COURSE OF STUDY *Magistrale in "Strategie d'Impresa e Management"*
ACADEMIC YEAR *2023/2024*
ACADEMIC SUBJECT *Business Intelligence*

General information	
Year of the course	*I*
Academic calendar (starting and ending date)	*Il semester from 19 February 2024 to 31 May 2024*
Credits (CFU/ETCS):	6
SSD	*ING-INF/05*
Language	*Italian*
Mode of attendance	*optional*

Professor/ Lecturer	
Name and Surname	ANTONELLA SERRA
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Telephone	
Department and address	*Headquarters of Economics - Taranto*
Virtual room	*Teams platform*
Office Hours (and modalities: e.g., by appointment, on line, etc.)	After class, in presence Online, by appointment via e-mail

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
150	*48*		*102*
CFU/ETCS			
6	*6*		

Learning Objectives	The course aims to provide specialized skills for the design and management of modern Business Intelligence (BI) infrastructures to support management information systems and to provide knowledge of modern ERP/CRM technologies to support business and systems architecture for data analysis (data warehouse). The course also deals with the methodological principles of some phases of the life cycle of an Information System, with reference not only to the technological aspects, but also to those that require attention to the organizational and economic context, as well as the main tools analysis technologies of Business Intelligence.
Course prerequisites	(recommended) Knowledge of database systems, the relational model and the SQL language

Teaching strategies	Frontal teaching
Expected learning outcomes in terms of	

Knowledge and understanding on:	The course intends to provide students with specialized knowledge and all the methodological and technological tools to support both Management and Operational Information Systems, with particular reference to the main ERP/CRM and Business Intelligence (BI) software suites. In particular, these tools will allow students, on the one hand, to know how to use the most appropriate "best practices" for the compliance and re-engineering of business processes of an operational nature, on the other, to know how to efficiently implement and effective management/decision-making processes of a given organization.
Applying knowledge and understanding on:	The course is aimed at transmitting the skills and methodological and operational tools necessary to concretely apply the knowledge relating to the design and maintenance of both Management and Operational Corporate Information Systems. In particular, the student must demonstrate to be able to re-engineer the typical operational business processes of a company through the introduction of ERP/CRM information technologies, and to support management/management processes with Business Intelligence (BI) tools. decision making.
Soft skills	• *Making informed judgments and choices* Through study, exercises and the development of analysis cases and models in the classroom, the student is able to gather the peculiarities of the context to organize a correct analysis process. • *Communicating knowledge and understanding* At the end of the course the student will have acquired the communication skills necessary for the correct transmission of results in the field of data analysis and in relation to the ICT resources that can be used in Corporate Information Systems and will be able to communicate through the collection of relevant information, the modeling of raw data and the processing of these into knowledge, the meaning of situations and indications on their management. • *Capacities to continue learning* At the end of the course, the student will show having developed the ability to autonomously learn further insights on topics related to ICT resources that can be used in Company Information Systems.
Syllabus	
Content knowledge	Information systems • Information systems in the company. • Corporate data management The Business Intelligence • What is Business Intelligence • The elements of a Business Intelligence system • The economic evaluation of Business Intelligence • Designing Business Intelligence The data warehouse • Introduction to the data warehouse • Master Data Management and data quality systems • ETL • OLAP • The front-end tools • The future of Business Intelligence Business Intelligence with Microsoft Excel/Power BI/Knime

Texts and readings	Kennet Laudon, Jane Laudon – Management dei Sistemi Informativi – Pearson Education (Capitolo 2 - 7) A. Rezzani - Business Intelligence Processi, metodi, utilizzo in azienda - Apogeo Education - Maggioli Editore M. Scalera - Informatica aziendale edizione 2017 Capp. 7 – 10
Notes, additional materials	
Repository	Links to useful websites are available on the e-learning platform at the studio https://elearning.uniba.it/

Assessment	
Assessment methods	The verification of learning takes place through an oral exam on the various contents developed during the during which the teacher will be able to ascertain the knowledge acquired also through practical exercises to be carried out during the exam to the teacher himself. During the exam, the teacher will verify the expected learning outcomes. The assessment aims to evaluate the knowledge and ability to understand and critically analyze the topics covered by the teaching, the methodology used to study the subject, mastery of the specific teaching language, as well as the ability to understand the interconnections between different teaching topics. Workshops and exercises may be scheduled during the course which will be evaluated by the teacher and may contribute to the final evaluation.
Assessment criteria	• *Knowledge and understanding* Knowledge of the main issues related to the organization and automatic management of the different types of data accumulated and available in public and private organizations. • *Applying knowledge and understanding* The student will be able to use the methodologies learned to support data analysis in order to produce precise and essential information, using a data-driven approach. • *Autonomy of judgment* the student will be able to express a critical attitude with which to plan, design and manage data analysis workflows • *Communicating knowledge and understanding* the student will have acquired the communication skills necessary for the correct transmission of results in the field of data analysis, both in written and oral form, allowing him to continue his university studies with a high degree of autonomy. • *Communication skills* The student must demonstrate the ability to use the terminology appropriately and pertinently. • *Capacities to continue learning* The student will acquire the theoretical and practical knowledge to autonomously address and resolve IT problems, which may arise both during the continuation of the studies and during the working activity.
Final exam and grading criteria	The verification of learning takes place through an oral exam aimed at verifying the learning of the contents of the Course. During the exam, the teacher will be able to ascertain the knowledge acquired also through practical exercises. The final mark is given out of thirty. The exam is considered passed when the grade is greater than or equal to 18.
Further information	