UCLouvain

2025

llsmf2903

## **Digital Business Systems**

The version you're consulting is not final. This course description may change. The final version will be published on 1st June.

5.00 credits

22.5 h + 15.0 h

Q1

Teacher(s)	Belleflamme Paul ;Coenraets Jérôme ;Kolp Manuel ;				
Language :	English				
Place of the course	Louvain-la-Neuve				
Prerequisites	None				
Main themes	Digital technologies are deeply reshaping our society and economy. In particular, they are transforming the management of organizations in every aspect. Against this backdrop, the objective of this course is to provide students with a broad and solid grasp of the challenges and opportunities raised by datafication (the transformation of social action into data) and digitization (the conversion of information into a digital format). To do so, the module adopts a transversal approach, spanning several disciplines of management (among others, knowledge and information systems, marketing, corporate social responsibility, and strategy).				
Learning outcomes					
Evaluation methods	<ul> <li>The final grade in this course will be based on marks in individual coursework, group coursework, and a final exam.</li> <li>The individual coursework counts toward 14% of the final grade. It consists of a combination of activities that are specified on a weekly basis.</li> <li>The group coursework counts toward 48% of the final grade. The contents and guidelines are specified below (see the 'Group coursework' section). Groups will first present their work in progress in an interim report (4% of the final grade); they will then present their final work in a written report (34% of the final grade) and in an oral online video presentation (10% of the final grade).</li> <li>The final exam counts toward 33% of the final grade. It is a closed-book exam, with multiple-choice questions.</li> <li>The Peer and Self Assessment of groupwork counts toward 5%. It consists of an auto-evaluation of your group project commitment and peer review of other groups online presentations.</li> <li>The marks for the individual coursework are set once and for all (this part of the assessment cannot be retaken). However, students have the possibility to retake the final exam in August and, if the mark of the group coursework is below 10/20, to replace it with an individual coursework (to be handed in June or in August).</li> </ul>				
Teaching methods	Class time is devoted to lecturing, discussion, and invited talks. Students participate through news and case discussions, and independent reading of academic and business literature. In parallel, the course uses project-based learning, as students are asked to work in groups on a specific project. The objective of the project is to get students acquainted with the practical and managerial implications of the concepts taught in class.				
Content	Digital technologies are deeply reshaping our society and economy. In particular, they are transforming the management of organizations in every aspect. Against this backdrop, the objective of this course is to provide students with a broad and solid grasp of the challenges and opportunities raised by datafication (the transformation of social action into data) and digitization (the conversion of information into a digital format). To do so, the module adopts a transversal approach, spanning several disciplines of management (among others, knowledge and information systems, marketing, corporate social responsibility, and strategy). As the scope of the course is very broad, the team of instructors will select a range of topics based on their background, interests and experience. Potential covered topics are (but not limited to): Data analytics, business intelligence, digital marketing, artificial intelligence, digital business models, IT project management processes, system analysis and design, societal issues (privacy, security, impacts on jobs, globalization, green computing, etc.).				
Inline resources	All the information and teaching material relevant to the course will be posted on a dedicated Moodle website.				

Université catholique de Louvain - Digital Business Systems - en-cours-2025-llsmf2903

Bibliography	<ul> <li>Potential references:</li> <li>Belleflamme, P. and Peitz, M. (2021). <i>The Economics of Platforms: Concepts and Strategy</i>. Cambridge University Press.</li> <li>Chaffey, D. and Ellis, F. (2019). <i>Digital Marketing. Strategy, Implementation and Practice</i> (7th Edition). Pearson.</li> <li>Chiang, M. (2012). <i>Networked life</i>. Cambridge University Press.</li> <li>Easley, D. and Kleinberg J. (2010). <i>Networks, Crowds, and Markets</i>. Cambridge University Press.</li> <li>Laudon, K.C. and Laudon, J.P. (2020). <i>Management Information Systems: Managing the Digital Firm</i> (16th Edition). Pearson.</li> <li>Leskovec, J., Rajaraman A. and Ullman J. (2020). <i>Mining of Massive Datasets</i> (3rd Edition). Cambridge University Press.</li> <li>Russel, S. and Norvig P. (2022). <i>Artificial Intelligence, a Modern Approach</i> (4th Edition). Pearson.</li> <li>Valacich, J., Schneider, C. Hashim, M., (2022) Information Systems Today: Managing the Digital World, (9th edition), Pearson.</li> </ul>
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Master [120] : Business Engineering	INGE2M	5		٩		