



Programme of Course "Basi Di Dati II"

- Code: I2I007
- Type of course unit: Elective (Laurea Magistrale in Ingegneria Informatica e Automatica curriculum Generale), Compulsory (Laurea Magistrale in Ingegneria Informatica e Automatica curriculum Informatica)
- Level of course unit: Postgraduate Degrees
- Semester: 2

Number of ects credits: (Laurea Magistrale in Ingegneria Informatica e Automatica) 9 (workload 225 hours)

Teachers: Paolino Di Felice

1	Course objectives	The course introduces students to the design, implementation, updating and querying of spatial and distributed databases (SDBs & DDBs). The main solutions adopted by existing DBMSs on the market to implement the logical protection of the data collected into relational DBs are, also, presented.
2	Course content and learning outcomes (dublin descriptors)	<p>Topics of the module include:</p> <ul style="list-style-type: none"> • Spatial SQL • The vector data model and the linked spatial data formats (WKT, shape, GML, ...,). • The raster data model. • Distributed databases. • Data protection by controlling who access the database. <p>On successful completion of this module, the student should :</p> <ul style="list-style-type: none"> • On successful completion of this module, the student should: (a) have profound knowledge about the available SDB technology; (b) have knowledge and understanding about the design of SDBs. • Understand and explain how to create, update and querying SDBs and DDBs by using SQL. • Demonstrate skill in the design and ability to manage SDBs and DDBs by using SQL. • Knowing how to communicate his basic knowledge to others in the job opportunities that will arise. • Demonstrate capacity for reading and understand other texts on related topics.
3	Course prerequisites	The student must have passed the course: Fundamentals of relational databases.
4	Teaching methods and language	Lectures, team work, lab, exercises. Language: Italian
5	Assessment methods	Written and oral exam.