Thematic overview Master courses for MLS

This is an overview of courses available for the programme in Molecular Life Sciences. *Courses in Italic courses* are generally suited to fulfill the molecular component required with a number of internships. Other molecular courses (designated with MOL or SM-code) also fulfill the requirement but will not be feasible for all students. These course require substantial chemical knowledge.

Please be aware that not all master courses are given every year!
You can check course descriptions by copying the course name or course code into the course finder module at the bottom of the page.

Make sure to check the actual schedule: persoonlijkrooster.ru.nl/schedule

Life science courses				
Course name	**Code**	**EC**	**Period**	**Schedule**
Trends in Stem Cell Biology [1,2,3]	BM073	3	1st quarter	We
Epigenomics in health and disease [1]	BM062	3	Oct 1 - Oct 31	Mo + Tue
Systems neuroscience [3]	BM044B	3	Sept 2 – Sept 30	Mo + Tue
Computation for Biologists [1]	BM066A	6	1st quarter	Thur +Fri
Translational Genomics [2]	BM072	6	1st quarter	Thur +Fri
Molecular and cellular neurobiology [3]	BM001D	6	1st quarter	Thur +Fri
Protein dynamics and networks [1]	*BM064*	*3*	*Sept 2 – Sept 30*	*Mo + Tue*
Molecular Therapy [2]	*BM078*	*6*	*1st quarter*	Mo + Tue
Behavioural neuroscience [3]	BM053B	3	Oct 1 – Oct 31	Mo + Tue
Methods in neuroscience	NM103	3	2nd quarter	Thur
Apoptosis	*BM004C*	*3*	*2nd quarter*	*Fri*
Oncology	BM015C	3	2nd quarter	Fri
Systematic reviews in neuroscience (literature thesis)	BM059	6	Febr – July	
Cellular Imaging in four Dimensions	BM016C	3	3rd quarter	
Neurogenomics of speech, language and reading disorders	BM061	3	3rd quarter	
Principles of Systems Biology	*BM041B*	*3*	*3rd quarter*	
Advanced Endocrinology	BM032C	3	4th quarter	
Human Fertility	BM050B	3	4th quarter	Not in 20-21
Kidney: Bench to Bedside	BM079	3	2nd quarter	

[1] course is part of Medical Epigenomics specialisation
[2] course is part of Human biology specialisation
[3] course is part of Neurobiology specialisation

Non-life science courses				
Course name	**Code**	**EC**	**Period**	**Schedule**
*Systems chemistry**	*MOL402*	*3*	*Sept 2 – Sept 30*	*Mo + Tue*
*Omics**	*MOL410*	*3*	*1st quarter*	*Wed*
Organic chemistry of biomolecules*	MOL403	3	1st quarter	Thur - Fri
*Chemical biology**	*MOL401*	*3*	*1st quarter*	*Thur - Fri*
Instrumental analysis in (bio)molecular chemistry*	MOL404	3	Oct 1 – Oct 29	Mo + Tue
Materials science	MOL407	3	1st quarter	
Physical chemistry of molecular aggregates	MOL408	3	1st quarter	

Molecular Modeling	MOL406	3	1st quarter	
Advanced spectroscopy	MOL409	6	1st semester	
Advanced Organic Synthesis	SM302	3	1st quarter	
Quantum chemistry	SM297	3	2nd quarter	
Polymer chemistry	SM019A	3	1st quarter	
Molecular materials	SM292A	3	1st quarter	
Pattern Recognition for the Natural Sciences	SM299	3	2nd quarter	
Application of Metal-catalysis in natural Product Synthesis	SM018A	3	2nd quarter (Every other year)	
Physical organic chemistry of the cell	*SM296*	*3*	*2nd quarter*	
Magnetic Resonance II	SM023D	6	2nd and 3rd quarter	
Chemometrics II	SM103A	3	Contact lecturer	
Inleiding Java voor bioinformatici	CMBI110A	6	3rd quarter	
Advanced crystallography	SM155	3	3rd quarter	
Advanced molecular structure determination	SM026A	3	3rd quarter	
Bioinformatics of protein structure	CMBI103B	6	3rd quarter	
Chemical discovery & design	MOL414	3	4th quarter	2 weeks fulltime
Quantum dynamics	SM295	4	4th quarter	
Magnetic Resonance IIIa, Solid-state NMR	SM044A	3	4th quarter	

* course is part of Specialisation Chemistry for Life

Master course in Environmental Sciences			
Name course	**Code**	**EC**	**Period**
Risk Management of Chemicals	MM014	3	2nd quarter
Free electives - Research related			
Name course	**Code**	**EC**	**Period**
Working with Radionuclides level 5B [1]	BM007C	2	several times 1 week
Course on Laboratory Animal Science [2]	BM024D	3	several times
Study tour Chemistry and Molecular Life Sciences	SM300A	3	4th quarter not in 2019
Free electives - Non-research			
Name course	**Code**	**EC**	**Period**
Beroepsorientatie (in Dutch)	FNWI001	3	Several times
Project management (in Dutch)	FMT015B	3	Several times
Scientific English for Masterstudents (limited number of participants)	FNWI002	3	1st, 3rd and 4th quarter

[1] Enrolling: See prospectus

[2] Prerequisites and application: See prospectus