

<b>Module title</b>		<b>Abbreviation</b>
Decision Support Systems		12-M-DSS-132-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Information Systems Engineering		Faculty of Business Management and Economics
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
<p>The course discusses advanced approaches for modelling and solving decision problems in business settings. The acquired insights are used to design and implement decision support systems using standard software tools.</p>		
<b>Intended learning outcomes</b>		
<p>After successfully completing the course, students should be able to</p> <ul style="list-style-type: none"> <li>• Understand the structure of classic business decision problems</li> <li>• Isolate key elements from general problem descriptions and convert them to quantitative decision models</li> <li>• Solve different classes of optimization problems (linear, network, integer, multi-objective, non-linear, stochastic)</li> <li>• Implement spreadsheet-based decision support systems</li> </ul>		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V + Ü (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
<p>a) written examination (approx. 60 minutes) or b) written examination consisting entirely or partly of multiple/single choice questions (approx. 60 minutes) or c) presentation (approx. 20 to 30 minutes) with written elaboration (approx. 20 pages), weighted 1:2 or d) oral examination (one candidate each: approx. 10 to 15 minutes; groups of 2: approx. 20 minutes; groups of 3: approx. 30 minutes) or e) entirely or partly computerised written examination (approx. 60 minutes)</p> <p>Language of assessment: German, English</p>		
<b>Allocation of places</b>		
<p>Number of places: 40. Should the number of applications exceed the number of available places, 15 places will be set aside for Master's students of Business Information Systems. (1) Should the number of applications exceed the number of available places, places will be allocated in a standardised procedure among all applicants irrespective of their subjects according to the following quotas: Quota 1 (50% of places): total number of ECTS credits already achieved in the respective degree subject; among applicants with the same number of ECTS credits achieved, places will be allocated by lot. Quota 2 (25% of places): number of subject semesters of the respective applicant; among applicants with the same number of subject semesters, places will be allocated by lot. Quota 3 (25% of places): allocation by lot. In this procedure, applicants who already have successfully completed at least one module component of the respective module will be given preferential consideration. (2) Places on all courses of the module component with a restricted number of places will be allocated in the same procedure. (3) A waiting list will be maintained and places re-allocated as they become available.</p>		
<b>Additional information</b>		
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<b>Workload</b>		
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**Teaching cycle**

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**Referred to in LPO I** (examination regulations for teaching-degree programmes)

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**Module appears in**

Master's degree (1 major) Business Information Systems (2013)

Master's degree (1 major) Business Management (2013)

Master's degree (1 major) Economics (2013)