


3.00 credits

20.0 h + 10.0 h

Q2

Teacher(s)	Lee John ;Missal Marcus (coordinator) ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Learning outcomes	
Evaluation methods	Oral examination (switching to written or distancial depending on the class size and sanitary conditions) or written exam with open questions. Weighting of the final score: 50% for Marcus Missal's part, 50% for John Lee's part.
Teaching methods	Lectures (physically, remotely or both/comodal dep. sanitary conditions) and critical paper readings.
Content	(1) Necessity of a theoretical approach in neurosciences. (2) History of neural networks. (3) Most important types of neural networks. (4) Deep learning. At the end of this unit, the student should be able to justify mathematical modeling of the central nervous system. The student should be able to explain the general principles of neural networks and have the knowledge and skills to simulate the behavior of elementary neural networks.
Inline resources	https://moodleucl.uclouvain.be/course/view.php?id=9189
Other infos	It is compulsory to participate to practical work, exercices and directed work to validate this unit. unjustified absence will cause a penalty at the examination of this unit that could include annulation of the exam for the academic year under consideration (0/20). In case of repeated no-show, even if justified, the teacher can propose to the jury to oppose inscription to the exam for this unit in agreemen with article 72 of RGEE.
Faculty or entity in charge	FASB

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Biomedicine	SBIM2M	3	WSBIM2280 AND (WSBIM2112 OR WSBIM2151) AND WSBIM2154 AND WSBIM2155 AND WSBIM2156	
Master [60] in Biomedicine	SBIM2M1	3		