INSTITUT NATIONAL DES SCIENCES APPLIQUÉES LYON

DPT GENIE INDUSTRIEL
INDUSTRIAL ENGINEERING
INSA Campus LyonTech - 19 Avenue Jean Capelle
Batiment Jules Verne - 69621 VILLEURBANNE
Phone 0472438594

Outils & Méthodes

Business Intelligence

IDENTIFICATION

CODE : GI-4-S1-EC-BIN
ECTS : 2.0

HOURS

Lectures :	2.0 h
Seminars :	12.0 h
Laboratory :	14.0 h
Project :	0.0 h
Teacher-student contact :	28.0 h
Personal work :	7.0 h
Total :	35.0 h

ASSESSMENT METHOD

Written exam at the end of the tutorial part ["TD"]
Project evaluation : collective presentation and written report

TEACHING AIDS

Slides

TEACHING LANGUAGE

English

CONTACT

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AIMS

GI-4-S1-UE-GEDE
GI-4-S1-EC-BIN
General engineering skills:
- Develop an experimental approach;
- Identify, formulate and solve a complex engineering problem.
Specific Industrial Engineering skills:
- Observe, measure, analyze and interpret an activity or system from data
- Modeling, designing a system of information, decision-making and production of goods and services;
- Evaluate, prototype or simulate a system.
Abilities :
Collect customer needs for analysis; Identify sources of production data useful for an analytical approach; Process voluminous information for analysis; Exploit the data in the perspective of the analyzed activity: Carry out a project, working in a group.
Knowledge: operational and analytical database schemas; Elementary actions and sequencing for data transformation; Methods and tools for visualizing information from data.

CONTENT

DATA WAREHOUSE
1. Dimensional modeling for decision support systems
2. The Extract-Transform-Load [ETL] task : data cleaning, fusion and restructuration methods, ETL tools
3. Query tools and methods : reporting, scorecards, etc.

BIBLIOGRAPHY

ystèmes d'information décisionnels, E. Ferragu, 2013 [available at Doc'INSA]
- Piloter l'entreprise grâce au data warehouse, Jean-Michel Franco, Sandrine de Lignerolles , 2000
[available at the Industrial Eng. dept. local library]

PRE-REQUISITE

Relational Databases, SQL : GI-3-BDD-S2