Module title: Control Theory
Abbreviation: 10-M=ARTH-161-m01

Module coordinator: Dean of Studies Mathematik (Mathematics)
Module offered by: Institute of Mathematics

ECTS: 10
Method of grading: numerical grade
Duration: 1 semester
Module level: graduate
Other prerequisites: --

Contents:
Introduction to mathematical systems theory: stability, controllability and observability, state feedback and stability, basics in optimal control.

Intended learning outcomes:
The student is acquainted with the fundamental notions and methods of control theory. He/She is able to establish a connection between these results and broader theories, and learns about the interactions of geometry and other fields of mathematics.

Courses (type, number of weekly contact hours, language — if other than German):
V (4) + Ü (2)
Module taught in: German and/or English

Method of assessment (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. 90 to 120 minutes, usually chosen) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, 15 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

Allocation of places:
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Additional information:
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Referred to in LPO I (examination regulations for teaching-degree programmes):
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Module appears in:
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)