


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). 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 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 using MATLAB NNTool GUI.
Inline resources	https://moodleucl.uclouvain.be/course/view.php?id=9189
Other infos	Prerequisites: introduction to linear algebra and differential calculus.
Faculty or entity in charge	FASB

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