

Part I

Organizational Matters

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- ▶ Modul: IN2003

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- ▶ Modul: IN2003
- ▶ Name: “Efficient Algorithms and Data Structures”
“Effiziente Algorithmen und Datenstrukturen”

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 - ▶ 4 SWS
Mon 10:00–12:00 (Room Interim2)
Fri 10:00–12:00 (Room Interim2)

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- ▶ Webpage:
<https://www.moodle.tum.de/course/view.php?id=90411>

▶ Required knowledge:

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 - ▶ IN0001, IN0003
 - ▶ **“Introduction to Informatics 1/2”**
 - ▶ “Einführung in die Informatik 1/2”

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“Grundlagen: Algorithmen und Datenstrukturen” (GAD)

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 - ▶ IN0011
“**Basic Theoretic Informatics**”
“Einführung in die Theoretische Informatik” (THEO)

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 - ▶ IN0011
 - ▶ **“Basic Theoretic Informatics”**
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 - ▶ IN0015
 - ▶ **“Discrete Structures”**
 - ▶ “Diskrete Strukturen” (DS)

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 - ▶ IN0007
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 - ▶ IN0011
“**Basic Theoretic Informatics**”
“Einführung in die Theoretische Informatik” (THEO)
 - ▶ IN0015
“**Discrete Structures**”
“Diskrete Strukturen” (DS)
 - ▶ IN0018
“**Discrete Probability Theory**”
“Diskrete Wahrscheinlichkeitstheorie” (DWT)

The Lecturer

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1 Contents

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

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 - ▶ Priority queues
 - ▶ Union/Find data structures




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- ▶ Cuts/Flows
- ▶ Matchings

2 Literatur

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2 Literatur



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