

# Engineering Design 1 (ED 1)



Lehrstuhl für Produktentwicklung  
Prof. Dr.-Ing. Tamara A. J. Reinicke

## Course description:

The aim of the course is to give students the methodological skills needed to develop products systematically, creatively and with high quality.

Through extensive task clarification, systematic analyses and comprehensible evaluation of effective structures as well as the use of quality assurance methods, students are enabled to solve problems in product development and counteract errors at an early stage.

The focus of the course is on generating high-quality, feasible solution concepts.

Special features in the design of solution concepts are taught in the "Engineering Design II" course.

## In detail:

- Product development process according to VDI 2221 and Pahl/Beitz
- Clarification of the task
- Functions and their structures
- Solution-finding methods
- Evaluation of product concepts
- Quality management
- Overview of intellectual property rights

## Part of

**Modul:** *Introduction to Mechanical Engineering I*

**Modul Nr.:** 4MECHMA001.1

## Lecturer:

*Prof. Dr.-Ing. Tamara A. J. Reinicke*

## Information:

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*Form: Lecture*

*Amount: 2 SWS*

*Credits: 3 ECTS*

*Frequency: Winter semester*

*Language: english*



## More Information at:

[www.mb.uni-siegen.de/pe](http://www.mb.uni-siegen.de/pe)



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