Module title: Theoretical Mechanics
Abbreviation: 11-TM-092-m01

Module coordinator: Managing Director of the Institute of Theoretical Physics and Astrophysics
Module offered by: Faculty of Physics and Astronomy

ECTS: 8
Method of grading: Only after succ. compl. of module(s)

Duration: 1 semester
Module level: undergraduate
Other prerequisites:
Certain prerequisites must be met to qualify for admission to assessment. The lecturer will inform students about the respective details at the beginning of the course. Registration for the course will be considered a declaration of will to seek admission to assessment. If students have obtained the qualification for admission to assessment over the course of the semester, the lecturer will put their registration for assessment into effect. Students who meet all prerequisites will be admitted to assessment in the current or in the subsequent semester. For assessment at a later date, students will have to obtain the qualification for admission to assessment anew.

Contents
Newtonian mechanics, Lagrangian and Hamiltonian formalism, conservation laws, limits of classical physics.

Intended learning outcomes
The students have knowledge of the principles of classical theoretical mechanics and the required calculation methods.

Courses
Type, number of weekly contact hours, language — if other than German: V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment
Type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus: written examination (approx. 120 minutes, for modules with less than 4 ECTS credits approx. 90 minutes; unless otherwise specified)
Assessment offered: When and how often assessment will be offered depends on the method of assessment and will be announced in due form under observance of Section 32 Subsection 3 ASPO (general academic and examination regulations) 2009.

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
Bachelor' degree (1 major) Mathematics (2012)
Bachelor' degree (1 major) Mathematics (2013)
Bachelor' degree (1 major) Nanostructure Technology (2012)
Bachelor' degree (1 major) Computational Mathematics (2012)
Bachelor' degree (1 major) Computational Mathematics (2013)
Bachelor's degree (1 major, 1 minor) Physics (Minor, 2010)