llsmg2008 2019	IT Management

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

5 credits	30.0 h	Q2

Teacher(s)	Vanderdonckt Jean ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	This course thoroughly examines specific themes for transforming business problems into information systems: 1. The identification of data in order to transform them into information useful for the information system, 2. The application of a design methodology for information systems, 3. The use of analyzing techniques for problem solving by information systems. At the end of this course, the student should be able to elaborate various models used for designing an information system.
Aims	1 At the end of the class, students should be able to - Understand the major concepts of information system - Identify data which are required to be managed in an information system so as to transform them into relevant information - Decompose a project for an information system into applications, phases, and functions - Structure in time and space the phases of an information system - Assign the phases of the information system to organisational units depending on the goals of the information system - - - - *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Content	Content The course basically consists of two parts: 1. Basic elements of information systems: this first part introduces the student to the basic concepts belonging to the area of information systems, then the concepts of an advanced data base ; it is demonstrated how to develop files, data bases from a conceptual model of date. The different categories of an information system are given based on a pyramidal structure. 2. A method for designing an information system: this second part addresses a global method for designing an information system from data collected in the real world. This method is articulated around three axes: an approach to be followed, models describing various aspects of the problem to be solved, and software tools supporting the approach. Methods Since this course is centred on the fundamental principles of information systems, we will emphasize more the approach by extreme modelling: in this approach, it is expected that the information system will be represented through various models that are as much expressive as possible. These models will then initiate the rest of the development process. The method followed for this course is deliberately illustrative in the sense that two complete case studies will be progressively detailed in the second part : first, data collected from the real world will form the first information ; then, the approach will be applied, step by step, model by model ; and finally, an illustration of a possible results will be given for each case study. The first case study, deliberately simplified, is related to the computerisation of a company selling clothes by correspondence. The second case study, a more complex one than the first one, is related to the management of an insurance company, in particular for car insurance. These two case studies will be considered as running examples throughout the second part. Two sessions will be dedicated also to invited conferences.
Other infos	Prerequisite : none, but knowing the fundamental principles of algorithmic is considered as an asset. Evaluation : the final note of this course will be assigned depending on the results obtained for the two parts: 1. the score obtained for the written examination (12 points on a total of 20) with the following parts: three questions related to the theory seen during the course and in the invited conferences, the class diagram, the schema for process decomposition, the schema for process dynamics, or the dataflow diagram; 2. the score obtained in the work accompanying the course (8 points on a total of 20). No documentation will be available during the written examination. Support : the hole set of documents and overheads used in the course is available at the course web site
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Master [60] in Management	GEST2M1	5		🔍
Master [120] in Motor Skills: Physical Education	EDPH2M	5		🔍