

## t.KT1 - Kommunikationstechnik 1

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**Person responsible for the course:** Thomas Müller, muth

**Credits:** 4

**Valid for:** 2010/2011

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### Learning objectives:

The student knows the basic terms and understands the problems to be solved as well as machinery and protocols of data communication.

The student can apply his knowledge in Ethernet and IP protocols. He has an insight on how application access services of the transport layer.

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### Course content:

Class:

- Introduction to communication technology
- Local Area Networks (Ethernet, Bridging and Switching)
- Internet Protocols (IP, Routing)
- Transport Layer (UDP, TCP)
- Netzwerk Applikationen und Protokolle (DNS, BOOTP/DHCP, TFTP, SMTP, MIME, HTTP)
- Transport Layer Interface (Socket-API)

Lab:

- Protocol Analyzer
  - Ethernet
  - Bridging, Switching
  - Routing
  - TCP
  - Application Layer Protocols
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### Previous knowledge:

- Programming in C
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### Teaching method:

Type of lesson:	Number of lessons per week:
Lecture	14x2L
Tutorial/Practicum	7x4L
Group teaching	
Block instruction	
Seminar	

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**Assessment:**

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Type	Weighting
1	End of term exam	60-100%
6	Exam during the semester	0-40%
	Further assessments	

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**Language of instruction:**

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**Instruction material:**

- Lecture notes
- Presentation slides
- Lab instructions
- Example of an end of term exam with solutions

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**Comments:**

This is an informative description. Authoritative information is given in  
<https://olat.zhaw.ch/olat/url/RepositoryEntry/56623108?guest=true&lang=de>