

Syllabus

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Titul dl curs	Capstone Project
Codesc dl curs	73019
Titul suplementar	
SSD	IINF-05/A
Lingaz	Inglese
Curs de laurea	Corso di laurea magistrale in Informatica per la Data Science
D'autri cursc de laurea (cursc deberieda)	
Dozenc	dr. Davide Lanti, Davide.Lanti@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/34107
Assistent didatich	
Semester	Primo semestre
Ann/Agn de stude	2
Credic universitars	6
Ores de insegnament	12
Ores de laboratore	0
Ores de stude individual	138
Ores de riceviment prevedudes	18
Ressum� di contegnus	Individual or group project based on real data from a specific application domain in areas such as bioinformatics, internet of things, business information systems, tourism, agriculture.
Argomenc dl curs	The course belongs to the type "affini o integrative – formazione affine" in the curricula "Data Analytics" and "Data Management". Data science cannot be taught only on a theoretical level. Students must apply and test their skills on real data, interacting with domain experts. To this end, the students carry out a project on

	<p>real data taken from concrete application domains, such as bioinformatics, sensors, Internet of things, business information systems, tourism and agriculture. The goal is to acquire professional skills while applying the techniques studied throughout the Masters program. The project is carried out individually or in groups, autonomously under the joint supervision of a professor and one or more domain experts. Individual or group project based on real data from a specific application domain in areas such as bioinformatics, internet of things, business information systems, tourism, agriculture.</p>
Paroles clef	Data Science, Real-World Data Projects
Prerequisic aconsiés	
Cursc propedeutics	
Modalité de enseignament	Individual or group project.
Oblianza de frecuencia	Attendance of project presentations at the beginning of the course is not compulsory.
Obietifs formatifs y competenzes da arjonje	<p>The course belongs to the type "affini o integrative – formazione affine" in the curricula "Data Analytics" and "Data Management". Data science cannot be taught only on a theoretical level. Students must apply and test their skills on real data, interacting with domain experts. To this end, the students carry out a project on real data taken from concrete application domains, such as bioinformatics, sensors, Internet of things, business information systems, tourism and agriculture. The goal is to acquire professional skills while applying the techniques studied throughout the Masters program. The project is carried out individually or in groups, autonomously under the joint supervision of a professor and one or more domain experts.</p> <p>Applying knowledge and understanding:</p> <ul style="list-style-type: none"> • D2.1 - Practical application and evaluation of tools and techniques in the field of data science • D2.2 - Ability to address and solve a problem using scientific methods • D2.3 - Ability to analyse, explore and evaluate a data set in specific application domains <p>Making judgments</p> <ul style="list-style-type: none"> • D3.1 - Ability to plan and, if necessary, re-plan a technical

	<p>project activity for the analysis and management of data, or for the implementation of corresponding software systems or applications, and to complete it within the defined deadlines</p> <ul style="list-style-type: none"> • D3.2 - Ability to autonomously select the documentation (in the form of books, web, magazines, etc.) needed to keep up to date in a given sector • D3.3 - Ability to identify reasonable work goals and estimate the resources needed to achieve these goals. <p>Communication skills</p> <ul style="list-style-type: none"> • D4.1 - Ability to use English at an advanced level with particular reference to disciplinary terminology • D4.2 - Ability to present one's work in a clear and comprehensible way in front of an audience, including non-specialists • D4.3 - Ability to structure and draft scientific and technical documentation • D4.4 - Ability to coordinate the work of a project team and interact positively with team members • D4.5 - Ability to interact and collaborate in the implementation of a project or research with peers and experts <p>Learning skills</p> <ul style="list-style-type: none"> • D5.1 - Ability to autonomously extend the knowledge acquired during the course of study • D5.2 - Ability to autonomously keep oneself up to date with the developments of the most important areas of data science • D5.3 - Ability to deal with problems in a systematic and creative way and to appropriate problem solving techniques
<p>Obietifs formatifs y competenzes da arjonje (informaziuns suplementares)</p>	
<p>Sort de ejam</p>	<p>Project work, carried out individually or in groups, evaluated on the basis of the practical application of data science tools and methods (D2), project planning and judgment (D3), communication and teamwork (D4), and autonomous learning and problem-solving ability (D5). The project must be complemented by a written report and validated through a brief oral presentation.</p>
<p>Criters de valutazion</p>	<p>The exam is pass/fail, and is evaluated on the following criteria:</p> <ul style="list-style-type: none"> • Creativity, skills in critical thinking, ability to apply known and

	new techniques to real-world problems • Clarity of presentation
Bibliografia obligatora	
Bibliografia aconsieda	
Deplù informazioms	
OSS	Innovazione e infrastrutture, Istruzione di qualità