Internet Routing

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General information (1)

- **Area**: BKS – Hauptstudium Vertiefer
- **Time**
  - Fri: 12:00 – 14:00
- **Room**
  - Tel 1118/1119
- **Language**
  - English (questions can be asked in German!)
- **Web site**
  - [http://www.net.t-labs.tu-berlin.de/teaching/ss11/IR_lecture](http://www.net.t-labs.tu-berlin.de/teaching/ss11/IR_lecture)
- **ISIS**
  - [https://www.isis.tu-berlin.de/course/view.php?id=4636](https://www.isis.tu-berlin.de/course/view.php?id=4636)
  - Key: bgpisfantastic
General information (2)

- Prerequisite
  - Network Protocols and Architecture
  - Basis Kommunikationsnetze
    or corresponding experience

- Exam
  - For those that need it 😊
  - Oral or written exam after semester end
    (depends on # of participants)
What is this course?

- Not an introduction on the Internet
- Focus: Routing in the Internet
  - Methodology
    - Principles
  - How does routing in the Internet actually look like
    - Different protocols
    - Business structure
    - Topology / route choice
  - How do the differences in wireless change the routing protocol choices
  - Future Routing architectures
  - Data Center routing challenges
Start: Review by example

- Overview Internet architecture
- Internet protocols
  - TCP, UDP, IP, IP addresses
- Internet Applications
  - Web, DNS, ...
- Layer 2
  - Ethernet / Switching / ARP
- Introduction to wireless
  - Channel characteristics / Mobility / Failures