Module title: Embedded Systems

Abbreviation: 10-I=ES-102-m01

Module coordinator: holder of the Chair of Computer Science V

Module offered by: Institute of Computer Science

ECTS: 8

Method of grading: numerical grade

Duration: 1 semester

Module level: graduate

Other prerequisites: Where applicable, prerequisites as specified by the lecturer at the beginning of the course (e.g. completion of exercises).

Contents:
Models of embedded systems, implementation methods (ASIC, AISIP, micro controller), verification of embedded systems, implementation planning static, periodic and dynamic, binding problems, hardware synthesis, software synthesis.

Intended learning outcomes:
The students are familiar with the technical possibilities for the design of embedded systems and master the most important techniques for the modelling, verification and optimisation of such systems in hardware and software.

Courses:
V + Ü (no information on SWS (weekly contact hours) and course language available)

Method of assessment:
written examination (approx. 80 to 90 minutes). If announced by the lecturer by four weeks prior to the examination date, the written examination can be replaced by an oral examination of one candidate each or an oral examination in groups. A 80 to 90 minute written examination is equivalent to a 20 minute (approx.) oral examination of one candidate each, a 30 minute (approx.) oral examination in groups of 2 and a 40 minute (approx.) oral examination in groups of 3.
Language of assessment: German, English if agreed upon with the examiner

Allocation of places:
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Additional information:
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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) Computer Science (2010)
Master’s degree (1 major) Mathematics (2012)
Master’s degree (1 major) Mathematics (2010)
Master’s degree (1 major) Computational Mathematics (2012)
First state examination for the teaching degree Gymnasium Computer Science (2009)