

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

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Adaptation module

Module number	262032-202 (version 01)
Module name	Computational Economics I
Module coordinator	Professorship Economics – Microeconomics
Content and qualification objectives	<p><u>Content:</u></p> <ul style="list-style-type: none"> • Use of computer-aided methods to examine economic issues • Basic and object-oriented programming techniques • Working with data and its visualization • Application of a variety of calculation techniques (e. g. regressions, Monte Carlo simulation, network analysis, agent-based simulation) to economic problems in a programming language <p><u>Qualification objectives:</u></p> <p>After successful completion of the module, students are able to give an overview of the most important methods of computational economics. They can design algorithms to solve simple economic problems and are able to create programs that implement these algorithms and provide useful visual or numerical results.</p>
Teaching methods	<p>The module teaching method is the lecture.</p> <ul style="list-style-type: none"> • Lecture: Computational Economics I (2 teaching units) <p>The class will be conducted in English.</p>
Requirements for participation (recommended knowledge and skills)	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 related written assignments (scope: ca. 2 pages per assignment) on Computational Economics I (Examination number: 63311) <p>The study achievement is credited, if it is graded at least “sufficient”.</p> <p>The task will be given in English. The assessment component must be taken 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.