uc3m Universidad Carlos III de Madrid

Data Design for sensemaking

Review date: 19-05-2022 Academic Year: (2022 / 2023)

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: DIAZ PEREZ, MARIA PALOMA

Type: Electives ECTS Credits: 6.0

Year: 4 Semester:

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Context of Data Governance
- 2. Data integration models (datawarehouse and virtual models)
- 3. Heterogeneous Data. Mediated Schema. Schema Matching and Mapping.
- 4. Obtaining Data. Crawlers. Wrappers. Data Integration on the web.
- 5. NoSQL databases in data integration.
- 6. Sensemaking and Situational Awareness in the Big Data Era
- 7. Visual Analytics: History, Definition and Building Process
- 8. Principles of Human Computer Interaction: Perception, Cognitive Aspects, Semiotics and Creativity
- 9. Interaction with Visual Interfaces
- 10. Geo-spatial and Temporal Data Processing
- 11. Deep Learning Models
- 12. Applications of Visual Analytics

% end-of-term-examination: 60 % of continuous assessment (assigments, laboratory, practicals...): 40