. Satellite navigation systems. Positioning systems. Optical communication systems and networks. Multichannel systems, design, planning, routing, control, and management of optical communication networks.	2273

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<u>Master's in Industrial Engineering</u>	<u>MECHANICAL SYSTEM ANALYSIS AND SIMULATION</u>	Modeling, analysis, and simulation of mechanical systems. Computer applications for mechanical calculation. Numerical and dimensional synthesis. Synthesis of spatial mechanisms. Dynamics of non-ideal machines. Simulation techniques: resolution of kinematic, dynamic, and tension problems.	8089
<u>Master's in Industrial Engineering</u>	<u>SERVICE ROBOTICS</u>	Applications of medical, rehabilitation, and care robotics. Bioengineering. Applications of mobile and navigation robotics. 3D vision systems.	8091
<u>Master's in Industrial Engineering</u>	<u>INDUSTRIAL ELECTRONICS</u>	Industrial applications of power electronics.	8092
<u>Master's in Telecommunications Engineering</u>	<u>VIRTUALIZATION OF NETWORKS AND SERVICES</u>	Management, administration, and maintenance of networks, services, and content. Planning of networks, services, and applications, considering the quality of service and scaling. Next generation Internet technologies and protocols, middleware, and services.	2966
<u>Master's in Telecommunications Engineering</u>	<u>ADVANCED APPLICATIONS IN SIGNAL PROCESSING</u>	Applications of advanced signal processing techniques in various fields of engineering and communications: bioengineering, audiovisual, remote sensing, and human-machine interfaces.	2964
<u>Master's in Telecommunications Engineering</u>	<u>ADVANCED TECHNOLOGIES IN OPTICAL COMMUNICATIONS</u>	Technologies for generating, distributing, amplifying, and routing signals with fiber. Advanced analog and digital fiber systems. Degrading factors. Optical networks.	2963