sidebar

Student Group

First Name	Surname	Matrikel Nr.

Table of Contents

Content Constants Calc

EEE1 - Electrical Engineering and Electronics 1

Introduction in EEE1

Electrical Fundamentals

- Block 01 — Physical quantities and units
- Block 02 — Electric charge, current and voltage
- Block 03 — resistance and power

DC Networks

- Block 04 — Kirchhoff’s laws
- Block 05 — Resistive networks
- Block 06 — Real sources and source equivalents
- Block 07 — Power-relevant figures
- Block 08 — Two-port theory and transforms

Electrics
5 The electrostatic Field
6 The stationary el. Flow (*)

Magnetics
7 The magnetostatic Field
8 time-dept. magnetic Field
9 Magnetic Circuits (*)

10. OpAmps

Charge on electron (e)	$1.60217634 \times 10^{-19}$ C
Avogadro’s number (NA)	6.022142×10^{23} 1/mol
Permeability of vacuum μ0	$12.566370614 \times 10^{-7}$ Vs/Am $4\pi \times 10^{-7}$ Vs/Am

Permittivity of vacuum ϵ0	$8.854187817 \times 10^{-12}$ As/Vm