Curriculum Molecular Sciences 2022-2023 - 1st year

		Chemistry														
Tutor	code	**1st Quarter**	**ec**	Tutor	code	**2nd Quarter**	**ec**	Tutor	code	**3rd Quarter**	**ec**	Tutor	code	**4th Quarter**	**ec**	
	NWI-MOL131	Mathematics	midterm				midterm				midterm 9		NWI-MOL139	Sustainable Chemistry	3	
	NWI-MOL127	Biochemistry	midterm				6	Tutor P	NWI-MOL003	Mechanics 1	3	Tutor P	NWI-MOL014	Electricity and Magnetism 1	3	
Tutor C	NWI-MOL120	Structure of Atoms and Molecules	3		NWI-MOL122	Chemical Analysis 2	3	Tutor C	NWI-MOL124	Organic Chemistry 1	6		NWI-MOL140	Molecular Sciences lab	3	
	NWI-MOL121	Chemical Analysis 1	3	Tutor C	NWI-MOL135	Thermodynamics	3					Tutor C	NWI-MOL136	Physical Concepts of Chemical Processes	3	
	NWI-MOL123	Chemical Analysis Lab	3		NWI-MOL128	Essentials of Biochemistry Lab	3		NWI-MOL125	Synthesis Lab 1a	3		NWI-MOL126	Synthesis Lab 1b	3	
	NWI-MOL0861	Academic Skills first year (course continues in year 2 and 3)														
		obtainable ec's:	**9**			***obtainable ec's:***	**15**			***obtainable ec's:***	**12**			***obtainable ec's:***	**15**	51
		Molecular Life Sciences														
	NWI-MOL131	Mathematics					midterm				midterm 9		NWI-MOL139	Sustainable Chemistry	3	
	NWI-MOL127	Biochemistry	midterm				6	Tutor P	NWI-MOL003	Mechanics 1	3	Tutor P	NWI-MOL014	Electricity and Magnetism 1	3	
Tutor C	NWI-MOL120	Structure of Atoms and Molecules	3	Tutor C	NWI-MOL135	Thermodynamics	3	Tutor C	NWI-MOL124	Organic Chemistry 1	6		NWI-MOL140	Molecular Sciences lab	3	
	NWI-MOL121	Chemical Analysis 1	3		NWI-MOL129	Biochemistry Lab	6						NWI-MOL137	Cell Biophysics	6	
	NWI-MOL123	Chemical Analysis Lab	3						NWI-MOL125	Synthesis Lab 1a	3					
	NWI-MOL0861	Academic Skills first year (course continues in year 2 and 3)														
		obtainable ec's:	**9**			***obtainable ec's:***	**15**			***obtainable ec's:***	**12**			***obtainable ec's:***	**15**	51
		Science														
	NWI-MOL131	Mathematics	midterm				midterm				midterm 9		NWI-MOL153*	Linear Algebra for Science students	3	
Tutor P	NWI-MOL133	Mechanics and lab	midterm				midterm 6	Tutor P	NWI-MOL134	Electricity and Magnetism	midterm				midterm 6	
	NWI-MOL127	Biochemistry	midterm				6	Tutor C	NWI-MOL124	Organic Chemistry 1	6		NWI-MOL140	Molecular Sciences lab	3	
Tutor C	NWI-MOL120	Structure of Atoms and Molecules	3		NWI-MOL122	Chemical Analysis 2	3						NWI-MOL125	Synthesis Lab 1a	3	
	NWI-MOL121	Chemical Analysis 1	3	Tutor C	NWI-MOL135	Thermodynamics	3		NWI-MOL123	Chemical Analysis Lab	3		*keuze:*			
													NWI-NP032B	*Inleiding Neuroscience*	*3*	
												Tutor C	*NWI-MOL136*	*Physical Concepts of Chemical Processes*	*3*	
													NWI-NP021D	*Golven en Optica*	*3*	
	NWI-MOL0861	Academic Skills first year (course continues in year 2 and 3)														
		obtainable ec's:	**6**			***obtainable ec's:***	**12**			***obtainable ec's:***	**9**			***obtainable ec's:***	**12**	39

* In 2022-2023: MOL153 Linear Algebra for Science students in year 1 replaces MOL132 Vector Calculus. Vector Calculus will be given in year 2.

Curriculum Molecular Sciences 2022-2023 - 2nd year

Chemistry

Q1	5th Quarter	ec	Q2	6th Quarter	ec		Q3	7th Quarter	ec		Q4	8th Quarter	ec
NWI-MOL150	DATA: Programming and Statistics	midterm			6		NWI-MOL151	DATA: Techniques and Analysis	midterm				6
NWI-MOL016	Linear Algebra	3	NWI-MOL155	Quantum Mechanics	midterm				midterm 6		NWI-MOL056	Chemical Bonding	3
NWI-MOL161	Organic Chemistry 2	3	NWI-MOL162	Inorganic Chemistry	3	II	NWI-MOL163	Synthesis Lab 2	6	II	NWI-MOL170B	Panorama Science & Society 1	6
NWI-MOL160	Mechanics, Electricity, and Magnetism 2	midterm			6								
NWI-MOL040	Thermodynamics 2	3	NWI-MOL032	Crystal Structure	3		NWI-MOL165	Biochemistry 2	3		NWI-MOL157	Physical Organic Chemistry	3
obtainable ec's		9 ec			18 ec				9 ec				18 ec

Data analysis
Fundamental of Matter
Synthetic Chemistry
(Medical) Bio(chemical)
Physics
Physical Chemistry
Panorama Science

Molecular Life Sciences all specializations

						I	NWI-MOL170A	Panorama Science & Society 1	6	I	NWI-BB017C NWI-BB048B	Advanced Molecular Biology (HB/FG) **OR** Endocrinology (HB)	6
NWI-MOL150	DATA: Programming and Statistics	midterm			6								
NWI-MOL158	Biomolecules at work	6	NWI-MOL152*	DATA: Structural Bioinformatics	3	x	*NWI-FCEM02B*	*Writing about Science* ***OR***	*3*	x		Elective / FFIL101 Philosophy	3
			NWI-MOL122	Chemical Analysis 2	3	x	*NWI-MOL126*	*Synthesis Lab 1b* ***OR***	*3*	II	NWI-MOL163	Synthesis Lab 2	6
NWI-MOL027	DNA technology	3	NWI-MOL032	Crystal Structure	3	x	*NWI-MOL113*	*Nanomaterials in Biomedicine (max 30)*	*3*				
NWI-MOL161	Organic Chemistry 2	3	NWI-MOL172**	Inorganic Chemistry in Biological Systems	3	II	NWI-MOL167 NWI-BB019B NWI-MOL054	Comparative Physiology (**HB**/FG/**NS**) **OR** Immunology (FG,max 135) **OR** Toxicology	6	II	NWI-BB047C NWI-BB094 NWI-BB087	Medical Embryology (HB/FG/NS) **OR** Neurons & synapses (**NS**) **OR** Population and evolutionary biology (FG)	6
			*** Name change, no other differences**										
		12 ec			18 ec				15 ec				15 ec

Science Phys Chem/Chem Phys

NWI-MOL150	DATA: Programming and Statistics	midterm			6		NWI-MOL151	DATA: Techniques and Analysis	midterm				6
NWI-MOL153	Linear Algebra for Science students*	3	NWI-NB013C	Kwantummechanica 1	6	I	NWI-NB002B	Electromagnetisme	6		NWI-MOL056	Chemical Bonding	3
NWI-NB001C	Voortgezette Mechanica	6									*Combination of courses/electives from:*		
			NWI-MOL032	Crystal Structure	3		*Combination of courses/electives from:*				*~~NWI-NB072B~~*	*~~Structuur der Materie: Vaste stof fysica~~*	*~~3~~*
NWI-MOL161	Organic Chemistry 2	3	*elective e.g:*		*3*	I	*NWI-MOL170B*	*Panorama Science & Society 1*	*6*		NWI-NB005B	Thermodynamics**	3
NWI-MOL132	Vector Calculus* - alleen resit	3	*NWI-MOL162*	*Inorganic Chemistry*	*3*					II	NWI-MOL170B	Panorama Science & Society 1	6
			NWI-FCEM02B	*Writing about Science*	*3*		*NWI-NP038*	*Introduction Nano & Quantum Tech*	*3*				
			x *NWI-GCSE002*	*Energy and Sustainability*	*3*	x	*NWI-MOL126*	*Synthesis Lab 1b***	*3*	II	*NWI-MOL163*	*Synthesis Lab 2***	*6*
* MOL153 Laatste keer in kwartaal 1, voortaan in kwartaal 4 eerste jaar.			*NWI-NB046C*	*Chemistry and Physics of the Atmosphere*	*3*	x	*NWI-FCEM02B*	*Writing about Science*	*3*				
** MOL132 Vector Calculus vanaf 2023-2024 als cursus in Q1 gegeven, in 2022 alleen resit.							*NWI-NB071B*	*Structuur der Materie: Atoom- en Molecuulfysica*	*3*		*~~NWI-NB071B~~*	*~~Structuur der Materie: Atoom- en Molecuulfysica~~*	*~~3~~*
							NWI-NB072B	*Structuur der Materie: Vaste stof fysica*	*3*	**OF:**	*NWI-MOL157*	*Physical Organic Chemistry*	*3*
											NWI-MOL051	*Spectroscopy Project*	*3*
											NWI-NB019C	*Complexe functies*	*3*
											NWI-NB031B	*Tensors and Applications*	*3*
		ec				ec			**for Physics MSc a thermodynamics course is mandatory: NB005B (Q3) or MOL040 (Q1)**				

Science Phys Biol

NWI-MOL150	DATA: Programming and Statistics	midterm			6		NWI-MOL151	DATA: Techniques and Analysis	midterm				6
NWI-MOL153	Linear Algebra for Science students*	3	NWI-NB013C	Kwantummechanica 1	6	I	NWI-NB002B	Electromagnetisme	6	II	NWI-MOL170B	Panorama Science & Society 1	6
NWI-NB001C	Voortgezette Mechanica	6											
			NWI-NB074B	Neurofysica 2	3	II	NWI-MOL167	Comparative Physiology	6		*Compulsory choice:*		
NWI-NB027B	Neurofysica 1	3	*elective e.g:*								*NWI-MOL159*	*Physics and mathematics of complex biological systems* ***of***	*3*
NWI-MOL132	Vector Calculus* - alleen resit	3	NWI-FCEM02B	Writing about Science	3					I	*NWI-BB094*	*Neurons & Synapses*	*6*
* MOL153 Laatste keer in kwartaal 1, voortaan in kwartaal 4 eerste jaar.											*Combination of courses/electives from:*		
** MOL132 Vector Calculus vanaf 2023-2024 als cursus in Q1 gegeven, in 2022 alleen resit.											*NWI-MOL051*	*Spectroscopy Project*	*3*
											NWI-NB019C	*Complexe functies*	*3*
											NWI-NB068B	*Nonlinear Dynamics, Chaos and Applications*	*3*
		ec				ec				ec			

Science Chem Biol/Biol Chem

NWI-MOL153	Linear Algebra for Science students*	3	NWI-MOL155	Quantum Mechanics	midterm				midterm 6		NWI-MOL056	Chemical Bonding	3
NWI-MOL150	DATA: Programming and Statistics	midterm			6		*Compulsory choice:*			I	*NWI-BB017C*	*Advanced Molecular Biology*	*6*
NWI-MOL158	Biomolecules at work	6	NWI-MOL152*	DATA: Structural Bioinformatics	3	x	*NWI-MOL126*	*Synthesis Lab 1b***	*3*				
			NWI-MOL032	Crystal Structure	3	II	*NWI-MOL167*	*Comparative Physiology*	*6*		*Combination of courses/electives from:*		
NWI-MOL161	Organic Chemistry 2	3	NWI-MOL162	Inorganic Chemistry	3					II	NWI-MOL170B	Panorama Science & Society 1	6
NWI-MOL132	Vector Calculus* - alleen resit	3	or NWI-MOL172	Inorganic Chemistry in Biological Systems	3		*Combination of courses/electives from:*						
			*** Name change, no other differences**			I	NWI-MOL170A	Panorama Science & Society 1	6		*NWI-MOL157*	*Physical Organic Chemistry*	*3*
* MOL153 Laatste keer in kwartaal 1, voortaan in kwartaal 4 eerste jaar.											*NWI-MOL159*	*Physics and mathematics of complex biological systems*	*3*
** MOL132 Vector Calculus vanaf 2023-2024 als cursus in Q1 gegeven, in 2022 alleen resit.							*NWI-MOL165*	*Biochemistry 2*	3	II	NWI-MOL163	Synthesis Lab 2**	6
										II	*NWI-BB048B*	Endocrinology	**6**
							MOL170 Panorama Science & Society is a compulsory course for all students						
								for Chem specialisations Mol Chem and Med Chem MOL163 mandatory (note: requires MOL126 in Q7!)					

Curriculum Molecular Sciences 2022-2023 - 3rd year MLS - relevant courses per specialization

I = Mo-Tue; II = Thur-Fri; x = Wed; 0 = undetermined

Molecular Life Sciences

	Q1	**9th Quarter**	**ec**	**Sp**		Q2	**10th Quarter**	**ec**	**Sp**		Q3	**11th Quarter**	**ec**	**Sp**		Q4	**12th Quarter**	**ec**	**Sp**
										I	NWI-BB025B	Principles and Practice of Human Pathology	6	FG/HB		**NWI-MOL200A**	**Bachelor internship**	**12**	all
I+II	NWI-BB086	Genomics, Health and Environment	12	FG	I	NWI-BB039C	Neurodevelopment	6	NS	I	NWI-BB036B	Applied Ecology	6			NWI-MOL086	Academic skills	3	all
I	NWI-MOL107	RNA Structure and Function	6	FG/HB/CoL	I	NWI-BB084B	Molecular principles of development	6	FG/HB/NS/CoL	I	NWI-BB043B	Plant Genome Analysis	6						
I	NWI-BB080C	Neural Basis of Motor Control	6	NS	I	NWI-MB024C	HERA (environmental risk analysis)	6		I	NWI-BB089	Quantitative Bioimaging (max 30)	6	NS	I	NWI-MOL066	Structure, Function and Bioinformatics	6	FG
					I	NWI-MOL053	Pharmacochemistry	6	all	I	NWI-BB092	Neural Basis of Cognition and Perception	6	NS					
										I	NWI-MOL055	Molecular basis of Diseases (max 96)	6	HB					
										I	NWI-MOL109	Chemometrics for Molecular Life Sciences	6	CoL					
										I?	NWI-MOL093	Stereoselective synthesis	3	Med					
										I?	NWI-MOL169	Catalysis	3	Med					
										I	NWI-MB023C	Man & Nature: present, past & Future	6						
x	NWI-MOL100	Spectroscopy of Biomolecules	3	CoL/Med	x	NWI-BB028B	History of Biology	3		x	NWI-MOI111	Biophysical Chemistry	3	all	x	NWI-FCEM02B	Writing about Science	3	
	NWI-MOL171	Physical organic chemistry 2*	3	Med	x	NWI-GCSE002	Energy and Sustainability	3	CoL	x	NWI-MOL073	Comparative Genomics (max 30)	3	FG	x	NWI-FFIL100	Philosophy 1 (Biological topics)	3	
x	NWI-BB011B	Biology and Society	3		x	~~NWI-MOL091~~	~~Green chemistry~~	~~3~~	CoL	x	NWI-MOL113	Nanomaterials in Biomedicine	3	CoL/Med					
x	NWI-FFIL101	Philosophy 1 (Physics Topics)	3		x	NWI-MOL096	Metalorganic chemistry	3	Med	x	NWI-FCEM02B	Writing about Science	3						
x	NWI-FCEM02B	Writing about Science	3		x+II	NWI-MOL087C	Synthesis Lab 3***	6	Med	x	NWI-MOL091	Sustainable Chemistry 2****	3						
x	NWI-MOL173	Chemical Biology Lab**	3		x	NWI-FFIL101	Philosophy 1 (Molecular Topics)	3											
	NWI-FNWI015	Elementen van Betaonderwijs	3		x	NWI-FC0042B	Debating science & society	3											
	NWI-FNWI012	Leren & Onderwijzen in Betawetenschappen	6			NWI-FNWI013	Ontwerp Onderwijs in betawetenschappen	6											
						NWI-FNWI014	Betawetensch. Onderwijs in Context	3											
					x	NWI-GCSE001	Climate change	3											
II	MED-MIN16	Translational neuroscience (max)							NS	II	NWI-BB019B	Immunology (max 135)	6	FG/HB	II	NWI-MB021B	Intr. Geographic Information Systems	6	
II	NWI-MOL168	Biomolecular Architectures	6	FG/HB/NS	II	NWI-BB021B	Neurobiophysics	6	NS	II	NWI-BB081B	Cognitive Neuroimaging (Brain Dynamics) (max 60?)	6	NS					
II	NWI-MOL095	Organic chemistry 3	6	CoL/Med	II	NWI-BB088	Biological Invasions	6	HB	II	NWI-BB020C	Animal Adaptation Physiology	6	all					
II	NWI-MOL104	Medical Biotechnology (max 25)	6	FG/HB/NS	II	NWI-BB097	Infectious Diseases	6	HB/CoL	II	NWI-BB064B	Functional Genomics	6	FG/CoL					
I+II	NWI-BB086	Genomics, Health and Environment	6(12)	FG	II	NWI-MOL078	Nanobiotechnology (max 100)	6	CoL	II	NWI-MOL054	Toxicology	6	all					
			6		x+II	NWI-MOL087C	Synthesis Lab 3***	6	Med										
						NWI-MOL175	Panorama Science and Society 2						6						

* If you want to take MOL171: Check presumed foreknowledge

** New lab course. See prospectus

*** within schedule of MOL087C there is room to also follow a concurrent 3 ec course

**** new name for Green Chemistry

Curriculum Molecular Sciences 2022-2023 - 3rd year Chemistry - most relevant courses

I = Mo-Tue; II = Thur-Fri; x = Wed; 0 = undetermined

Chemistry

	Q1	9th Quarter	ec		Q2	10th Quarter	ec		Q3	11th Quarter	ec		Q4	12th Quarter	ec
		Electives, Minor, or exchange programme				**Electives, Minor, or exchange programme**									
	NWI-MOL106	Applied Quantum chemistry	3		NWI-NB046C	Chemistry and Physics of the Atmosphere	3	x	NWI-MOL111	Biophysical chemistry	3		NWI-MOL200A	Bachelor internship	12
I	NWI-MOL057	Magnetic Resonance I (max 24) 7 weeks	6		NWI-MOL071	Crystal Growth	3	I	NWI-MOL169	Catalysis	3		NWI-MOL086	Academic skills	3
I	or: NWI-MOL058	Introduction to Magnetic Resonance 4 weeks	3	x	~~NWI-MOL091~~	~~Green chemistry~~	~~3~~	I	NWI-MOL065	Chemometrics	6				
	NWI-MOL171	Physical organic chemistry 2	3		NWI-MB024C	HERA (environmental risk analysis)	6	I	OR NWI-MOL109	Chemometrics for Molecular Life Sciences	6	I	NWI-MOL066	Structure, Function and Bioinformatics	6
I	NWI-MOL107	RNA Structure and Function	6	x	NWI-MOL096	Metalorganic chemistry	3		NWI-MOL034	Condensed Matter Lab	3		NWI-MOL051	Spectroscopy Project (max 9)	3
II	NWI-MOL095	Organic chemistry 3	6		NWI-MOL064	Spectroscopy of Atoms and Molecules	3	x	NWI-MOL113	Nanomaterials in Biomedicine	3		NWI-FCEM02B	Writing about Science	3
	NWI-NB078	Molecules in Space	3		NWI-MOL059	Statistical Thermodynamics	6		~~NWI-MOL112~~	~~Quantum Theoretical Chemistry~~	~~3~~		NWI-FFIL100	Philosophy 1 (Biological topics)	3
	NWI-FFIL101	Philosophy 1 (Physics Topics)	3	I	NWI-MOL053	Pharmacochemistry	6	I	NWI-MOL093	Stereoselective synthesis	3	II	NWI-MB021B	Intr. Geographic Information Systems	6
	NWI-FCEM02B	Writing about Science	3	II	NWI-MOL078	Nanobiotechnology	6	II	NWI-MOL054	Toxicology	6				
	NWI-FNWI015	Elementen van Betaonderwijs	3	x+II	NWI-MOL087C	Synthesis Lab 3 *	6	x	NWI-MOL091	Sustainable Chemistry 2****	3				
	NWI-FNWI012	Leren & Onderwijzen in Betawetenschappen	6		NWI-FNWI013	Ontwerp Onderwijs in betawetenschappen	6		NWI-MOL174	Computational and Quantum Chemistry 1	3		NWI-MOL176	Computational and Quantum Chemistry 2	3
x	NWI-MOL173	Chemical Biology Lab**	3		NWI-FNWI014	Betawetensch. Onderwijs in Context	3		NWI-MB023C	Man & Nature: present, past & Future	6				
					NWI-FC0042B	Debating science & society	3		NWI-FCEM02B	Writing about Science	3				
					NWI-GCSE002	Energy and Sustainability	3								
					NWI-FFIL101	Philosophy 1 (Molecular topics)	3								
					NWI-GCSE001	Climate Change	3								
					NWI-MOL175	Panorama Science and Society 2					6				

*** within schedule of MOL087C there is room**

to also follow a concurrent 3 ec course

**** new name for Green Chemistry

Curriculum Molecular Sciences 2022-2023 - 3rd year Science - some relevant courses per specialization

I = Mo-Tue; II = Thur-Fri; x = Wed; 0/? = undetermined

		Science Phys Chem/Chem Phys															
I	NWI-MOL058	Intr Magnetic Resonance (OR MOL057 MR I)	3/(6)												**NWI-MOL200A**	**Bachelor internship**	**12**
															NWI-MOL086	Academic skills	3
	NWI-MOL039	Fysisch practicum*					6										
	NWI-NB015C	Kwantummechanica 2					6		~~NWI-NB005B~~	~~Thermodynamics**~~	~~3~~				NWI-NB005B	Thermodynamics**	3
x?	NWI-MOL040	Thermodynamics 2**	3		NWI-MOL059	Statistical Thermodynamics	6	OR	NWI-NB033C	Statistische mechanica							6
	NWI-NB021C	Programmeren 2	3		NWI-MOL064	Spectroscopy of Atoms and Molecules	3	II	NWI-MOL163	Synthesis Lab 2***	6						
									NWI-MOL034	Condensed matter lab							
					NWI-MOL175	*Panorama Science and Society 2*					*6*						
		Science Phys Biol															
I	NWI-BB080C	Neural Basis of Motor Control	6	I	NWI-BB039C	Neurodevelopment	6	I	NWI-BB098	Medical Neurobiology	6				**NWI-MOL200A**	**Bachelor internship**	**12**
								I	NWI-BB089	Quantitative Bioimaging (max 30)	6				NWI-MOL086	Academic skills	3
	NWI-MOL039	Fysisch practicum*					6										
x?	NWI-MOL040	Thermodynamics 2**	3		NWI-MOL059	Statistical Thermodynamics	6	OR	NWI-NB033C	Statistische mechanica							6
	NWI-NB021C	Programmeren 2	3						NWI-NB036B	Psychophysics 1	3						
								II	NWI-BB081B	Cognitive Neuroimaging	6						
					NWI-MOL175	*Panorama Science and Society 2*					*6*						
		Science Chem Biol/Biol Chem															
I	NWI-MOL107	RNA Structure and Function	6	I	NWI-MOL053	Pharmacochemistry	6	I	NWI-MOL109	Chemometrics for Molecular Life Sciences	6				**NWI-MOL200A**	**Bachelor internship**	**12**
I	NWI-MOL171	Physical organic chemistry 2	3	I	NWI-BB084B	Molecular principles of development	6		OR MOL065	Chemometrics	6				NWI-MOL086	Academic skills	3
I	NWI-MOL057/058	Magnetic Resonance Ia (OR MOL110a MR I)	3/6					I	NWI-MOL169	Catalysis	3						
x?	NWI-MOL040	Thermodynamics 2	3	x	NWI-MOL091	Green chemistry	3	I	NWI-MOL093	Stereoselective synthesis	3						
II	NWI-MOL095	Organic chemistry 3	6	x	NWI-MOL096	Metal Organic chemistry	3	x	NWI-MOL113	Nanomaterials in Biomedicine	3						
				x+II	NWI-MOL087C	Synthesis Lab 3	6	II	NWI-MOL054	Toxicology	6						
				II	NWI-MOL078	Nanobiotechnology	6	II	NWI-BB064B	Functional Genomics	6						
				II	NWI-BB097	Infectious Diseases	6										
					NWI-MOL175	*Panorama Science and Society 2*					*6*						

recommended for Physics MSc
recommended for Biology MSc: 24 ec bio electives
recommended for Mol Sci MSc

*****for Chem specialisations Mol Chem and Med Chem MOL163 mandatory (note: requires MOL126 in Q7!)**
****for Phyics MSc a thermodynamics course is mandatory: NB005B (Q4) or MOL040 (Q1)**
***for Phyics MSc Physics Lab is mandatory: MOL039**