

## Curriculum Master Program Molecular Life Science / Start in Summer (2019)

Semester	Cell Biology, Structure Biology, Neuroscience and Clinical Immunology				Multidisciplinary Competences			ECTS / WWH		
1.	LS4110-KP06 Drug Research (Pharmacology and Toxicology)		(Rational Drug Design)		LS4131-KP04 Membrane-Biophysics	LS4135-KP04 Protein-Biophysics	ME5051-KP05 Biophysics of Ionizing Radiation and Radiation Safety	ME5055-KP05 Animal Models and animal protection		
					Chose 1 of 2		Chose 1 of 2			
ECTS	6				Each 4		Each 5			
L/T/P/S	2 / 0 / 0 / 0		2 / 0 / 0 / 0		Each 2 / 1 / 0 / 0		Each 2 / 0 / 2 / 0			
	LS4101-KP08 Molecular Biomedicine A, B, C, D, E, F, G (see bottom)			MZ4121-KP06 Infection Biology	MZ4125-KP06 Neuroscience 2	MZ 4127-KP06 Clinical Immunology 1				
	Chose 3 of 7			Chose 1 of 3						
ECTS	8			Each 6					29	
L/T/P/S	Each 0 / 0 / 0 / 2			Each 2 / 0 / 0 / 2					21	
2.	MZ5111- KP06 Immunology	MZ5115-KP06 Neuroscience 1	MZ5117-KP06 Frontiers in Metabolic Medicine Research		LS4010-KP06 Basics of Cell- and Molecular Biology for Virology (Cell Biology) (Molecular Virology)		MA3400-KP05 Biomathe- matics	CS4440-KP05 Moleculare Bioinformatics	EW4170- KP05 System Biology	
	Chose 1 of 3				Chose1 of 3					
ECTS	Each 6				6			Each 5		
L/T/P/S	Each 2 / 0 / 0 / 2				2 / 0 / 0 / 0	2 / 0 / 0 / 0		Each 2 / 2 / 0 / 0		
	LS4020-KP06 Structure Analytics: A Crystallography B NMR-Spectroscopy C Single Molecule Methods D Microscopy: techniques and applications			LS4030-KP06 Molecular Pathomechanisms and Strategies of Therapy			LS4040-KP04 Basic Virology and Biosafety			
	Chose 2 of 4									
ECTS	6				6			4		33
L/T/P/S	Each 2 / 0 / 0 / 0				4 / 0 / 0 / 0			2 / 0 / 1 / 0		23
3.	LS5111-KP16 Practical Course (Internship) MLS									
ECTS	16									
L/T/P/S	0 / 0 / 24 / 0									
	LS5200-KP06 Consolidation in Molecular Life Science [Chose 2 ]									
ECTS	6									
L/T/P/S	Each 0 / 0 / 0 / 2									
	Start of the Master Thesis MLS								28	
	6								28	
4.	LS5990 Master Thesis MLS						PS4610-KP07 Ethics in Sciences / Scientific Writing			
ECTS	24						6			30
L/T/P/S							2 / 0 / 0 / 0	0 / 0 / 0 / 2		4
1. – 4.									ECTS WWH	120 >76

L= lecture; T= tutorial; P= practical course; S= seminar; ECTS: credit point of the European transfer system; WWH = weekly work hours

LS4101- KP08: A Molecular Oncology, B Molecular Endocrinology, C Molecular Biology of the Cardiovascular System, D Tissue Regeneration, E Molecular Neurobiomedicine, F Clinical Immunology 2. G Neuroendocrinology

Required courses are Blue. Optional courses are Orange