

5.00 credits

30.0 h

Q1

Teacher(s)	Fouss François ;
Language :	English
Place of the course	Mons
Prerequisites	/
Main themes	Nowadays, data are everywhere. For most organizations, potentially every area of its business, as well as every relationship related to its business, can now be quantified and recorded. Such amount of data led to the emergence of powerful methods for storing, processing, querying, and extracting useful information/knowledge from these data. This course will be focused on methods for data understanding, design, management, preparation, modeling, querying, and visualization, as a global means for the organization of making better decisions. As a central element in data analytics, modeling and methodology will play an important role in this course, including, e.g., data design for business intelligence analytics, predictive modeling, or fitting statistical models to data.
Learning outcomes	
Bibliography	<p>Sources potentielles :</p> <p>Provost & Fawcett (2013) 'Data science for business'. O'Reilly.</p> <p>Sherman (2014) 'Business intelligence guidebook: from data integration to analytics'. Morgan Kaufmann.</p> <p>Efraim, Sharda & Delen (2010) 'Decision support and business intelligence Systems'. Pearson.</p> <p>Leskovec, Rajaraman & Ullman (2014) 'Mining of massive datasets, 2nd ed'. Cambridge University Press.</p> <p>Kelleher, Mac Namee & D'Arcy (2015) 'Fundamentals of machine learning for predictive data analytics'. MIT Press.</p> <p>Hastie, Tibshirani & Friedman (2009), "The elements of statistical learning, 2nd ed". Springer-Verlag.</p> <p>Izenman (2008), 'Modern multivariate statistical techniques: regression, classification, and manifold learning'. Springer.</p> <p>Bellanger & Tomassone (2014), "Exploration de données et méthodes statistiques : data analysis & data mining avec le Logiciel R". Ellipses.</p>
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] : Business Engineering	INGM2M	5		
Master [120] in Public Administration	ADPM2M	5		