



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 + 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	<b>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</b> Oral Exam
Teaching methods	<b>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</b> Lectures, practical sessions on computers, project
Content	<ul style="list-style-type: none"> <li>· What and why information visualisation?</li> <li>· Data abstraction: types of data and of datasets</li> <li>· Which visualisation for which task?</li> <li>· Validating visualisations</li> <li>· Display and ocular perception</li> <li>· Visualisation channels (colour, size, shape, angle, ...)</li> <li>· Tabular data: lists, matrices, tensors</li> <li>· Spatial data: scalar, vector and tensor fields</li> <li>· Networks and trees</li> <li>· Link between machine learning and visualisation: clustering, dimensionality reduction, graph embedding</li> <li>· Interactive visualisation</li> <li>· Multiple views</li> <li>· Advanced topics in visualisation</li> </ul>
Inline resources	Moodle page of the course: <a href="https://moodleucl.uclouvain.be/course/view.php?id=12042">https://moodleucl.uclouvain.be/course/view.php?id=12042</a>
Bibliography	Visualization analysis & Design, Tamara Munzner, CRC Press, 2015.
Faculty or entity in charge	EPL

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