

# Network Protocols and Architectures

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## General information (1)

- Area:
  - Informatik Diplom: BKS – Hauptstudium-Vertiefer
  - Informatik Bachelor: Communication Technology
  - Informatik Master: Communication-based Systems
  - See Web page for further areas
- Master/Bachelor Module:  
"Netzwerkarchitekturen – Grundlagen (MINF-KT-NA/Glg.W10)"  
(BA/MA: With tutorial only)
- Time and room
  - Wednesday: 10:00 – 12:00 German MA 042
  - Thursday: 14:00 – 16:00 English MA 043
- Web site
  - [http://www.net.t-labs.tu-berlin.de/teaching/ws1011/NPA\\_lecture/](http://www.net.t-labs.tu-berlin.de/teaching/ws1011/NPA_lecture/)
- ISIS
  - <https://www.isis.tu-berlin.de/course/view.php?id=3584>

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## General information (2)

- Prerequisite:
  - Grundstudium or similar
- Tutorials
  - Homework assignments
  - Recitation sessions

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## General information (3)

- Options
  - BA/MA/DA: 4 SWS or 6 LP for Lecture + Tutorial
    - 50 % of exercise points => passed tutorial
  - Bonus on exam grade:
    - 60 % of exercise points => 0.3 bonus for exam grade
    - 75 % of exercise points => 0.7 bonus for exam grade
  - DA only: 2 SWS for Lecture only
- Registration for tutorials
  - Via ISIS
    - <https://www.isis.tu-berlin.de/course/view.php?id=3584>
  - Please fill out questionnaire

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## General information (4)

### □ Tutors

- Oliver Hohlfeld (Tutorial management)
- Mustafa Al-Bado
- Jan Böttger
- Benjamin Frank
- Juhoon Kim
- Ingmar Poesse

### □ Exam

- For those that need it ☺
- Written exam 24. Feb. 2010 from 14:00 to 16:00

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## General information (5)

### □ Homework

- Start: After **second** lecture
- Hand-in by Thursday before 12pm (noon)
  - Online via ISIS
  - Offline via Postbox in Telefunkengebäude
  - **One solution per person**
  - Group discussions OK but no verbatim solutions!!!
- **Plagiarism: Not allowed**  
(Copy from Internet, text book, each other, ...)
  - No points for complete assignment (first occurrence)
  - Exclusion from class (repeat offenders)

### □ Tutorial

- Start: After **third** lecture

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## Exam

- ❑ For those that need it ☺
- ❑ Written Exam
  - Date: **24 Feb. 2010, 2 p.m. to 4 p.m**
  - Room: **A151** (Architecture Building)
  - Registration: Until **10. Feb. 2010 noon**
    - Via ISIS
    - MA/BA students: Module registration (including signature)
      - Hand-in with homework solution
  - Language
    - English / German
  - Aids (Hilfsmittel)
    - Closed book exam
    - 1 sheet of paper (max DIN A4)

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## What is this course?

- ❑ Principles on which the Internet relies
- ❑ Goals
  - Identify, study common architectural components, protocol mechanisms
- ❑ Examples
  - Internet architecture
  - Network application protocols
- ❑ Principles
  - State handling, Randomization, Indirection, Virtualization, ...

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## Background reading

- Kurose and Ross:  
Computer Networking: A Top-Down Approach  
Featuring the Internet.  
Fifth edition, Addison-Wesley, 2007  
Preliminary edition online: student (quarter24)
- Peterson, Davie:  
Computer Networks. A systems approach  
Fourth edition, Morgan Kaufmann 2007
- ... see Web