## inf701 - Computer Science Education II

<table>
<thead>
<tr>
<th>Module name</th>
<th>Computer Science Education II</th>
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<tbody>
<tr>
<td><strong>Module code</strong></td>
<td>inf701</td>
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<tr>
<td><strong>ECTS credit points</strong></td>
<td>6.0 KP</td>
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<tr>
<td><strong>Workload</strong></td>
<td>180 h</td>
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<tr>
<td><strong>Used in degree programmes</strong></td>
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<tr>
<td></td>
<td>Master of Education Programme (Gymnasium) Computing Science &gt; Mastermodule</td>
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<td></td>
<td>Master of Education Programme (Hauptschule and Realschule) Computing Science &gt; Mastermodule</td>
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<td>Master's Programme Computing Science &gt; Mastermodule</td>
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### Contact person

- **module responsibility**
  - Ira Diethelm
  - Die im Modul Lehrenden
- **authorized examiners**
  - Ira Diethelm
  - Die im Modul Lehrenden

### Prerequisites

### Skills to be acquired in this module

#### Professional competence

- The students:
  - (re-)construct the knowledge of computer science by the method of didactical reduction
  - differentiate the development of computer science and evaluate this development with current trends for class
  - select computer science education approaches for lesson planning, organisation and implementation

#### Methodological competence

- The students:
  - (re-)construct core concepts of lesson planning for computer science education requirements

#### Social competence

- The students:
  - present self-developed lesson plans and lesson materials
  - discuss lesson plans regarding computer science education concepts
  - accept opinions and criticism
  - provide constructive feedback

#### Self-competence

- The students:
  - adapt computer science education concepts for lesson planning
  - reflect on their self-perception with regard to the conception of computer science education
**Module contents**  
The lecture will focus on the requirements and challenges of computer science education in grammar school (German: Gymnasium). Main focus:

- Didactical (re-)construction of computer science knowledge, especially its didactical reduction
- Didactical categorisation of computer science and the development, importance and evaluation of computer science in school
- Scheduling, organisation and implementation of computer science in class

**Recommended reading**

- Further literature will be announced in the lecture.

**Links**

**Language of instruction**  
German

**Duration (semesters)**  
1 semester

**Module frequency**  
jährlich

**Module capacity**  
Unlimited

**Module level**  
AS (Akzentsetzung / Accentuation)

**Modulart**  
je nach Studiengang Pflicht oder Wahlpflicht

**Lern-/Lehrform / Type of program**  
V+Ü

**Vorkenntnisse / Previous knowledge**

**Examination**  
**Examination periods**  
End of lecture period

**Type of examination**  
Exercise and und 1 seminar paper or 1 oral exam

**Course type**  
**Comment**  
**SWS**  
**Course frequency**  
**Workload attendance**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Lecture</td>
<td></td>
<td>2</td>
<td>WinSem</td>
<td>28 h</td>
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<tr>
<td>Exercises</td>
<td></td>
<td>2</td>
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**Total attendance time for module**  
56 h