## MASTER'S PROGRAMME IN NEUROSCIENCE 2023-26 PROGRAMME STRUCTURE 120 CREDITS (ECTS)

<b>NEU-100 NEUROSCIENCE</b> Obligatory studies (60 credits)	
NEU-101 Cellular physiology	
NEU-102 Cellular neurobiology	
NEU-103 Systems neuroscience	
NEU-104 Integrative neurobiology	
NEU-105 Methods and trends in neuroscience	
NEU-106 Master's seminar in neuroscience	
NEU-110 Master's thesis in neuroscience	
VIIKB-001 Maturity test	

NEU-201 CELL AND SYSTEMS PHYSIOLOGY Obligatory studies (65 credits)
NEU-101 Cellular physiology
NEU-203 Systems physiology
NEU-207 Regulatory networks in metabolism *)
NEU-561 Principles of bioscience omics
NEU-205 Methods and trends in physiology and neuroscience
NEU-206 Master's seminar in cell and systems physiology
NEU-220 Master's thesis in cell and systems physiology
VIIKB-001 Maturity test

\*) Not obligatory for biology teachers

## **ELECTIVE COURSES AND MODULES (0-60 credits)**

Each course can be completed separately or compiled into specific study modules of 15-30 credits.

In addition, other applicable optional course(s) may be included in each module.

In addition, other applicable optional course(s) may be included in each module.			
NEU-500 Molecular and Cellular Neuroscience	NEU-550 Sensory Biology		
NEU-502 Synaptic signaling and plasticity	NEU-551 Sensory biology		
NEU-531 Developmental neuroscience	NEU-552 Sensory performance in animals and humans		
NEU-543 Brain slice electrophysiology	NEU-512 Animal models in behavioural neuroscience		
PROV-004 Cell and molecular biology methods	NEU-542 Electrophysiological techniques		
NEU-510 Systems and Cognitive Neuroscience	NEU-560 Omics		
NEU-511 Systems and cognitive neuroscience	NEU-561 Principles of bioscience omics		
NEU-512 Animal models in behavioural neuroscience	TMED-915 Introduction to bioinformatics		
NEU-520 Neuroscience in Health and Disease	NEU-570 Environmental Physiology		
NEU-521 Basic mechanisms of nervous system diseases	BIO-404 Adapted animal		
NEU-512 Animal models in behavioural neuroscience	BIO-405 Exposed animal		
TMED-406 Translational psychiatry	HNFB-221 Nutrition and society		
MED-TOU11 Sleep and Circadian Neurobiology	NEU-240 Neuroscience from Cells to Systems		
MED-TOU25 Sleep and circadian rhythms	NEU-102 Cellular neurobiology		
NEU-530 Development, Regeneration and Ageing	NEU-502 Synaptic signaling and plasticity		
NEU-530 Developmental neuroscience	NEU-512 Animal models in behavioural neuroscience		
NEU-231 Mechanisms of regeneration and aging	NEU-521 Basic mechanisms of nervous system diseases		
GMB-305 Stem cells and organogenesis	NEU-250 Nutrition and Health		
TMED-202 Regenerative medicine from bench to bedside	NEU-251 Molecular nutrition		
NEU-540 Electrophysiology and Neurobiophysics	GMB-401 Integrative health biosciences		
NEU-541 Introduction to neurobiophysics	HNFB-221 Nutrition and society		
NEU-542 Electrophysiological techniques			
NEU-543 Brain slice electrophysiology			

OTHER GENERAL / ELECTIVE STUDIES 0-60 credits				
Elective courses from neuroscience or other programs / Pedagogical courses for teacher's qualification (60 cr)				
MPHARM-004 Research ethics	NEU-404 Practical training	NEU-415 Creative scientific thinking		
NEU-414 Research project	Academic writing	TMED-901 Career development		
NEU-603 Laboratory animal science	Statistics and R	SUST-001 Sustainability course		