

<b>BM01: Mathematics I</b>				<b>Study Programme:</b>	B
<b>Module Type:</b>	<b>ECTS Credits:</b>	<b>Workload:</b>	<b>Study semester:</b>	<b>Module Duration:</b>	
Compulsory	3	90	1.	one semester	
<b>Courses (HPW=hours per week):</b>			<b>Contact hours:</b>	<b>Independent study:</b>	<b>Planned Group Size:</b>
Course 1: Mathematics I (2 HPW)			30h	25h	310
Course 2: Mathematics I - Tutorial (2 HPW)			15h	20h	2 x 150
Group events <i>It will be offered several groups for course 2.</i>					
<b>Intended Learning Outcomes (ILOs):</b>					
By the end of the module, students will be able to <ul style="list-style-type: none"> <li>- explain calculation of vector calculus and matrices, especially for treatment of linear equation systems;</li> <li>- or adopt them to mathematical models and problems in the field of linear algebra.</li> </ul>					
<b>Key competencies:</b>					
<ul style="list-style-type: none"> <li>- Academic research and writing</li> <li>- Critical thinking</li> <li>- Analytical skills</li> <li>- Willingness to learn and accomplish</li> </ul>					
<b>Description/Contents:</b>					
<b>Course 1: Mathematics I</b> <ol style="list-style-type: none"> <li>1. Fundamentals: numbers and calculation</li> <li>2. Linear equation systems</li> <li>3. Matrices and vector algebra</li> <li>4. Determinants and inverse matrices</li> </ol> <b>Course 2: Mathematics I – Tutorial</b> Cf. contents of course 1.					
<b>Language:</b>					
The language of the module is German.					
<b>Teaching Methods:</b>					
Lectures, group work, self-study.					
<b>Module Applicability:</b>					
B.Sc. Business Administration; B.Sc. Economics.					
<b>Pre-requisites/Requirements:</b>					
Admission to study Business Administration or Economics for a Bachelor's degree.					
<b>Examination Types:</b>					

Comprehensive examination in the form of a written exam at the end of the winter semester (90 min).
<b>Requirements for Award of Credit Points:</b>
Successful participation in the exam. The exam will be passed if the grade is at least „sufficient“ (4,0). Requirement for a successful participation in the exam is a regular, self-reliant processing of homework in which a certain proportion has to be solved correctly. The person responsible determines the proportion in the beginning of the course.
<b>Availability:</b>
The module will be offered generally each winter term.
<b>Assessment:</b>
This course will be graded and is part of the calculation for the overall grade of your bachelor degree. Particular information concerning the calculation of the overall grade can be gathered in the respective examination regulations.
<b>Person Responsible and Main Lecturer:</b>
PD. Dr. Axel Grünrock and teaching/research assistants.
<b>Further Information:</b>
Further information can be found at the website of the person responsible as ILIAS and HIS-LSF.

Stand: 12.01.2018