Appendices Master's degree programme Applied Mathematics

Appendix A Teaching outcomes 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 Mathematics.

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

The degree programme has the following specializations:

- Computational Science and Numerical Mathematics
- Systems, Control and Optimization

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

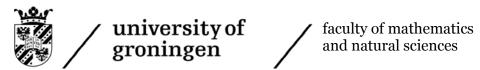
The degree programme has the following specializations:

- Computational Science and Numerical Mathematics
- Systems, Control and Optimization

The master programme comprises 120 ECTS.

The requirements on the programme are the following.

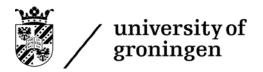
Parts	Constraints	ECTS		
Student colloquium		5		
At least five modules	Specialization Algebra and Geometry	≥ 25		
from the list of modules	(Mathematics):			
given at the University of	- Caput Algebra and Geometry (annual)			
Groningen, the modules	- Applied Geometry (annual)			
in the specialization area				
are compulsory	Specialization Dynamical Systems and Analysis			
	(Mathematics):			
	- Dynamical Systems and Chaos (annual)			
	- Caput Dynamical Systems (every two years,			
	2010-2011)			
	- Caput Mathematical Physics (every two years,			
	2011-2012)			



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	Specialization Statistics and Probability	
	(Mathematics):	
	- Contemporary Statistics with Applications	
	(every two years, 2010-2011)	
	- Statistical Genomics (every two years, 2011-	
	2012)	
	Specialization Computational Science and	
	Numerical Mathematics ;	
	- Computational Fluid Dynamics (annual)	
	- Computational Engineering (every two years,	
	2010-2011)	
	- Boundary Layers (every two years, 2011-2012)	
	Specialization Systems, Control and	
	Optimization:	
	- Robust Control (annual)	
	- Modeling and Identification (every two years,	
	2010-2011)	
	- Introduction to Optimization (every two years,	
	2011-2012)	
At least three modules	From these modules at least two have to be in the	≥ 18
from the Mastermath	specialization area and at least one has to be	≥ 10
programme	outside the specialization area.	
	For information on the modules of the	
	Mastermath programme see	
Advanced modules of	http://www.mastermath.nl	> 10
	These modules have to be of at least third year	≥ 10
programmes taught at the	bachelor level, and have to be relevant for the	
University of Groningen	master Mathematics (at the discretion of the	
other than the master	exam committee).	
programmes		
mathematics and applied		
mathematics		
Free choice		≤ 5
Final Research Project	Research project in the specialization area. An	50
	internship of at least 15 ECTS is part of this	
	project.	

The Mathematics and Applied Mathematics modules given at the University of Groningen are

module	offered	ECTS	assessment	practical
Caput Algebra and Geometry	annual	5	Take home exam followed by an	
			oral discussion of the problems	
Applied Geometry	annual	5	Homework, oral presentation,	
			final assignment, report	



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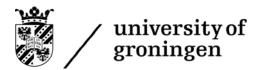
Boundary Layers	every two years	5	Oral examination	X
Caput Dynamical Systems	every two years	5	Oral presentation, essay	
Caput Mathematical Physics	every two years	5	Oral presentation, essay	
Computational Engineering	every two years	5	Assignments, oral presentation	
Computational Fluid Dynamics	annual	5	Assignments, oral examination	X
Contemporary Statistics with	every two	5	Homework, final project,	
Applications	years		examination	
Dynamical Systems and Chaos	annual	5	Oral presentation, essay	
Final Research Project	annual	50	Assessment of performance, report, oral presentation	
Introduction to Optimization	every two years	5	Homework, oral examination	
Mathematical Research Project	annual	30	Assessment of performance, report, presentation	
Modeling and Identification	every two years	5	Take home exams followed by an oral discussion of the problems	
Robust Control	annual	5	Take home exam followed by an oral discussion of the problems	
Statistical Genomics	every two years	5	Homework, final project, examination	
Student Colloquium	annual	5	Oral presentation, article	

For information on the modules of the Mastermath programme see http://www.mastermath.nl.

For information on the modules of programmes of the University of Groningen other than the master programmes mathematics and applied mathematics see the teaching and examination regulations of the corresponding programme.

Appendix D Optional modules (art. 2.4)

See Appendix C.



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Appendix E Entry requirements and compulsory order of examinations (art. 3.2)

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

Appendix F Admission to the degree programme and different specializations (art. 4.1.1 + art. 4.2)

Holders of the following Bachelor's degree 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 Mathematics:

- BSc Mathematics
- BSc Applied Mathematics

Appendix G Application deadlines for admission and deadlines for decision (art. 4.5.1 + 4.5.3)

Deadlines for application are:

- June 1st 2012 for EU student
- April 15th 2012 for non-EU students

Deadlines for decision are:

- July 1st 2012 for EU student
- June 15 $^{\text{th}}$ 2012 for non-EU students