

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presential, distance or in a comodal or hybrid format).

5 credits




30.0 h + 30.0 h

Q1

Teacher(s)	Lee John ;
Language :	English
Place of the course	Louvain-la-Neuve
Aims	<i>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".</i>
Evaluation methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Oral Exam. Practical modalities depend on sanitary conditions.
Teaching methods	Due to the COVID-19 crisis, the information in this section is particularly likely to change. Lectures, practical sessions on computers, project. All activities can switch from presential to comodal or distancial depending on sanitary conditions.
Content	<ul style="list-style-type: none"> · What and why information visualisation? · Data abstraction: types of data and of datasets · Which visualisation for which task? · Validating visualisations · Display and ocular perception · Visualisation channels (colour, size, shape, angle, ...) · Tabular data: lists, matrices, tensors · Spatial data: scalar, vector and tensor fields · Networks and trees · Link between machine learning and visualisation: clustering, dimensionality reduction, graph embedding · Interactive visualisation · Multiple views · Advanced topics in visualisation
Inline resources	Moodle page of the course: https://moodleucl.uclouvain.be/course/view.php?id=12042
Bibliography	Visualization analysis & Design, Tamara Munzner, CRC Press, 2015.
Faculty or entity in charge	EPL

Force majeure

Teaching methods	Ex-cathedra course broadcasted or recorded. Practical sessions on computers, and project to be carried out individually or by groups of 2 students.
Evaluation methods	Oral exam with Teams and open book, if a face-to-face oral exam in LLN is not permitted; questions might concern the project.

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Data Science : Statistic	DATS2M	5		
Master [120] in Mathematical Engineering	MAP2M	5		
Master [120] in Data Science Engineering	DATE2M	5		
Master [120] in Data Science: Information Technology	DATI2M	5		