Master's degree programme Chemistry

Appendices to the Teaching and Examination Regulations
2011-2012

Appendix A Aim of the degree programme (art. 1.3)

The degree programme aims to train the students in such a way that they acquire the insight, skills and knowledge that allows the recipient of the degree to establish a professional career in the field of Chemistry.

Appendix B Specializations of degree programme (art. 2.2)

The degree programme has the following specializations:
- Chemical Physics
- Molecular Chemistry
- Polymer Science
- Science, Business and Policy

Appendix C Content of degree programme (art. 2.3)

Specialization Chemical Physics

module	ECTS	assessment	practical
Research Project in Chemical Physics	45	assessment of performance, report, presentation	x
Second research project or traineeship	15	assessment of performance, report, presentation	x
Colloquium	10	report, presentation	
Electromagnetism of Solids	5	written examination	
X-ray Diffraction	5	written examination	
Optional courses in Chemical Physics	40	see appendix D	see app. D

Specialization Molecular Chemistry

module	ECTS	assessment	practical
Research Project in Molecular Chemistry	45	assessment of performance, report, presentation	x
Second research project or traineeship	15	assessment of performance, report, presentation	x
Colloquium	10	report, presentation	
Workshops in Molecular Chemistry	5	attendence, performance	x
Structure Determination with Spectroscopic Methods	5	written examination	
Organic Synthesis: Methods and Strategy 1	5	written examination	
Final examination in Molecular Chemistry	5	oral examination	
Optional courses in Molecular Chemistry	30	see appendix D	see app. D

Specialization Polymer Science

module	ECTS		practical
Research Project in Polymer Science	30	assessment of performance, report, presentation	x
Second research project or traineeship	30	assessment of performance, report,	x

		presentation	
Colloquium	10	report, presentation	
Lab course Polymer Science 3	5	report	x
Thermodynamics of Polymer Systems	5	written examination	
Nanochemistry	5	written examination	
Advanced PolymerChemistry	5	written examination	
Biomaterials 2	5	written examination	
Colloid and Interface Science	5	written or oral examination	
Polymer Physics	5	written examination	
Polymer Surfaces and Interfaces	5	written examination	
Structure and Properties of Polymers	5	written examination	
Optional Courses in Polymer Chemistry	5	see appendix D	see app. D

Specialization Science, Business and Policy

module	ECTS	assessment	practical
Modules in one of the fields Chemical Physics, Molecular Chemistry, Polymer Science to be detetmined on indivdual basis	30	as indicated for the corresponding specialization	as indicated for the corresponding specialization
Master research / thesis	30	assessment of performance, report, presentation	
Course Science, Business and Policy	20	assignment, exam	
Internship Science, Business and Policy	40	assessment of performance, reports	

Appendix D Optional modules (art. 2.4)

Optional courses in Chemical Physics

module	ECTS	assessment	practical
Caput theoretical Chemistry	5	written examination	
Computational Methods in Quantum Chemistry	5	report	x
Computational Physics	5	assignments	x
Lasers in Nanoscience	5	written examination	
Magnetism and Conductivity	5	written examination	
Mesoscopic Physics	5	written examination	
Molecular Dynamics	5	assignments, reports, presentation	
Molecular Quantum mechanics	5	written examination	
Non Linear Optics	5	written examination	
Device Physics	5	written examination	
Physics of Lasers	5	written examination	
Solid State Phase Transitions	5	written examination	
Solid State Physics 1	5	written examination	
Surfaces and Interfaces	5	written examination	

Optional courses in Molecular Chemistry

module	ECTS	assessment	practical
Coordination Chemistry	5	written examination	
Organometallic Chemistry	5	written examination, discussion	
Organic Synthesis: Methods and Strategy 2	5	written examination	
Reaction Mechanisms	5	written examination	
Supramolecular Chemistry	5	written examination	

Organic Materials	5	written examination	
Homogeneous Catalysis	5	written examination	
Stereochemistry	5	written examination	
Biomolecular Chemistry	5	written examination	

Optional courses in Polymer Science

module	ECTS	assessment	practical
Supramolecular Chemistry	5	written examination	
Homogeneous Catalysis	5	written examination	
Polymer Products	5	essay, assignment	
Surfaces and Interfaces	5	written examination	
Surface Characterization	5	as indicated in appendix C or D of the MSc programme in Biomedical Engineering	

Appendix E Entry requirements (art. 3.1)

For students admitted to the programme there are no entry requirements for the individual modules.

Appendix F Admission requirements (art. 4.1 and 4.2)

Holders of the following Bachelor's degrees from the University of Groningen are considered to have sufficient knowledge and skills and will be admitted to the Master's degree programme in Chemistry on that basis:
- BSc Scheikunde

Appendix G Application deadlines for admission (art. 4.5)

Deadlines for application are: June 1st for EU students
April 15th for non-EU students