

Course: Project Research, Design & Engineering

credits: 15

Course code WBVH18PRDE

Name Project Research, Design & Engineering

Study year 2022-2023

ECTS credits 15

Language Dutch, with parts in English, English

Coordinator J.T. Hofman

Modes of delivery Education

Assessments Project Research, Design & Engineering -

Assignment

Learning outcomes

General

- manages and reflects on his/her individual role in accordance with his/her personal development plan
- manages and reflects on his/her activities within the project team, in accordance with the project organization
- Evaluates the designed solution with the stakeholders (client and supervisor)

Problem analysis and definition

- 1. sets up and documents an appropriate project organization with co-workers such that the project team is leading and the supervisor has an advising role
- 2. analyses a given problem and formulates this problem into a clear problem statement and project goal
- 3. investigates various systematic approaches and motivates the selection of the most suited approach
- 4. elaborates the selected approach into a project plan including scope, approach and planning in accordance with the stakeholders (client and supervisor)

Design and Engineering

- 1. analyses the technical aspects of the problem along with conducting a literature research and documents these findings
- designs a concept solution for a technical problem based on the findings of the analyses using a systematic approach in close cooperation with the client
- engineers the designed solution such that the design is ready to be implemented
- documents and motivates the designed solution to the stakeholders

Content

In this project (15 EC) a professional mechanical engineering problem is addressed. The subject contains product as well as system issues. During the project the entire engineering process is addressed. First, an analysis of the problem including a literature research will be performed. Next, a solution will be designed and engineered to specifications in a methodical manner. The project will be performed in close cooperation with the client.

Included in programme(s)

Mechanical Engineering
Mechanical Engineering VWO a 3-year variant

School(s)

Institute of Engineering