

<b>Module title</b>		<b>Abbreviation</b>
Logic Programming		10-I=LP-172-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Computer Science I		Institute of Computer Science
<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>Logic-relational programming paradigm, top-down evaluation with SLD(NF) resolution. Introduction to the logic programming language Prolog: recursion, predicate-oriented programming, backtracking, cut, side effects, aggregations. Connection to (deductive) databases. Comparison with Datalog, short introduction of advanced concepts like constraint logic programming.</p>		
<b>Intended learning outcomes</b>		
<p>The students have fundamental and practicable knowledge of logic programming. They are able to implement compact and declarative programs in Prolog, and to compare this approach to the traditional imperative programming paradigm.</p>		
<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)		
<p>written examination (approx. 60 to 120 minutes).          If announced by the lecturer at the beginning of the course, the written examination may be replaced by an oral examination of one candidate each (approx. 20 minutes) or an oral examination in groups of 2 candidates (approx. 15 minutes per candidate).          Language of assessment: German and/or English          creditable for bonus</p>		
<b>Allocation of places</b>		
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<b>Additional information</b>		
<p>Focuses available for students of the Master's programme Informatik (Computer Science, 120 ECTS credits): AT, SE, IT, IS.</p>		
<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>		
<p>Master's degree (1 major) Computer Science (2017)          Master's degree (1 major) Computer Science (2018)          Master's degree (1 major) Information Systems (2019)          Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)          Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)</p>		