

## INTENDED LEARNING OUTCOMES OF THE BACHELOR IN ECONOMICS, MANAGEMENT AND COMPUTER SCIENCE

### BASIC AREA

Knowledge and understanding	
Upon completing the study program, students will acquire knowledge related to:	Knowledge and Understanding will be achieved through the following courses:
<ul style="list-style-type: none"> <li>– the principles of business management and the methods of measuring and representing phenomena and dynamics of companies;</li> <li>– the economic behavior of firms and individuals at micro and macro level, with a focus on the financial dimension of economic systems;</li> <li>– the general principles of the legal system with a focus on the new issues and problems related to the digital economy;</li> <li>– the basic mathematical tools and the fundamentals of statistical thinking, both descriptive and inferential;</li> <li>– the use of computer in order to solve mathematical-statistical problems, and the main applications and software tools;</li> <li>– two European Union languages useful in business career (Italian is mandatory for non-native speakers).</li> </ul>	<ul style="list-style-type: none"> <li>– Principles of Management, Accounting</li> <li>– Microeconomics and Macroeconomics, Principles of Finance</li> <li>– Fundamentals of Information Technology Law, European IP and Data Law</li> <li>– Mathematics and Statistics (Module I - Mathematics) + (Module II - Statistics)</li> <li>– Fundamentals of Computer Science, Computer Programming</li> <li>– Two EU languages</li> </ul>

<b>Applying knowledge and understanding</b>	
Upon completing the study program, students will be able to:	Ability to Apply Knowledge and Understanding will be achieved through the following courses:
<ul style="list-style-type: none"> <li>– use the fundamental concepts and the language of management, evaluate the economic environment and the overall sustainability of firms and apply methods for representing the analysis of the phenomena and dynamics of company performance;</li> <li>– interpret and assess phenomena and dynamics of the economic system as well as the role of financial institutions and their behavior;</li> <li>– estimate the impact of legislative provisions, in particular with reference to digital economy issues;</li> <li>– apply the main mathematical-statistical methods to carry out basic quantitative analyses;</li> <li>– appropriately use the major IT tools and find information online useful for study or work activities;</li> <li>– effectively interact in two European Union languages, both in study abroad contexts and in professional contexts, through the use of "general" language.</li> </ul>	<ul style="list-style-type: none"> <li>– Principles of Management, Accounting</li> <li>– Microeconomics and Macroeconomics, Principles of Finance</li> <li>– Fundamentals of Information Technology Law, European IP and Data Law</li> <li>– Mathematics and Statistics (Module I - Mathematics) + (Module II - Statistics)</li> <li>– Fundamentals of Computer Science, Computer Programming</li> <li>– Two EU languages</li> </ul>

**DISTINCTIVE AREA**

<b>Knowledge and understanding</b>	
Upon completing the study program, students will acquire knowledge related to:	Knowledge and Understanding will be achieved through the following courses:
<ul style="list-style-type: none"> <li>– mathematical-statistic methods for implementing computer-based algorithms aimed at finding quantitative solutions to business problems;</li> <li>– the principles of machine learning and the main IT tools used in processing large data sets in companies, banking institutions and public administrations;</li> <li>– methodologies for economic modelling and applicable quantitative models, as well as methodologies and techniques for elaborating models to analyze the behavior of individuals in the market and their interactions;</li> <li>– methodologies for modern marketing analysis through the use of major IT and quantitative tools;</li> <li>– the strategic role of information technology in firms;</li> <li>– subjects of study chosen by the student.</li> </ul>	<ul style="list-style-type: none"> <li>– Advanced Mathematics and Statistics (Module I - Applied Mathematics) + (Module II - Advanced Statistical Methods)</li> <li>– Machine Learning, Big Data and Databases</li> <li>– Econometrics, Computational Microeconomics (Module I - Game theory) + (Module II - Mechanism Design)</li> <li>– Marketing Analytics</li> <li>– Information Systems Management</li> <li>– Elective courses</li> </ul>
<b>Applying knowledge and understanding</b>	
Upon completing the study program, students will be able to:	Ability to Apply Knowledge and Understanding will be achieved through the following courses:
<ul style="list-style-type: none"> <li>– use mathematical-statistic methods and related IT tools to quantitatively analyze various aspects of firms and the economic environment;</li> <li>– understand problems related to machine learning algorithms and organize and carry out research involving large amounts of data;</li> <li>– apply economic modelling methods and techniques and forecast and interpret the behavior of economic actors;</li> <li>– study marketing strategies by adopting an analytical approach based on the use of suitable software involving the application of mathematical-statistic methods;</li> <li>– understand the importance of organizing IT systems appropriate to the firms' strategic goals.</li> </ul>	<ul style="list-style-type: none"> <li>– Advanced Mathematics and Statistics (Module I - Applied Mathematics) + (Module II - Advanced Statistical Methods)</li> <li>– Machine Learning, Big Data and Databases</li> <li>– Econometrics, Computational Microeconomics (Module I - Game theory) + (Module II - Mechanism Design)</li> <li>– Marketing Analytics</li> </ul>

	– Information Systems Management
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<b>Making judgements</b>	<p>Graduates will have the ability to gather and interpret information and data in order to make judgements autonomously. Thanks to the rigorous methodological approach of the “characterizing” courses of the program, graduates will also acquire excellent analysis and autonomous assessment skills in various areas of economic and social situations.</p>
<b>Communication</b>	<p>Graduates will develop their written communication skills (summary and detailed analysis) as well as oral skills (face-to-face and in public). Such abilities will be developed through attending teaching activities related to courses, completing assignments given by faculty members and taking exams.</p> <p>Developing communication skills, written and oral, is further stimulated through compulsory student participation in seminars on the development of soft skills (group work and leadership) as well as seminars organized with partner companies (i.e. Oracle, IBM, Netcomm) to analyze current events related to the data driven economy.</p> <p>Communication skills are particularly oriented towards interaction with specialist and non-specialist audiences belonging to various company functions at companies working in multicultural settings.</p> <p>In addition, the class composition, with students from a variety of different countries, fosters the development of communication and relational skills in international and multicultural settings.</p> <p>Written and oral communication skills in a foreign language may be reinforced through a study abroad period, while the ability to communicate in a work environment can be practiced on the field through an internship.</p> <p>Lastly, graduates will perfect their written communication skills through the writing of the final work.</p>
<b>Lifelong learning skills</b>	<p>Graduates will have the analytical and cognitive tools that allow them to autonomously approach the evolution of problems attributable to companies operating in a global landscape in a fast-changing context, characterized by progressive internationalization and product and process innovation. They will be able to autonomously develop methods for managing knowledge, useful for professional development (lifelong learning) and to undertake education at a higher level. This ability will be acquired through: participation in teaching activities, in traditional and/or interactive ways, individual study and in particular research carried for the drafting of the final work.</p>