

Faculty of Economic, Social and Political Sciences



IAG3100 Filière Systèmes d'information

[90h] 15 credits

Teacher(s): Manuel Kolp, Alain Pirotte, Marco Saerens, Jean Vanderdonckt
Language: French
Level: Third cycle

Aims

At the end of the class, students should

- " Master some recent evolutions of information technologies in relation with internet, and assess their impact on the company.
- " Be able to develop an information system related to e-business.
- " Understand some of the recent advances in information technologies related to the internet, for instance in "web mining".

Main themes

- " The analysis and design of information systems, in particular e-business (course1).
- " The study of some web mining algorithms (course2).
- " A computer sciences seminar, related to the internet (seminar1).
- " Strategic analysis, in the context of e-management, with a real-world lab (course3).
- " Analysis, design and implementation of a e-commerce system (lab1).
- " Development of a web recommendation system (lab2).

Content and teaching methods

Content

- IAG3101 Analysis, modeling and design of information systems, in the framework of e-business (7 ECTS).
 " This module will introduce some more advanced concepts of the design of information systems, in the framework of e-business, and based on the courses GETI2101 (relational modeling and UML) and SESP1224 (objet-oriented programming). It integrates the already assimilated knowledge (UML, objet oriented programming, etc) and shows how the different components of a e-business information system interact, as well as the different steps needed for the design of such a system. It will include four sub-modules:
 - The analysis and design of information systems, in particular e-business (course1).
 - The study of some web mining algorithms (course2).
 - A computer sciences seminar, related to the internet (seminar1).
 - Strategic analysis, in the context of e-management, with a real-world lab (course3).
- IAG3102 Analysis and programming lab (8 ECTS).
 " This lab aims to develop two e-business related applications, illustrating the IAG3101 course :
 - Design and development of a e-commerce system (UML, PHP/MySQL, lab1).
 - Development of a web recommendation system (web mining, PHP/MySQL , lab2).

Methods

Project-based.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite : A course on (1) object-oriented programming and (2) requirement analysis and system design, including UML and relational modeling.

Evaluation : Oral exam and presentation

Support : Book chapters will be provided to the students

References :

- S. Bennett, S. McRobb & R. Farmer (2002) "Object-oriented systems analysis and design using UML, 2nd ed". McGraw-Hill.

- R. Elmasri & S. Navathe (2004) "Fundamentals of database systems, 4th ed". Addison-Wesley.

- P. Kruchte (2003), "The Rational Unified Process : An Introduction, 3th ed". Addison-Wesley.

- L. Maciaszek (2001) "Requirements analysis and system design". Addison-Wesley.

- M. P. Singh (2004) "The Practical Handbook of Internet Computing". Chapman & Hall/CRC.

- P. Baldi, P. Frasconi & P. Smyth (2003) "Modeling the internet and the web". Wiley.

Pedagogic team: two assistants or researchers of the ISYS unit

Programmes in which this activity is taught

ECGE3DS/AC Diplôme d'études spécialisées en économie et gestion (Master in business administration) (audit et contrôle de gestion)

Other credits in programs

ECGE3DS/AC	Diplôme d'études spécialisées en économie et gestion (Master in business administration) (audit et contrôle de gestion)	(15 credits)	Mandatory
IAG23M	Troisième année de Maîtrise en sciences de gestion (orientation "méthodes quantitatives de gestion")	(15 credits)	Mandatory
INGE23	Troisième Ingénieur de gestion	(15 credits)	Mandatory
INGE23/G	Troisième Ingénieur de gestion (Générale)	(15 credits)	Mandatory