Part I

Organizational Matters

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▶ Modul: IN2003

▶ Name: "Efficient Algorithms and Data Structures"
        "Effiziente Algorithmen und Datenstrukturen"

▶ ECTS: 8 Credit points

▶ Lectures:
    ▶ 4 SWS
       Mon 12:15–13:45 (Room 00.13.009A)
       Thu 10:15–11:45 (Room 00.04.011, HS2)

▶ Webpage: http://www14.in.tum.de/lehre/2011WS/ea/

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The Lecturer

- ▶ Harald RÃd'cke
- ▶ Email: raecke@in.tum.de
- ▶ Room: 03.09.044
- ▶ Office hours: (per appointment)

Tutorials

- Tutor:
  - Chintan Shah
  - chintan.shah@tum.de
  - Room: 03.09.059
  - Office hours: Wed 11:30–12:30
- Room: 00.08.038
- Time: Tue 14:14–15:45

Assessment

- In order to pass the module you need to
  1. pass an exam, and
  2. obtain at least 40% of the points in the assignment sheets.

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  - there will be no sheet be graded. there will be a homework where if there is a.
  - Answers should be given in English. but if you want it also be solved.

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- ▶ Foundations
  - ▶ Machine models
  - ▶ Efficiency measures
  - ▶ Asymptotic notation
  - ▶ Recursion

- ▶ Higher Data Structures
  - ▶ Search trees
  - ▶ Hashing
  - ▶ Priority queues
  - ▶ Union/Find data structures

- ▶ Cuts/Flows

- ▶ Matchings

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2 Literatur I

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📄 Donald E. Knuth:
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