

<b>Module title</b>		<b>Abbreviation</b>
Non-linear Analysis		10-M=VNAN-161-m01
<b>Module coordinator</b>		<b>Module offered by</b>
Dean of Studies Mathematik (Mathematics)		Institute of Mathematics
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
Methods in nonlinear analysis (e. g. topological methods, monotony and variational methods) with applications.		
<b>Intended learning outcomes</b>		
The student is acquainted with the concepts of non-linear analysis, can compare them and assess their applicability on practical problems.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (3) + Ü (1) Module taught in: German and/or English		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
a) written examination (approx. 60 to 90 minutes, usually chosen) or b) oral examination of one candidate each (approx. 15 minutes) or c) oral examination in groups (groups of 2, approx. 10 minutes per candidate) Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German or English creditable for bonus		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Mathematics (2016) Master's degree (1 major) Economathematics (2016) Master's degree (1 major) Mathematical Physics (2016) Master's degree (1 major) Computational Mathematics (2016) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016) Master's degree (1 major) Computational Mathematics (2019) Master's degree (1 major) Mathematics (2019) Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020) Master's degree (1 major) Mathematical Physics (2020) Master's degree (1 major) Economathematics (2021)		

Master's degree (1 major) Computational Mathematics (2022)  
Master's degree (1 major) Mathematics (2022)  
Master's degree (1 major) Mathematical Physics (2022)  
Master's degree (1 major) Econometrics (2022)  
exchange program Mathematics (2023)  
Master's degree (1 major) Computational Mathematics (2024)  
Master's degree (1 major) Mathematics (2024)  
Master's degree (1 major) Econometrics (2024)