

# Master degree programme Applied Physics

## Appendices to the Teaching and Examination Regulations

### 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 Applied Physics.

### Appendix B Specializations of degree programme (art. 2.2)

The degree programme has the following specializations:

- Applied Physics
- Instrumentation and Informatics

### Appendix C Content of degree programme (art. 2.3)

#### Specialization Applied Physics

module	ECTS	assessment	practical
Applications of Quantum Physics	5	written examination	
Physical Transport Phenomena	5	written examination	
Physical Materials Science	5	written examination	
Applied Signal Processing	5	written examination	
Device Physics	5	written examination	
Courses in Business and Management	10	written examination	
Internship in Industry	30	assessment of performance, report, presentation	
Applied Physics Research	45	assessment of performance, report, presentation	
Optional courses in Science	10	see appendix D	see app. D
General Physics Colloquium	-	attendance	

#### Specialization Instrumentation and Informatics

module	ECTS	assessment	practical
Applications of Quantum Physics	5	written examination	
Solid Mechanics / Device Physics	5	written examination, assignments, report / 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	
Internship in Industry	20	assessment of performance, report, presentation	
Applied Physics Research	40	assessment of performance, report, presentation	
Optional courses in Science	10	see appendix D	see app. D
Optional courses in Instrumentation and Informatics	15	see appendix D	see app. D
General Physics Colloquium	-	attendance	

## Appendix D Optional modules (art. 2.4)

### Optional Courses in Science

module	ECTS	assessment	practical
Optional courses at master level in Mathematics, Physics, Astronomy Chemistry or Computer Science	5		x

### Optional Courses in Instrumentation and Informatics

module	ECTS	assessment	practical
Accelerator Physics and Ion Optics	5	oral 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 Applied Physics on that basis:

- BSc Technische Natuurkunde

## Appendix G Application deadlines for admission (art. 4.5)

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