

# Circuit Design

## Student Group

First Name	Surname	Matrikel Nr.

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# Circuit Design



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The course Circuit Design expands your knowledge of switching and amplifying elements. The knowledge gained from this course is used in a wide range of products. Microcontrollers in mobile phones and automobiles, data processing in sensors (e.g. motion detectors) and much more are based on the components and circuits presented in this course. These are simple amplifier circuits, as well as diodes and transistors. The course is tightly connected to Electrical Engineering I/II as well as Electrical Engineering Lab.

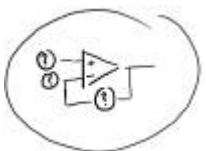
## Teaching material for the individual parts



0 Block - Tools  
1 Block - Amplifier Basics



2 Block (I) - Diodes  
2 Block (II) - Transistors



3 Block - OpAmp Basic Circuits I  
4 Block - OpAmp Basic Circuits II



5 Block - Filter Circuits I  
6 Block - Filter Circuits II



## 7 Block - non-linear Applications

### 8 Block - further Simulations

explanation of the PN Junction

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