

General information	
Academic subject	<b>INFORMATICS</b>
Degree course	<i>Economia e Amministrazione delle Aziende</i>
Academic Year	<i>II</i>
European Credit Transfer and Accumulation System (ECTS)	7
Language	<i>italian</i>
Academic calendar (starting and ending date)	<i>II semester</i>
Attendance	

Professor/ Lecturer	
Name and Surname	Antonella Serra
E-mail	antonella.serra@uniba.it
Telephone	
Department and address	<i>Ionian department</i>
Virtual headquarters	<i>Teams</i>
Tutoring (time and day)	After class, in person Online, by appointment via e-mail

Syllabus	
Learning Objectives	<i>Knowledge and understanding Knowledge of the fundamental concepts for an adequate use of ICT technologies in the company.</i>
Course prerequisites	
Contents	<i>Introduction to IT Analog and digital The representation of information: character encoding, the coding of numbers the encoding of images and sounds Logical data structuring: files Computer hardware architecture The software The concept of algorithm. Constants, variables and instructions of an algorithm. The programming languages. Machine language. Low-level symbolic languages. High-level languages. Program translation processes: compilation and interpretation. Software use licenses: licenses for free and open-source software; licenses for proprietary or closed source software. The operating system Computer networks: introduction Local networks, geographic networks, the Internet The Web. From hosting to housing. Cloud computing Data management. Structured data and unstructured data. The management of structured data. DBMS and database. Design of a relational database: conceptual design and logical design. The SQL language. Data Quality Information systems Information systems classification: TPS, MIS, DSS, ESS. OLAP and OLTP. IT security</i>

<b>Books and bibliography</b>	<i>Lecture notes available on the e-learning platform</i>
<b>Additional materials</b>	

<b>Work schedule</b>			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
<b>Hours</b>			
175	56		119
<b>ECTS 7</b>			
<b>Teaching strategy</b>		<i>Frontal lessons</i>	
<b>Expected learning outcomes</b>			
<b>Knowledge and understanding on:</b>	<ul style="list-style-type: none"> <li>○ Know the fundamental concepts for a wise use of ICT technologies in the company.</li> </ul>		
<b>Applying knowledge and understanding on:</b>	<ul style="list-style-type: none"> <li>○ Autonomy in decisions about the right software / service to be used in the company</li> </ul>		
<b>Soft skills</b>	<ul style="list-style-type: none"> <li>• <i>Autonomy of judgment</i></li> <li>• <i>Show that you have acquired autonomy of judgment on the choices in relation to the design of a Company Information System.</i></li> <li>• <i>Communication skills</i></li> <li>• <i>Show to be able to communicate in an appropriate way the technical characteristics of a Company Information System.</i></li> <li>• <i>Ability to learn independently</i></li> <li>• <i>Show that you have developed the ability to independently learn further insights on topics relating to ICT resources that can be used in Company Information Systems.</i></li> </ul>		

<b>Assessment and feedback</b>	
<b>Methods of assessment</b>	<i>Oral / written exam</i>
<b>Evaluation criteria</b>	<ul style="list-style-type: none"> <li>• Knowledge and understanding:</li> <li>• Show that you have developed the ability to independently learn further insights on topics relating to ICT resources that can be used in Company Information Systems.</li> <li>• Applied knowledge and understanding:</li> <li>• Show that they have developed the ability to independently apply the concepts relating to ICT resources that can be used in Company Information Systems.</li> <li>• Autonomy of judgment:</li> <li>• Show that you have developed evaluation skills in real contexts</li> <li>• Communication skills:</li> <li>• Show that you have developed the ability to communicate what you have learned in a clear and rigorous way.</li> <li>• Ability to learn:</li> <li>• Show that you have acquired a learning methodology</li> </ul>
<b>Criteria for assessment and</b>	<i>The results obtained, of all the expected learning criteria, will be evaluated through</i>

attribution of the final mark	<i>appropriate questions included in the exams.</i>
<b>Additional information</b>	