Technology Arts Sciences

TH Köln

Course

ESP - Embedded system project

Version: 1 | Last Change: 02.08.2019 19:20 | Draft: 0 | Status: vom verantwortlichen Dozent freigegeben

^ General information

Long name	Embedded system project
Approving CModule	ESP BaTIN
Responsible	Prof. Dr. Tobias Krawutschke Professor Fakultät IME
Level	Bachelor
Semester in the year	summer semester
Duration	Semester
Hours in self-study	114
ECTS	5
Professors	Prof. Dr. Tobias Krawutschke Professor Fakultät IME
Requirements	Course Embedded Systems
Language	German, English if necessary
Separate final exam	No

^ Project

Learning goals

ES Development

Hardware Selection

Device selection

Understanding device descriptions (manuals)

Application of modelling methods

Generation of a system model

Refinement of system components

Modelling behavior

Implementation

Design of special components

Integration of devices

Development of tests, testing

Building a prototype using mechanical/electronical parts

Handling of complex tasks with a team

Project planning

Contract fulfilling in time

Presentation

System design

Intermediate work report

Result presentation

Expenditure classroom teaching

Туре	Attendance (h/Wk.)	
Project	2	
Tutorial (voluntary)	0	

Separate exam

Exam Type

working on projects assignment with your team e.g. in a lab)

Details

Grading of the project in several parts

- 1) The student teams present and defend their results reached during the phases analysis, technical conception, implementation of prototype in scheduled meetings to show their competencies in planning, development and integration of technical systems.
- 2) The teams write a documentation using a predefined form. With presentations and the report, they show their competencies to interact with clients (either external stake holders or role of the docent), appliers, social environment and team members.
- 3) The students individually undergo a colloquium that shows their ability to analyze and evaluate requirements, concepts and system implementations.

Minimum standard

Team: Delivery of work results in time, presentation of results or obstacles if result couldn't reached, written report according to the form Individual: Valuable participation in the team's work, understanding the system, its modelling, design, implementation and its behavior