

**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**

<b>Module number</b>	261033-311 (version 01)
<b>Module name</b>	Life Cycle Engineering
<b>Module coordinator</b>	Professorship Business Administration III - Management Accounting and Controlling
<b>Content and qualification objectives</b>	<p><u>Content:</u></p> <p>The module provides an overview of the basic ideas and theoretical foundation of Life Cycle Engineering (LCE) and details related methods and modeling approaches. Individual topics include:</p> <ul style="list-style-type: none"> <li>• Product lifecycle models</li> <li>• Approaches to assess the technical, economic and ecological performance of products and product systems</li> <li>• Models for multidimensional analysis</li> <li>• Technology and material selection</li> <li>• Case studies</li> </ul> <p><u>Qualification objectives:</u></p> <p>After successful completion of the module, students have developed an understanding of the necessity to include technical, economic and ecological objectives in decisions, specifically in the early stages of the product life cycle. A particular emphasis is also placed on the necessary (evaluation) approaches and models, which students have expanded their knowledge on and can be applied in a case study carried out in small groups.</p>
<b>Teaching methods</b>	<p>The module teaching methods are lecture and case study.</p> <ul style="list-style-type: none"> <li>• Lecture: Life Cycle Engineering (2 teaching units)</li> <li>• Case Study: Life Cycle Engineering (1 teaching unit)</li> </ul> <p>The classes will be conducted in English.</p>
<b>Requirements for participation (recommended knowledge and skills)</b>	none
<b>Module application</b>	---
<b>Requirements for the award of credit points</b>	Successfully passing the module examination is required for the awarding of credit points.
<b>Module examination</b>	<p>The module examination consists of two assessment components. The student must take the following specific assessment components:</p> <ul style="list-style-type: none"> <li>• 10-minute oral presentation on the case study Life Cycle Engineering (Examination number: 61428)</li> <li>• 60-minute written examination on Life Cycle Engineering (Examination number: 61421)</li> </ul> <p>The assessment components are to be produced in English.</p>
<b>Credits and grades</b>	<p>This module is worth 5 credit points.</p> <p>Section 10 of the Examination Regulations specifies how the assessment components are assessed and how the module grade is calculated.</p> <p>Assessment components:</p> <ul style="list-style-type: none"> <li>• Oral presentation on the case study Life Cycle Engineering, weighting 3 – pass required</li> <li>• Examination on Life Cycle Engineering, weighting 7 – pass required</li> </ul>
<b>Frequency</b>	The module is offered each academic year, normally in the summer semester.
<b>Number of hours</b>	The module requires students to complete a total of 150 study hours.
<b>Module duration</b>	Under normal circumstances, the module is completed in one semester.