

Appendices Teaching and Examination Regulations Master's degree programmes 2010-2011

Astronomy

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 Astronomy.

Appendix B Specializations of degree programme (art. 2.2)

The degree programme has the following specializations:

- Theoretical and Observational Astronomy
- Instrumentation and Informatics
- Science, Business and Policy

Appendix C Content of degree programme (art. 2.3)

Specialization Theoretical and Observational Astronomy

module	ECTS	assessment	practical
Advanced astrophysics courses	30	see appendix D	see app. D
Optional courses in science	20	see appendix D	see app. D
Optional courses	10	see appendix D	see app. D
Master research / thesis	60	assessment of performance, report, presentation	
Astronomy colloquium	-	attendance	

Specialization Instrumentation and Informatics

module	ECTS	assessment	practical
Advanced astrophysics courses	10	see appendix D	see app. D
Optional courses in Instrumentation and Informatics	10	see appendix D	see app. D
Principles of Measurement Systems	5	written examination	
Control Engineering	5	written examination	
Applied Signal Processing	5	written examination	
Basic Detection Techniques	5	written examination	
Astronomical Space Missions	5	written examination	
Numerical Mathematics 2	5	written examination	
Project Information Technology	10	assessment of performance, report, presentation	
Internship in Industry	20	assessment of performance, report, presentation	
Master research / thesis	40	assessment of performance, report, presentation	
Astronomy colloquium	-	attendance	

Specialization Science, Business and Policy

module	ECTS	assessment	practical
Advanced astrophysics courses	30	see appendix D	see app. D
Course Science, Business and Policy	20	assignment, exam	
Internship Science, Business and Policy	40	assessment of performance, reports	

Master research / thesis	30	assessment of performance, report, presentation
Astronomy colloquium	-	attendance

Appendix D Optional modules (art. 2.4)

Advanced Astrophysics Courses

module	ECTS	assessment	practical
Formation and Evolution of Galaxies	5	written examination	
Dynamics of Galaxies	5	written examination, assignments	
Stellar Structure and Evolution	5	written examination	
Large Scale Structure of the Universe	5	written and oral reports, assignments	
Active Galaxies	5	written examination	
High Energy Astrophysics	5	as in due time determined by the lecturer	
Basic Detection Techniques	5	written examination	
Astronomical Space Missions	5	written examination, assignments	
Star and Planet Formation	5	written examination	
Virtual Observations	5	written examination, assignments	
Inter Academy Course	5	written examination	
Gravitational Lensing	3	oral examination, paper	
Milky way	3	presentation, paper	
Dark Matter in Galaxies	3	written examination, paper	
Epoch of Reionisation Physics	3	written examination, paper	
HI in the Universe	3	presentation, paper	
High Redshift Galaxies	3	written examination, paper	
Dwarf Galaxies	3	written examination, paper	
The Cosmic Web	3	written examination, paper	
Starburst Galaxies	3	presentations, paper	

Optional Courses in Science

module	ECTS	assessment	practical
Optional courses at master level in Mathematics, Physics, Astronomy Chemistry or Computer Science	5	as indicated in appendix C or D of the corresponding MSc Programme	

Optional Courses

module	ECTS	assessment	practical
Optional courses in any field taught at the university, on individual approval of the Board of Examiners	5	as indicated in appendix C or D of the corresponding programme	

Optional Courses in Instrumentation and Informatics

module	ECTS	assessment	practical
Accelerator Physics and Ion Optics	5	oral examination	
Device Physics	5	written examination	
Experimental Methods of Trace Gas Research	5	written examination, report	
Imaging Techniques in Radiology	5	as indicated in appendix C or D of the MSc programme in Biomedical Engineering	as indicated in appendix C or D of the MSc programme in Biomedical Engineering
Interferometry	5	written examination	
Laser Cooling and Trapping	5	oral examination	
Scientific Visualization	5	as indicated in appendix C or D of the MSc programme in Computer Science	as indicated in appendix C or D of the MSc programme in Computer Science
Virtual Observations	5	written examination, assignments	

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 Astronomy on that basis:

- BSc Sterrenkunde

Appendix G Application deadlines for admission (art. 4.5)

Deadlines for application are:

- June 1st for EU students
- April 15th for non-EU students