

<b>Module title</b>		<b>Abbreviation</b>
Decision Support Systems		12-M-DSS-192-m01
<b>Module coordinator</b>		<b>Module offered by</b>
Holder of the Chair of Business Analytics		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>		
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 (Python).		
<b>Intended learning outcomes</b>		
After successfully completing the course, students should be able to <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 decision support systems</li> </ul>		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V (2) + Ü (2)		
<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)		
a) Written examination (approx. 60 minutes) or b) oral examination (one candidate each: approx. 10 to 15 minutes, groups of 2: approx. 20 minutes, groups of 3: approx. 30 minutes) Creditable for bonus Language of assessment: German and/or English		
<b>Allocation of places</b>		
40 places. Should the number of applications exceed the number of available places, places will be allocated as follows: (1) Master's students of Information Systems will be given preferential consideration. (2) The remaining places will be allocated to students of other subjects. (3) When places are allocated in accordance with (1) and (2) and the number of applications exceeds the number of available places, places will be allocated by lot among applicants from this group.		
<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Information Systems (2019) Master's degree (1 major) China Business and Economics (2021) Master's degree (1 major) China Language and Economy (2021)		

Master's degree (1 major) Economathematics (2021)  
Master's degree (1 major) Information Systems (2022)  
Master's degree (1 major) Management (2022)  
Master's degree (1 major) Economathematics (2022)