

Recommended Modules of Studies for Guest Students:

Mathematics / Bachelor's level

Almost all of our Bachelor's level modules are taught in **German**. Only advanced modules for small audiences might be taught in English on request.

All modules span one semester—unless stated otherwise in the module list (“spanning two semesters”).

If you are studying business mathematics or other interdisciplinary subjects, please check the offerings of the other subject as well.

Module	Title	ECTS
Every semester		
FMI-BI0048	Skriptsprachen und Anwendungen (ASQ) <i>Scripting languages and their applications</i>	4
FMI-BI0058	Skriptsprachen in der Bioinformatik (ASQ) <i>Scripting languages in applied bioinformatics</i>	4
FMI-IN0050	Seminar Theoretische Informatik/Algorithmik <i>Seminar Algorithmics</i>	3
FMI-IN0104	Seminar Algorithmik <i>Seminar Algorithmics</i>	3
FMI-IN0144	Fortgeschrittenes Programmierpraktikum <i>Advanced Labs for Computer Science</i>	3
FMI-MA0481	Proseminar Geometrie <i>Proseminar Geometry</i>	3
FMI-MA0741	Statistische Verfahren <i>Statistical Methods</i>	6
Winter semester		
FMI-IN0005	Automaten und Berechenbarkeit <i>Automata and Computability</i>	9
FMI-IN0013	Diskrete Strukturen I <i>Discrete Structures I</i>	6
FMI-IN0018	Einführung in die Theorie künstlicher Neuronaler Netze <i>Introduction to Artificial Neural Networks</i>	6
FMI-IN0025	Grundlagen informatischer Problemlösung <i>Foundations of Computational Problem Solving</i>	9
FMI-IN0034	Maschinelles Lernen und Datamining <i>Machine Learning and Datamining</i>	6
FMI-IN0046	Rechnersehen I <i>Computer Vision I</i>	6
FMI-IN0052	Softwaretechnik Spezialisierung I <i>Softwareengineering Specialization I</i>	3
FMI-IN0055	Systemsoftware <i>System Software</i>	3
FMI-IN0058	Verteilte Systeme Spezialisierung I <i>Distributed Systems Specialization I</i>	3
FMI-IN0125	Automatisches Differenzieren <i>Automatic Differentiation</i>	3
FMI-IN2000	Datenbanken und Informationssysteme <i>Database and Information Systems</i>	6
FMI-MA0101	Algebra 1 <i>Algebra 1</i>	9

FMI-MA0201	Analysis 1 <i>Analysis I</i>	9
FMI-MA0203	Analysis 3 <i>Analysis 3</i>	9
FMI-MA0243	Funktionentheorie 1 <i>Complex Analysis 1</i>	6
FMI-MA0282	Seminar Analysis - Bachelor <i>Seminar Analysis Bachelor</i>	3
FMI-MA0301	Algebra/Geometrie 1 <i>Algebra/Geometry I</i>	9
FMI-MA0500	Einführung in die Numerische Mathematik und das Wissenschaftliche Rechnen <i>Introduction to Numerical Analysis and Scientific Computing</i>	9
FMI-MA0601	Lineare Optimierung <i>Linear Optimization</i>	9
FMI-MA0681	Seminar Optimierung - Bachelor <i>Seminar Optimization</i>	3
FMI-MA0904	Wirtschaftskompetenz A (ASQ) <i>Business Skills A</i>	3
Mostly winter semester		
FMI-IN0060	Verteilte Systeme <i>Distributed Systems and Web Development</i>	6
Summer semester		
FMI-BI0057	LaTeX Grundlagen für Naturwissenschaftler und Informatiker <i>Introduction to LaTeX for scientists</i>	4
FMI-IN0001	Algorithmen und Datenstrukturen <i>Algorithms and Data Structures</i>	9
FMI-IN0036	Mustererkennung <i>Pattern Recognition</i>	6
FMI-IN0045	Projektmanagement (ASQ) <i>Project Management</i>	3
FMI-IN0067	Mobiler Code <i>Mobile Code</i>	3
FMI-IN0075	Objektorientierte Programmierung <i>Object-oriented Programming</i>	5
FMI-IN0076	Deklarative Programmierung <i>Declarative Programming</i>	4
FMI-IN0096	Algorithmische Grundlagen des maschinellen Lernens <i>Algorithmic Foundations of Machine Learning</i>	6
FMI-IN0114	Programmieren in C++ <i>Programming in C++</i>	3
FMI-IN0134	Visuelle Objekterkennung <i>Visual object recognition</i>	3
FMI-MA0102	Algebra 2 <i>Algebra 2</i>	9
FMI-MA0202	Analysis 2 <i>Analysis II</i>	9
FMI-MA0207	Höhere Analysis 1 <i>Higher Analysis I</i>	9
FMI-MA0244	Gewöhnliche Differentialgleichungen <i>Ordinary Differential Equations</i>	6
FMI-MA0281	Proseminar Analysis <i>Proseminar Analysis</i>	3
FMI-MA0302	Algebra/Geometrie 2 <i>Algebra/Geometry 2</i>	9
FMI-MA0482	Seminar Geometrie - Bachelor <i>Seminar Geometry Bachelor</i>	3

FMI-MA0501	Verfahren der Numerischen Mathematik und des Wissenschaftlichen Rechnens im Einsatz <i>Methods of Numerical Analysis and Scientific Computing in Practise</i>	3
FMI-MA0510	Seminar Wissenschaftliches Rechnen -Bachelor <i>Seminar Scientific Computing Bachelor</i>	3
FMI-MA0691	Praktische Optimierung <i>Practical Optimization</i>	3
Mostly summer semester		
FMI-MA0553	Seminar Numerische Mathematik - Bachelor <i>Seminar Numerical Analysis Bachelor</i>	3
Spanning two semesters, starting winter		
MED-MDS002	Analyse medizinischer Daten und Signale <i>Analysis of Medical Data and Signals</i>	12
MED-MDS003	Bildgebende Verfahren und Bildverarbeitung in der Medizin <i>Medical Imaging Systems and Image Processing</i>	12
MED-MDS004	Angewandte Statistik in der Medizin <i>Applied Medical Statistics</i>	12
Rotation not exactly specified		
FMI-MA0181	Proseminar Algebra <i>Proseminar Algebra</i>	3
FMI-MA0182	Seminar Algebra - Bachelor <i>Seminar Algebra (Bachelor)</i>	3
FMI-MA0782	Seminar Wahrscheinlichkeitstheorie - Bachelor <i>Seminar Probabilty Theory Bachelor</i>	3
Courses offered very irregularly		
FMI-IN0011	Datenbanksysteme Spezialisierung <i>Database Systems Specialization</i>	3
FMI-IN0016	Einführung in die Bildinformatik <i>Introduction to Visual Computing</i>	6
FMI-IN0017	Einführung in die Künstliche Intelligenz <i>Introduction to Artificial Intelligence</i>	6
FMI-IN0028	Komplexitätstheorie - 6 LP <i>Computational Complexity - 6 CP</i>	6
FMI-IN0030	Kryptologie <i>Cryptology</i>	6
FMI-IN0031	Komplexitätstheorie - 3 LP <i>Computational Complexity</i>	3
FMI-IN0032	Literaturarbeit und Präsentation (ASQ) <i>Literature research and presentation</i>	3
FMI-IN0033	Logiksysteme <i>Logical Systems</i>	6
FMI-IN0062	Bewegungsberechnung aus Bildfolgen <i>Motion Computation from Image Sequences</i>	3
FMI-IN0082	Logik und Beweisbarkeit <i>Logic and Provability</i>	6
FMI-IN0086	Werkzeuge der Mustererkennung und des Maschinellen Lernens <i>Tools for Pattern Recognition and Machine Learning</i>	3
FMI-IN0095	Algorithmische Geometrie I <i>Computational Geometry I</i>	6
FMI-IN0121	IT-Sicherheit <i>IT Security</i>	6
FMI-IN0126	Hochleistungsrechnen <i>High-Performance Computing</i>	6
FMI-IN0157	Statistische Lerntheorie (Lab) <i>Statistical Learning Theory (Lab)</i>	3
FMI-IN0158	Algorithmisches Beweisen <i>Proof Complexity and Solving</i>	6

FMI-IN0159	Algorithmisches Beweisen LAB <i>Proof Complexity and Solving LAB</i>	4
FMI-IN0160	Komplexitätstheorie LAB <i>Computational Complexity LAB</i>	4
FMI-IN0162	Kryptologie LAB <i>Cryptology LAB</i>	4
FMI-IN0206	Begleitseminar zu einer Veranstaltung der Informatik (ASQ) <i>Companion Seminar for Computer Science Events</i>	3
FMI-IN0208	Grundlagen und Techniken der Netzwerkanalyse (ASQ) <i>Essentials and Techniques of Network Analysis</i>	6
FMI-IN0211	Lehren von Informatik - Lernen von Informatik <i>Teaching and Learning of Computer Science</i>	3
FMI-IN0212	Grundlagen der Prozessmodellierung und des Prozessmanagements <i>Introduction to Business Process Modeling and Management</i>	6
FMI-IN3008	Software- und Systementwicklung <i>Software and System Development</i>	6
FMI-MA0104	Codierungstheorie- 9 LP <i>Coding Theory with Exercises - 9 CP</i>	9
FMI-MA0106	Gruppentheorie - 9 LP <i>Group Theory</i>	9
FMI-MA0111	Algebraische Topologie <i>Algebraic Topology</i>	9
FMI-MA0112	Kombinatorik <i>Combinatorics</i>	6
FMI-MA0113	Knoten und niedrigdimensionale Mannigfaltigkeiten <i>Knots and low-dimensional Manifolds</i>	6
FMI-MA0144	Codierungstheorie <i>Coding Theory</i>	6
FMI-MA0149	Topologie <i>Topology I</i>	6
FMI-MA0204	Approximationstheorie 1 - 9 LP <i>Approximation Theory 1</i>	9
FMI-MA0242	Fourieranalysis 1 <i>Fourier Analysis 1</i>	6
FMI-MA0270	Diskrete Schrödingeroperatoren <i>Discrete Schrödingeroperators</i>	6
FMI-MA0289	Distributionen <i>Distributions</i>	3
FMI-MA0402	Fraktale Geometrie <i>Fractal Geometry</i>	9
FMI-MA0404	Konvexe und metrische Geometrie - 9 LP <i>Convec and Metric Geometry - 9 CP</i>	9
FMI-MA0405	Mathematische Methoden der klassischen Mechanik - 9 LP <i>Mathematical Methods of classical Mechanics - 9 CP</i>	9
FMI-MA0406	Klassische Differentialgeometrie - 9 LP <i>Classical Differential Geometry - 9 CP</i>	9
FMI-MA0408	Analysis auf Mannigfaltigkeiten - 6 LP <i>Analysis on Manifolds - 6 CP</i>	6
FMI-MA0409	Analysis auf Mannigfaltigkeiten - 9 LP <i>Analysis on Manifolds - 9 CP</i>	9
FMI-MA0442	Fraktale Geometrie <i>Fractal Geometry</i>	6
FMI-MA0444	Konvexe und metrische Geometrie - 6 LP <i>Convex and Metric Geometry</i>	6
FMI-MA0445	Mathematische Methoden der klassischen Mechanik - 6 LP <i>Mathematical methods of classical mechanics - 6 CP</i>	6

FMI-MA0446	Klassische Differentialgeometrie - 6 LP <i>Classical differential geometry</i>	6
FMI-MA0450	Integralgeometrie <i>Integral Geometry</i>	6
FMI-MA0520	Numerik von Randwertproblemen - 9 LP <i>Numerical Methods of Boundary Value Problems - 9 CP</i>	9
FMI-MA0521	Numerik von Randwertproblemen - 6 LP <i>Numerical Methods of Boundary Value Problems - 6 CP</i>	6
FMI-MA0552	Proseminar Numerische Mathematik <i>Proseminar Numerical Analysis</i>	3
FMI-MA0602	Diskrete Optimierung <i>Discrete Optimization</i>	9
FMI-MA0605	Kontinuierliche Optimierung <i>Continuous Optimization</i>	9
FMI-MA0642	Einführung in die diskrete Optimierung <i>Introduction to Discrete Optimization</i>	6
FMI-MA0644	Einführung in die kontinuierliche Optimierung <i>Introduction to Continuous Optimization</i>	6
FMI-MA0707	Einführung in die Versicherungsmathematik <i>Insurance Mathematics</i>	3
FMI-MA0708	Verfahren der Versicherungs- und Finanzmathematik <i>Methods of Insurance and Financial Mathematics</i>	6
FMI-MA0710	Einführung in Wahrscheinlichkeitstheorie und Mathematische Statistik <i>Introduction into Probability Theory and Mathematical Statistics</i>	6
FMI-MA0711	Maßtheorie <i>Measure Theory</i>	6
FMI-MA0712	Stochastik <i>Stochastics</i>	6
FMI-MA0781	Seminar Statistik - Bachelor <i>Seminar Statistics Bachelor</i>	3
FMI-MA0791	Proseminar Stochastik <i>Proseminar Stochastics</i>	3
FMI-MA0905	Wirtschaftskompetenz B (ASQ) <i>Business Skills B</i>	3
FMI-SQ0130	Datenanalyse mit R <i>Data Analysis with R</i>	6
FMI-SQ0131	Funktionale Programmierung <i>ASQ Module Functional Programming</i>	3
FMI-SQ0303	Go - Ein mathematisches Strategiespiel <i>Go - a mathematical strategic board game</i>	6

Recommended Modules of Studies for Guest Students:

Mathematics / Master's level

All of our Master's level modules are taught in English.

If you are studying business mathematics or other interdisciplinary subjects, please check the offerings of the other subject as well.

All modules span one semester—unless stated otherwise in the module list (“spanning two semesters”).

The M.Sc. Mathematics Program at the University of Jena is very close to current research. Because of that, many new courses are offered every semester and the offerings are very irregular. The following is a list of modules offered. For information on actual topics, visit our online course catalog at [Friedolin](#) or contact our study advisors for mathematics.

Module	Title	ECTS
FMI-IN0001	Algorithmen und Datenstrukturen <i>Algorithms and Data Structures</i>	9
FMI-IN0013	Diskrete Strukturen I <i>Discrete Structures I</i>	6
FMI-IN0025	Grundlagen informatischer Problemlösung <i>Foundations of Computational Problem Solving</i>	9
FMI-IN0033	Logiksysteme <i>Logical Systems</i>	6
FMI-IN0075	Objektorientierte Programmierung <i>Object-oriented Programming</i>	5
FMI-IN0076	Deklarative Programmierung <i>Declarative Programming</i>	4
FMI-IN0082	Logik und Beweisbarkeit <i>Logic and Provability</i>	6
FMI-IN0104	Seminar Algorithmik <i>Seminar Algorithmics</i>	3
FMI-IN0212	Grundlagen der Prozessmodellierung und des Prozessmanagements <i>Introduction to Business Process Modeling and Management</i>	6
FMI-IN3131	Mastermodul Algorithmik/Theoretische Informatik I - 3 LP <i>Master Module Theoretical Computer Science I - 3 CP</i>	3
FMI-IN3132	Mastermodul Algorithmik/Theoretische Informatik II - 3 LP <i>Master Module Theoretical Computer Science II - 3 CP</i>	3
FMI-IN3161	Mastermodul Algorithmik/Theoretische Informatik I - 6 LP <i>Master Module Theoretical Computer Science I - 6 CP</i>	6
FMI-IN3162	Mastermodul Algorithmik/Theoretische Informatik II - 6 LP <i>Master Module Theoretical Computer Science II - 6 CP</i>	6
FMI-IN3191	Mastermodul Algorithmik/Theoretische Informatik I - 9 LP <i>Master Module Theoretical Computer Science I - 9 CP</i>	9
FMI-IN3192	Mastermodul Algorithmik/Theoretische Informatik II - 9 LP <i>Master Module Theoretical Computer Science II - 9 CP</i>	9
FMI-MA3131	Mastermodul Algebra/Zahlentheorie I - 3 LP <i>Master Module Algebra /Number Theory I - 3 CP</i>	3
FMI-MA3132	Mastermodul Algebra/Zahlentheorie II - 3 LP <i>Master Module Algebra /Number Theory II - 3 CP</i>	3
FMI-MA3161	Mastermodul Algebra/Zahlentheorie I - 6 LP <i>Master Module Algebra /Number Theory I - 6 CP</i>	6
FMI-MA3162	Mastermodul Algebra/Zahlentheorie II - 6 LP <i>Master Module Algebra /Number Theory II - 6 CP</i>	6

FMI-MA3191	Mastermodul Algebra/Zahlentheorie I - 9 LP <i>Master Module Algebra /Number Theory I - 9 CP</i>	9
FMI-MA3192	Mastermodul Algebra/Zahlentheorie II - 9 LP <i>Master Module Algebra /Number Theory II - 9 CP</i>	9
FMI-MA3231	Mastermodul Analysis I - 3 LP <i>Master Module Analysis I - 3 CP</i>	3
FMI-MA3232	Mastermodul Analysis II - 3 LP <i>Master Module Analysis II - 3 CP</i>	3
FMI-MA3261	Mastermodul Analysis I - 6 LP <i>Master Module Analysis I - 6 CP</i>	6
FMI-MA3262	Mastermodul Analysis II - 6 LP <i>Master Module Analysis II - 6 CP</i>	6
FMI-MA3291	Mastermodul Analysis I - 9 LP <i>Master Module Analysis I - 9 CP</i>	9
FMI-MA3292	Mastermodul Analysis II - 9 LP <i>Master Module Analysis II - 9 CP</i>	9
FMI-MA3331	Mastermodul Geometrie I - 3 LP <i>Master Module Geometry I - 3 CP</i>	3
FMI-MA3332	Mastermodul Geometrie II - 3 LP <i>Master Module Geometry II - 3 CP</i>	3
FMI-MA3361	Mastermodul Geometrie I - 6 LP <i>Master Module Geometry I - 6 CP</i>	6
FMI-MA3362	Mastermodul Geometrie II - 6 LP <i>Master Module Geometry II - 6 CP</i>	6
FMI-MA3391	Mastermodul Geometrie I - 9 LP <i>Master Module Geometry I - 9 CP</i>	9
FMI-MA3392	Mastermodul Geometrie II - 9 LP <i>Master Module Geometry II - 9 CP</i>	9
FMI-MA3431	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen I - 3 LP <i>Master Module Numerical Analysis / Scientific Computing I - 3 CP</i>	3
FMI-MA3432	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen II - 3 LP <i>Master Module Numerical Analysis / Scientific Computing II - 3 CP</i>	3
FMI-MA3461	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen I - 6 LP <i>Master Module Numerical Analysis / Scientific Computing I - 6 CP</i>	6
FMI-MA3462	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen II - 6 LP <i>Master Module Numerical Analysis / Scientific Computing II - 6 CP</i>	6
FMI-MA3491	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen I - 9 LP <i>Master Module Numerical Analysis / Scientific Computing I - 9 CP</i>	9
FMI-MA3492	Mastermodul Numerische Mathematik/Wissenschaftliches Rechnen II - 9 LP <i>Master Module Numerical Analysis / Scientific Computing II - 9 CP</i>	9
FMI-MA3531	Mastermodul Optimierung I - 3 LP <i>Master Module Optimization I - 3 CP</i>	3
FMI-MA3532	Mastermodul Optimierung II - 3 LP <i>Master Module Optimization II - 3 CP</i>	3
FMI-MA3561	Mastermodul Optimierung I - 6 LP <i>Master Module Optimization I - 6 CP</i>	6
FMI-MA3562	Mastermodul Optimierung II - 6 LP <i>Master Module Optimization II - 6 CP</i>	6
FMI-MA3591	Mastermodul Optimierung I - 9 LP <i>Master Module Optimization I - 9 CP</i>	9
FMI-MA3592	Mastermodul Optimierung II - 9 LP <i>Master Module Optimization II - 9 CP</i>	9
FMI-MA3631	Mastermodul Stochastik I - 3 LP <i>Master Module Stochastics I - 3 CP</i>	3

FMI-MA3632	Mastermodul Stochastik II - 3 LP <i>Master Module Stochastics II - 3 CP</i>	3
FMI-MA3661	Mastermodul Stochastik I - 6 LP <i>Master Module Stochastics I - 6 CP</i>	6
FMI-MA3662	Mastermodul Stochastik II - 6 LP <i>Master Module Stochastics II - 6 CP</i>	6
FMI-MA3691	Mastermodul Stochastik I - 9 LP <i>Master Module Stochastics I - 9 CP</i>	9
FMI-MA3692	Mastermodul Stochastik II - 9 LP <i>Master Module Stochastics II - 9 CP</i>	9
FMI-MA3801	Mastermodul Seminar 1 <i>Master Module Seminar I</i>	3
FMI-MA3802	Mastermodul Seminar 2 <i>Master Module Seminar II</i>	3
FMI-MA3811	Mastermodul Projekt <i>Master Module Project</i>	6
FMI-SQ0101	ASQ-Modul Programmiersprachen und Programmierung I - 3 LP <i>ASQ Module Programming Languages and Programming I - 3 CP</i>	3
FMI-SQ0102	ASQ-Modul Programmiersprachen und Programmierung II - 3 LP <i>ASQ Module Programming Languages and Programming II - 3 CP</i>	3
FMI-SQ0105	ASQ-Modul Programmiersprachen und Programmierung I - 6 LP <i>ASQ Module Programming Languages and Programming I - 6 CP</i>	6
FMI-SQ0106	ASQ-Modul Programmiersprachen und Programmierung II - 6 LP <i>ASQ Module Programming Languages and Programming II - 6 CP</i>	6
FMI-SQ0121	ASQ-Modul Skriptsprachen I - 4 LP <i>ASQ Module Scripting Languages I - 4 CP</i>	4
FMI-SQ0122	ASQ-Modul Skriptsprachen II - 4 LP <i>ASQ Module Scripting Languages II - 4 CP</i>	4
FMI-SQ0125	ASQ-Modul LaTeX Grundlagen für Naturwissenschaftler und Informatiker - 4 LP <i>ASQ Module Introduction to LaTeX for Scientists</i>	4
FMI-SQ0130	Datenanalyse mit R <i>Data Analysis with R</i>	6
FMI-SQ0131	Funktionale Programmierung <i>ASQ Module Functional Programming</i>	3
FMI-SQ0201	ASQ-Modul Wirtschaftskompetenz I - 3 LP <i>ASQ Module Business Skills I - 3 CP</i>	3
FMI-SQ0202	ASQ-Modul Wirtschaftskompetenz II - 3 LP <i>ASQ Module Business Skills II - 3 CP</i>	3
FMI-SQ0211	ASQ-Modul Projektmanagement <i>ASQ Module Project Management</i>	3
FMI-SQ0301	ASQ-Modul Zahlengefühl und Strukturgefühl - 3 LP <i>ASQ Module Number Feeling and Structure Feeling - 3 CP</i>	3
FMI-SQ0302	ASQ-Modul Zahlengefühl und Strukturgefühl - 6 LP <i>ASQ Module Number Feeling and Structure Feeling - 6 CP</i>	6
FMI-SQ0303	Go - Ein mathematisches Strategiespiel <i>Go - a mathematical strategic board game</i>	6
FMI-SQ0501	ASQ-Modul Informatik und Gesellschaft <i>ASQ Module Informatics and Society</i>	3

Recommended Course of Studies for Guest Students:

Mathematics / Teacher Training

All modules for teacher training are taught in German.

All modules span one semester—unless stated otherwise in the module list (“spanning two semesters”).

Module	Title	ECTS
Every semester		
FMI-MA3035	Seminar 1 (Proseminar) <i>Seminar 1</i>	3
FMI-MA3036	Seminar 2 <i>Seminar 2</i>	4
Winter semester		
FMI-IN0006	Berechenbarkeit und Komplexität <i>Computability and Complexity</i>	6
FMI-MA0243	Funktionentheorie 1 <i>Complex Analysis 1</i>	6
FMI-MA3004	Geometrie für Lehramtsstudierende <i>Geometry</i>	7
FMI-MA3009	Analysis 1 <i>Analysis 1</i>	6
FMI-MA3011	Analysis 3 <i>Analysis 3</i>	6
FMI-MA3015	Elementare Geometrie <i>Elementary Geometry</i>	7
FMI-MA3023	Lineare Algebra und Analytische Geometrie 1 <i>Linear Algebra and Analytic Geometry 1</i>	9
FMI-MA3029	Elementare Wahrscheinlichkeitstheorie und Statistik <i>Elementary Probability Theory and Statistics</i>	9
FMI-MA3052	Fortgeschrittene Analysis für Lehramtsstudierende <i>Advanced Analysis for Trainee Teachers</i>	9
Summer semester		
FMI-MA0244	Gewöhnliche Differentialgleichungen <i>Ordinary Differential Equations</i>	6
FMI-MA3007	Elementare Methoden der Numerischen Mathematik <i>Elementary Methods of Numerics</i>	6
FMI-MA3010	Analysis 2 <i>Analysis 2</i>	9
FMI-MA3027	Wahrscheinlichkeitstheorie und Statistik für Lehramtsstudierende <i>Probability and Statistics for Trainee Teachers</i>	6
FMI-MA3030	Lineare Algebra und Analytische Geometrie 2 <i>Linear Algebra and Analytical Geometry 2</i>	6
FMI-MA3053	Algebra/Zahlentheorie für Lehramtsstudierende <i>Algebra/Number Theory for Trainee Teachers</i>	6
FMI-MA4003	Didaktik der Mathematik A-Gy <i>Mathematics Education A</i>	6
Courses offered very irregularly		
FMI-IN0030	Kryptologie <i>Cryptology</i>	6
FMI-MA0113	Knoten und niedrigdimensionale Mannigfaltigkeiten <i>Knots and low-dimensional Manifolds</i>	6

FMI-MA0144	Codierungstheorie <i>Coding Theory</i>	6
FMI-MA0402	Fraktale Geometrie <i>Fractal Geometry</i>	9
FMI-MA0442	Fraktale Geometrie <i>Fractal Geometry</i>	6
FMI-MA0450	Integralgeometrie <i>Integral Geometry</i>	6
FMI-MA0708	Verfahren der Versicherungs- und Finanzmathematik <i>Methods of Insurance and Financial Mathematics</i>	6
FMI-MA1106	Algebraische Gruppen <i>Algebraic Groups</i>	6
FMI-MA1276	Aperiodische Ordnung <i>Aperiodic Order - 6 CP</i>	6
FMI-MA3005	Praktische Mathematik und Modellierung: Wissenschaftliches Rechnen <i>Scientific Computing</i>	6
FMI-MA3006	Praktische Mathematik und Modellierung: Optimierung <i>Optimization</i>	6
FMI-MA3028	Markov-Ketten und stochastische Simulation <i>Markov Chains and Stochastic Simulation</i>	6
FMI-MA3050	Algebra für Lehramtsstudierende <i>Algebra for Trainee Teachers</i>	6
FMI-MA3055	Simpliziale Homologie für Lehramtsstudierende <i>Simplicial Homology for Trainee Teachers</i>	6