

# M.Sc. Integrative Neuroscience in Magdeburg, Germany

First part (Basic subjects)  
Semester 1  
You must take 30 CP total: 28 CP core courses (PF) plus 2 CP of 6 CP electives (WPF). An additional 2 CP are offered optionally.

1 SEMESTER	<b>Modul GA1</b> Molecular and Cellular Neuroscience 9 CP (PF) + 2 CP (WPF)	<b>Modul GB</b> Systems and Behavioural Neuroscience 9 CP (PF)	<b>Modul GC</b> Theoretical and Computational Neuroscience 6 CP (PF) + 4 CP (WPF)	<b>Modul X</b> Professionalism 4 CP (PF) + 2 CP (WPF)
	<b>Cellular Neurophysiology</b> Lecture: 4 SWS / 4 CP Lab: 2 SWS / 2 CP	<b>Integr. &amp; Compar. Neuroanatomy</b> Lecture: 4 SWS / 4 CP Lab: 2 SWS / 2 CP	<b>Theoretical Neuroscience I</b> Lecture: 3 SWS / 3 CP Tutorial (WPF): 2 SWS / 2 CP	<b>Lab Rotation I</b> Lab: 1,25 SWS / 4 CP
	<b>Basic Molecular &amp; Cell Biology</b> Lecture: 3 SWS / 3 CP Seminar (WPF): 2 SWS / 2 CP	<b>Neuroethology</b> Lecture: 3 SWS / 3 CP	<b>Mathematical foundations</b> Lecture: 3 SWS / 3 CP Tutorial (WPF): 2 SWS / 2 CP	<b>Journal Club</b> Journal Club (optnl.): 2 SWS / 2 CP

First part (Basic subjects)  
Semester 2  
You must take 30 CP: 28 CP core courses (PF) plus 2 CP of 6 CP electives (WPF). An additional 2 CP are offered optionally.

2 SEMESTER	<b>Modul GA2</b> Molecular and Cellular Neuroscience 12 CP (PF)	<b>Modul GB</b> Systems and Behavioural Neuroscience 6 CP (PF) + 2 CP (WPF)	<b>Modul GC</b> Theoretical and Computational Neuroscience 6 CP (PF) + 4 CP (WPF)	<b>Modul X</b> Professionalism 4 CP (PF) + 2 CP (WPF)
	<b>Molecular &amp; Cellular Neurobiology</b> Lecture: 4 SWS / 4 CP Lab: 2 SWS / 2 CP	<b>Systems Neurophysiology</b> Lecture: 3 SWS / 3 CP Lab (WPF): 2 SWS / 2 CP	<b>Theoretical Neuroscience II</b> Lecture: 3 SWS / 3 CP Seminar (WPF): 2 SWS / 2 CP	<b>Lab Rotation II</b> Lab: 1,25 SWS / 4 CP
	<b>Development &amp; Plasticity</b> Lecture: 4 SWS / 4 CP Seminar: 2 SWS / 2 CP	<b>Learning &amp; Memory</b> Lecture: 3 SWS / 3 CP	<b>Biological Statistics</b> Lecture: 3 SWS / 3 CP Seminar (WPF): 2 SWS / 2 CP	<b>Journal Club</b> Seminar (optnl.): 2 SWS / 2 CP

Second part (Advanced subjects)  
Semester 3  
You must take 30 CP: 24 CP of 36 CP electives (WPF) plus 6 CP core courses (PF). An additional 2 CP are offered optionally.

3 SEMESTER	<b>Modul VA</b> Molecular and Cellular Neuroscience 12 CP (WPF)	<b>Modul VB</b> Systems and Behavioural Neuroscience 12 CP (WPF)	<b>Modul VC</b> Theoretical and Computational Neuroscience 4 CP (WPF)	<b>Modul VD</b> Clinical and Applied Neuroscience 8 CP (WPF)	<b>Modul X</b> Professionalism 6 CP (PF) + 2 CP (WF)
	<b>Neurogenetics</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP	<b>Cognitive Neurobiology</b> Lecture (WPF): 3 SWS / 4 CP	<b>Spiking Networks</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP	<b>Clinical Neuroscience</b> Lecture (WPF): 3 SWS / 4 CP	<b>Scientific Ethics</b> Lecture (PF): 2 SWS / 2 CP
	<b>Neuroimmunology, -endocrinology</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP	<b>Macroimaging</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP		<b>Behavioural Pharmacology</b> Lecture (WPF): 3 SWS / 4 CP	<b>Lab Rotation III</b> Lab (PF): 1,25 SWS / 4 CP
	<b>Neural Signalling</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP	<b>Microimaging</b> Lecture (WPF): 2 SWS / 3 CP Lab (WPF): 1 SWS / 1 CP			<b>Journal Club</b> Seminar (optnl.): 2 SWS / 2 CP

Third part (Thesis research)  
Semester 4  
You must take 30 CP cor courses (PF). An additional 2 CP are offered optionally.

4 SEMESTER	<b>Masterarbeit 28 CP</b>				<b>Modul X</b> Professionalism 30 CP (PF) + 2 CP (WF)
					<b>Scientific Writing</b> Lecture (PF): 2 SWS / 2 CP
					<b>Journal Club</b> Seminar (optnl.): 2 SWS / 2 CP