

Additional Links

Student Group

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 5. examples of conductive properties (gaseous, liquid, bulk)
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 9. voltage divider
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 1. example for series circuit: contact resistance given by (0) connection cable (ca. 10..20mOhm) (1) resistance of crimping, (2) resistance of contact body (e.g. with spring), (3) contact spring element (ca. 1mOhm). All three for male and female connector each
5. linear sources
 - <https://en.wikibooks.org/wiki/Electronics>

You already know V-I-R and you not only connect AC/SC with music?

Great! Then you should Go one step Further.

In this course we will investigate

- which ideal components are used in circuits and
- how they interact with each other and different types of current.

[Introduction in Electrical Engineering 1](#)

or: How to work with this course?

Direct Current Circuits

1. [Preparation, Properties, Proportions](#)

- or: Watt is Power and Current?
- 2. [Simple Circuits](#)
or: about Branches and Stars
- 3. [Non-ideal Sources and two terminal Networks](#)
or: something lumpy with two Pins and why shots circuits may be important
- 4. [Network Analysis](#)
Recipes for Networking
- 5. [Switching Operations of RC-Combinations](#)
oder: unfinite Charging

Alternating Current Circuits

- 6. [Introduction in Alternating Current Technology](#)
or: active and reactive
- 7. [Circuits under different frequencies](#)
or: dampening and oscillating

[Tipps zur Klausur Elektrotechnik 1](#)

Weiterführende Links

Lesestoff

- [Online Brückenkurs des KIT/Uni Stuttgart](#): Schönes, teilanimiertes Onlineskript, welches die Kapitel 1, 2, 3 und 5 abdeckt
- [H.Er.T.Z der HS Karlsruhe](#): Das **H**ochschuloffene **E**lekt**r**otechnik **Z**entrum der Karlsruher HS hat ein schönes [Online-Skript](#)
- [LeifiPhysik](#): Hier finden Sie weitere Erklärungen zu unseren Kapiteln auf Berufschul-/Gymnasial-Ebene.
- [Electricity and Magnetism](#): beautiful online course covering most of the parts of my course.

Übungsaufgaben

- Passend zum H.Er.T.Z Skript (siehe oben), gibt es noch weitere [Übungsaufgaben](#)
- Weiter Übungsaufgaben werden über ILIAS ausgeteilt

Additional Links

English

- A great introductory script into electrical engineering can be found at [LibreText - Physics II Thermodynamics, Electricity and Magnetism](#). The content ist originally from [OpenStax](#).
- Another good introduction ist given by [HyperPhysics](#)

German

- [simple club](#): Erklär-Videos zu Elektrotechnik im Physik-Bereich ; Abo nicht notwendig!
- [Elektrotechnik einfach erklärt](#): noch wenige, aber gut entwickelte Videos
- [Elektrotechnik in 5 Minuten](#): guter Fundus an kurzen Videos

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