- Faculté des sciences économiques
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Data Warehousing (5MI2002)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en développement international des affaires	**Cours: 4 ph**	**cont. continu**	6
Master en méthodologie d'enquête et d'opinion publique	**Cours: 4 ph**	**cont. continu**	6
Master en sciences économiques, orientation politique économique	**Cours: 4 ph**	**cont. continu**	6
Master en statistique	**Cours: 4 ph**	**cont. continu**	6
Master en systèmes d'information	**Cours: 4 ph**	**cont. continu**	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Automne

Equipe enseignante:

Stoffel Kilian, professor
Institut du management de l'information, Pierre-a-Mazel 7, 2000 Neuchâtel
+ 41 32 718 1376, kilian.stoffel@unine.ch
Han Dong, assistant-doctorant
Institut du management de l'information, Pierre-a-Mazel 7, 2000 Neuchâtel
+ 41 32 718 1291, dong.han@unine.ch

Objectifs:

a) Identify differences between application operational data modelling and warehouse data modelling, explore the purpose of subject modelling, and develop a subject area model.
b) Apply techniques to develop a robust and representative list of business questions and translate them into data models.
c) Identify clusters of data elements with a natural affinity to be grouped as data marts.
d) Make informed choices between relational and dimensional data structures
e) Analyse dimension properties including domain size, density/sparsity, and volatility; describe advanced modelling techniques for slowly-changing dimensions.

Contenu:

The course begins by describing the basic notions, like the objectives of Business Intelligence and the data warehouse, and also how they fit into the general Corporate Information Factory architecture. It explains why relational design techniques is chosen to model the data warehouse. A discussion about the impact of the relational modelling over the final delivery of data marts is presented.
The analysis and design issues are presented: life cycle, modelling of data warehousing and data marts (star and snowflake schema), cubes, fact tables and dimensional tables, aggregation, etc.
Special attention is given to the inter-communication between the business intelligence agents and the data warehousing development with interviewing examples.

Forme de l'évaluation:

2-hour written exam during the last week of the semester (60%) and project (40%)
Catch-up exam: 2-hour written exam during the autumn session (100%)

Pré-requis:

none