

Matrikelnummer / Student ID Number

Studienkennzahl / Degree program number

<b>UK</b>	<b>066</b>	<b>404</b>	
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## ANSUCHEN UM ZULASSUNG ZUR MASTERPRÜFUNG IM MASTERSTUDIUM COMPUTATIONAL MATHEMATICS

APPLICATION FOR ADMISSION TO THE MASTER'S EXAMINATION IN THE MASTER'S PROGRAM IN COMPUTATIONAL  
MATHEMATICS (1.10.2023 - updated 1.10.2024)

<b>Vor- und Familienname /</b> First and Family name	
<b>Telefonnummer /</b> Phone number	
<b>E-Mail</b>	

### Prüfungssenat der Masterprüfung / Members of the examination senate

<b>Vorsitzende*r und 1. Prüfer*in /</b> Chair of the Examination Senate and 1. Examiner	Name in Blockbuchstaben / Name  Unterschrift / Signature
	<b>Präsentation und Verteidigung der Masterarbeit /</b> Presentation and Defense of the Master's Thesis

<b>2. Prüfer*in / 2. Examiner</b>	Name in Blockbuchstaben / Name  Unterschrift / Signature
<b>Masterarbeitsfach /</b> Master's Thesis Subject	

<b>3. Prüfer*in / 3. Examiner</b>	Name in Blockbuchstaben / Name  Unterschrift / Signature
<b>Studienfach nach Wahl gemäß</b> Curriculum / Subject of choice according to curriculum	

<b>Unterschrift Befürwortung</b> Studienpräses / Endorsement by Study President	
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<b>Termin /</b> Date	<b>Uhrzeit /</b> Time	<b>Prüfungsort /</b> Place of Examination
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Linz, am /on \_\_\_\_\_

<b>Unterschrift Antragsteller*in /</b> Student signature	
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**genehmigt / nicht genehmigt**

Linz, am \_\_\_\_\_

<b>Unterschrift Vizerektor*in für</b> Lehre und Studierende	
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## Core Subjects

Three of the following **Core Subjects** with an extent of **12 ECTS each** have to be completed

### Algebra

Course	Code	Type	ECTS	Date	Grade
Algebra	404ALBRALGV23	VL	6		
Algebraic Combinatorics	404ALBRALVC23	VL	3		
Discrete Mathematics	404ALBRDEMV23	VL	3		
<b>Total Grade</b>	<b>5-1</b>		<b>12</b>		

### Analysis

Course	Code	Type	ECTS	Date	Grade
Complex Analysis	404ANACCANV23	VL	4,5		
Dynamical Systems and Chaos	404ANACDSCV23	VL	3		
Spectral theory and distributions	404ANACSTDV23	VL	4,5		
<b>Total Grade</b>	<b>5-2</b>		<b>12</b>		

### Computer Algebra and Number Theory

Course	Code	Type	ECTS	Date	Grade
Advanced Computer Algebra	404CANCACAV23	VL	3		
Number Theory	404CANCNUTV23	VL	4,5		
Symbolic Summation and Integration	404CANCSSIV23	VL	4,5		
<b>Total Grade</b>	<b>5-3</b>		<b>12</b>		

### Geometry

Course	Code	Type	ECTS	Date	Grade
Computational Geometry	404GEOCCOGV23	VL	3		
Computer-aided geometric design	404GEOCCGDV23	VL	3		
Differential Geometry	404GEOCDGEV23	VL	3		
Commutative Algebra and Algebraic Geometry	404GEOCCAAV23	VL	3		
<b>Total Grade</b>	<b>5-4</b>		<b>12</b>		

### Mathematical Methods in Modeling and Data Analysis

Course	Code	Type	ECTS	Date	Grade
Statistical Methods	404MMMCSTMV23	VL	3		
Wavelets – Functional Analytical Basics	404MMMCWFAV23	VL	3		
Integral Equations and Boundary Value Problems	403MAMOIEBV22	VL	6		
<b>Total Grade</b>	<b>5-5</b>		<b>12</b>		

### Mathematical Models

Course	Code	Type	ECTS	Date	Grade
Computational Modeling in Medicine and Life Science	404MAMCCMMV23	VL	3		
Non-Life Insurance Mathematics	404MAMCNLIV23	VL	3		
Mathematical Methods in Continuum Mechanics	403MAMOMMCV22	VL	6		
<b>Total Grade</b>	<b>5-6</b>		<b>12</b>		

### Numerical Methods

Course	Code	Type	ECTS	Date	Grade
Inverse Problems	403MAMOINPV22	VL	3		
Numerical Methods for Elliptic Equations	403NUSINMEV22	VL	6		
Numerical Methods in Continuum Mechanics	403NUSINMCV22	VL	3		
<b>Total Grade</b>	<b>5-7</b>		<b>12</b>		

### Stochastics

Course	Code	Type	ECTS	Date	Grade
Stochastic Differential Equations	404STCCSDEV23	VL	4,5		
Financial Mathematics	403MAMOFIMV22	VL	4,5		
Stochastic Processes	403MAMOSTPV22	VL	3		
<b>Total Grade</b>	<b>5-8</b>		<b>12</b>		

### Symbolic Logic

Course	Code	Type	ECTS	Date	Grade
Automated Reasoning	404SLOCAURV23	VL	4,5		
Mathematical Logic	404SLOCMALV23	VL	3		
Formal Methods in Software Development	921SOENFMSK13	VL	4,5		
<b>Total Grade</b>	<b>5-9</b>		<b>12</b>		



**Free electives**

<b>Course</b>	<b>Code</b>	<b>Type</b>	<b>ECTS</b>	<b>Date</b>	<b>Grade</b>
<b>Total Grade</b>	<b>20</b>		<b>12</b>		

The Vice-Rector for Academic Affairs