



5.00 credits

30.0 h

Q2

Teacher(s)	Vande Kerckhove Corentin ;
Language :	English
Place of the course	Mons
Main themes	<p>The main topics of this course are:</p> <ul style="list-style-type: none"> <li>• Main currents in recommendation                             <ul style="list-style-type: none"> <li>• Collaborative recommendation</li> <li>• Content-Based Recommendation</li> <li>• Knowledge-based recommendation</li> </ul> </li> <li>• Main techniques and main models in recommendation                             <ul style="list-style-type: none"> <li>• Nearest neighbors model</li> <li>• Latent class model</li> <li>• Models based on dimensionality reduction and decompositions matrix (for example, nonnegative matrix factorization)</li> <li>• etc</li> </ul> </li> </ul>
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <ol style="list-style-type: none"> <li>1                             <ul style="list-style-type: none"> <li>• Understand the main currents supporting recommender systems;</li> <li>• Understand and describe the main techniques and models used in recommender systems;</li> <li>• Apply, on real data, different recommendation techniques, and compare the quality of the results obtained by applying these techniques;</li> <li>• Analyze and interpret the results provided by the application of recommendation techniques.</li> </ul> </li> </ol>
Evaluation methods	<p>Continuous evaluation Project with oral defense</p> <p>!!! The course consists in a unique evaluation (that is, one a mark has been obtained for the course, it holds for the entire academic year, and can NOT be improved later on) !!!</p>
Teaching methods	<p>Lectures Practical assignments, exercises and projects integrated into the course The lecture is given in English.</p>
Content	<p>Nowadays, recommender systems play an ever more important role to propose products or services to consumers. Recommending movies, music, news, books, restaurants, financial services, search terms, or contacts, etc. has become a key asset for many companies. Recommender systems can be based on numerous approaches in existence today. This course covers some of these systems with a focus on recommender systems data, collaborative filtering, matrix factorization, and the evaluation of recommender systems.</p>
Inline resources	<p>Online ressources are available on the Student Corner Lecture name : MLSMM2156 - Systèmes de recommandation Key : communicated at the first class Brief introduction: <a href="https://tryolabs.com/blog/introduction-to-recommender-systems/">https://tryolabs.com/blog/introduction-to-recommender-systems/</a> General overview: <a href="https://link.springer.com/book/10.1007%2F978-3-319-29659-3">https://link.springer.com/book/10.1007%2F978-3-319-29659-3</a></p>
Bibliography	Aggarwal, Charu C.. "Recommender Systems." Springer International Publishing (2016).
Faculty or entity in charge	CLSM

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Data Science : Statistic	DATS2M	5		
Master [120] : Business Engineering	INGE2M	5		
Master [120] : Business Engineering	INGM2M	5		