

Course

EPR - First term project

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General information

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| Long name | First term project |
| Approving CModule | EPR BaET EPR BaOPT |
| Responsible | Prof. Dr. Michael Gartz Professor Fakultät IME |
| Level | Bachelor |
| Semester in the year | winter semester |
| Duration | Semester |
| Hours in self-study | 24 |
| ECTS | 2 |
| Professors | Prof. Dr. Michael Gartz Professor Fakultät IME Prof. Dr. Uwe Oberheide Professor Fakultät IME |
| Requirements | interest in electrical engineering intereset in industrial automation, power engineering, communications engineering or optical technology |
| Language | German, English if necessary |
| Separate final exam | No |

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Project

Learning goals

Knowledge

first programming knowledge and knowledge to one of the four themes: electric generator, labyrinth robot, remotely controlled robot or automatic updated telescope.

The students got to know the infrastructure of the faculty and have arrived in the academic studies.

Skills

Taking responsibility for themselves and for their team;

To realize projects with abstract objectives and to tackle a project scope in work-sharing manner by teamwork;

To structure tasks, to define sub-goals and intersections,

to develop implementation concept in work-sharing manner,

to realize, check, optimize and document them;

to integrate partial solutions, to evaluate and optimize together product prototypes

to communicate in goal-oriented and regardful manner;

to make binding arrangements and comply with them;

With the help of self-reflection estimate the own proficiency level in correct manner and with the help of autonomous, goal-oriented learning close or diminish competence holes.

They are able to develop, assess and exert learning- and working- strategies.

They are able to work under laboratory conditions and can recognize if the work has been done in engineer manner, that means a planned operation, or if it was unstructured and inefficient.

Expenditure classroom teaching

| Type | 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

During the project phase the students prepare project- and product documentations with rough product specifications and well-founded development decisions, which show that the students have understood the project tasks and that they have analyzed the requirements out of the project design. With this prepared documents the students should show that they have synthesized approaches based on the research results and have exerted these to realize the project.

Formalized product-reviews which have to be prepared will help to make the evaluation of the done work packages of the project.

Daily activity reports of the working process and the collection of own competences in the beginning of the project and at the end revises the self-reflection.

The project result has to be shown and presented during the final competition or the final presentation which is different for each area of specialisation. Furthermore the operational capability of the project result has to be shown.

Minimum standard

all activity reports prepared to make sense

all self-reflection of own competences before and after the project phase prepared to make sense

at least 8 of 19 days contributed intensely one's services to the project

and prepared parts of the reviews, the technical documentation and of the project-documentation