

Annex 2: Module description for the Consecutive Degree Programme in Business & Economics leading to the award of Master of Science

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Specialization module

Module number	262032-302 (version 01)
Module name	Computational Economics II
Module coordinator	Professorship Economics – Microeconomics
Content and qualification objectives	<p><u>Content:</u></p> <ul style="list-style-type: none"> • Use of advanced computer-aided methods to analyze economic issues • Preparation of data for specific analysis techniques • Natural language processing techniques and their application in the context of economic research • Application of a variety of advanced calculation techniques to economic problems in a programming language <p><u>Qualification objectives:</u></p> <p>After successful completion of the module, students are able to work on more complex economic problems using methods from computational economics. They are able to use data in an appropriate way and prepare it for use if necessary. They know solutions to typical problems in computational economics (long computation times, Curse of Dimensionality, non-reproducibility of calculations due to stochastic influences). They are familiar with some approaches to natural language processing.</p>
Teaching methods	<p>The module teaching methods are lecture and exercise course.</p> <ul style="list-style-type: none"> • Lecture: Computational Economics II (1 teaching unit) • Exercise course: Computational Economics II (1 teaching unit) <p>The classes will be conducted in English.</p>
Requirements for participation (recommended knowledge and skills)	<p>Required previous knowledge:</p> <ul style="list-style-type: none"> • Fundamental knowledge of programming and Computational Economics, e.g. Module Computational Economics I (Module 262032-202) • See the list of course materials
Module application	The module is suitable for all degree programs with an economic orientation.
Requirements for the award of credit points	Successfully passing the module examination is required for the awarding of credit points.
Module examination	<p>The module examination consists of one assessment component.</p> <ul style="list-style-type: none"> • Creditable study achievement: Completion of five programming tasks during the semester as well as corresponding written assignments (scope: ca. 2 pages per assignment) on Computational Economics II (Examination number: 63324) <p>The study achievement is credited, if it is graded at least "sufficient".</p> <p>The assessment components may be produced in German or in English.</p>
Credits and grades	<p>This module is worth 5 credit points.</p> <p>Section 10 of the Examination Regulations specifies how the assessment component is assessed and how the module grade is calculated.</p>
Frequency	The module is offered each academic year.
Number of hours	The module requires students to complete a total of 150 study hours.
Module duration	Under normal circumstances, the module is completed in one semester.