

MANAGEMENT ENGINEERING - INGEGNERIA GESTIONALE (LM54)

(Lecce - Università degli Studi)

Insegnamento DATA MANAGEMENT

GenCod A003148

Insegnamento DATA MANAGEMENT

Anno di corso 1

Insegnamento in inglese DATA MANAGEMENT

Lingua INGLESE

Settore disciplinare ING-INF/05

Percorso PERCORSO COMUNE

Corso di studi di riferimento MANAGEMENT ENGINEERING -

Docente ANTONELLA LONGO

Tipo corso di studi Laurea Magistrale

Sede Lecce

Crediti 9.0

Periodo Primo Semestre

Ripartizione oraria Ore Attività frontale: 81.0

Tipo esame Orale

Per immatricolati nel 2017/2018

Valutazione Voto Finale

Erogato nel 2017/2018

Orario dell'insegnamento

<https://easyroom.unisalento.it/Orario>

BREVE DESCRIZIONE DEL CORSO

This is a course in information systems and data modelling; it is aimed at providing principles and tools to model data in information systems. It is a necessary prerequisite for more advanced courses in the management of digital technologies in enterprises and in the study of business intelligence. Students acquire a better understanding of relational and analytical database system structures and learn structured query language. These skills prepare them to, design and develop relational and multidimensional databases, fundamental elements of Enterprise Information Systems.

PREREQUISITI

No previous skills are required. The use of computer and the tools of office automation are

OBIETTIVI FORMATIVI

Learning Outcomes; after the course the student should be able to

- Describe the model and frameworks of an Information System; illustrate the main components of an information system from the technical and application perspective and the impact of information systems on business.
- Distinguish conceptual, logical and physical models in data management.
- Model Online Transaction processing systems from a data perspective, distinguishing among ER models, relational models and physical models
- Model Online Analytical processing systems from a data perspective, distinguishing among DFM, Snowflakes and physical models, being able to describe the relationships among them and the processes

MODALITA' D'ESAME

Written and Oral

The exam is made up of both written and oral part.

The written part aims at evaluating to what extent the student has: 1) the ability to design data models according to methodologies presented during the call, 2) reasoning about his/her choices and the capacity to integrate different concepts and tools.

The oral part follows the written part if the student has been scored with sufficient at least. It is aimed to verify to what extent the student has gained knowledge and understanding of selected topics and he is able to communicate them.

PROGRAMMA ESTESO

Introduction to Computer and Information Systems (21 hours)

- Computer, digital media, automatic information processing. Computer networks. Enterprise information systems and information architectures.

Online Transaction Processing (30 Hours)

- The aim of this module is to teach students to design database models and to implement tables, queries, forms, reports and web pages. The focus will be on why and how to use databases in some significant business scenarios. SQL and other programming languages will be presented to understand the basics of modern Web Applications and Service Oriented Architectures.

Online Analytical Processing (30 Hours)

- The aim of this module is to present models, methodologies and tools to understand Business Intelligence. Specific attention will be put on multidimensional analysis and on how to design and implement datawarehouses.

TESTI DI RIFERIMENTO

1. "Fundamentals of Database Systems", 6th Edition, Elmasri, Navathe, Addison-Wesley
2. "Datawarehouse Design - Modern Principles and Methodologies", Matteo Golfarelli, Stefano Rizzi, McGrawHill
3. "Management Information Systems" Kenneth Laudon, Jane Laudon, 13th edition, Global Edition, Pearson International Edition
4. Teaching materials provided at the course