### Learning Outcomes

On successful completion, students will be able to:

- critically read and evaluate scientific papers
- work independently to gain an understanding of recently published results and the methods and proofs behind
- communicate the central ideas to non-experts and discuss the value of the presented findings
- present a current algorithmic topic in oral and written form to a group of non-experts

### Content

The seminar uses recent publications in scientific conferences and journals, focusing on algorithms and complexity. The current topic will be announced on the website of the research group algorithmics and complexity theory (http://www.akt.tu-berlin.de/menue/teaching/).

### Module Components

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Type</th>
<th>Number</th>
<th>Cycle</th>
<th>SWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Research in Algorithms and Complexity</td>
<td>SEM</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Workload and Credit Points

<table>
<thead>
<tr>
<th>Current Research in Algorithms and Complexity (Seminar)</th>
<th>Multiplier</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Präsenzzeit</td>
<td>15.0</td>
<td>2.0h</td>
<td>30.0h</td>
</tr>
<tr>
<td>Vor-/Nachbereitung</td>
<td>15.0</td>
<td>4.0h</td>
<td>60.0h</td>
</tr>
</tbody>
</table>

The Workload of the module sums up to 90.0 Hours. Therefore the module contains 3 Credits.

### Description of Teaching and Learning Methods

Classic seminar with talks by the participants and accompanying handouts (2-4 pages), where central ideas and methods presented in the talk are summarized. We follow typical conference talk style.

### Requirements for participation and examination

Desirable prerequisites for participation in the courses:
Further knowledge on algorithms and complexity

Mandatory requirements for the module test application:
No information

### Module completion

<table>
<thead>
<tr>
<th>Grading:</th>
<th>Type of exam:</th>
<th>Language:</th>
</tr>
</thead>
<tbody>
<tr>
<td>graded</td>
<td>Portfolio examination</td>
<td>English</td>
</tr>
</tbody>
</table>

Grading scale:
This exam uses its own grading scale (see test description).

Test description:
According to §47 (2) AllgStuPO the grade will be calculated applying grading key 1 of Fakultät IV, it may however be altered in favour of the students.

<table>
<thead>
<tr>
<th>Test elements</th>
<th>Categorie</th>
<th>Duration/Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ergebnisprüfung) handout</td>
<td>written</td>
<td>30</td>
</tr>
<tr>
<td>(Ergebnisprüfung) talk</td>
<td>oral</td>
<td>70</td>
</tr>
</tbody>
</table>
Duration of the Module
This module can be completed in 1 semesters.

Maximum Number of Participants
This module is limited to maximum capacity of 12

Registration Procedures
http://www.akt.tu-berlin.de/menue/teaching/

Recommended reading, Lecture notes
Lecture notes: unavailable
Electronical lecture notes: unavailable

Assigned Degree Programs
This module is used in the following modulelists:

- Computer Engineering (Master of Science)
  - StuPO 2015
    - Modulisten der Semester: SS 2017 WS 2017/18

- Computer Science (Informatik) (Master of Science)
  - StuPO 2015
    - Modulisten der Semester: SS 2017 WS 2017/18

- Elektrotechnik (Master of Science)
  - StuPO 2015
    - Modulisten der Semester: SS 2017 WS 2017/18

- Informatik (Master of Science)
  - MSc Informatik PO 2013
    - Modulisten der Semester: SS 2017 WS 2017/18

- Technische Informatik (Master of Science)
  - StuPO 2013
    - Modulisten der Semester: SS 2017 WS 2017/18

- Wirtschaftsinformatik / Information Systems Management (Master of Science)
  - StuPO 2013
    - Modulisten der Semester: SS 2017 WS 2017/18
  - StuPO 2017
    - Modulisten der Semester: WS 2017/18

- Wirtschaftsingenieurwesen (Master of Science)
  - StuPO 2015
    - Modulisten der Semester: WS 2017/18 SS 2018

Miscellaneous
This course is not offered regularly, you will find detailed information on our website: http://www.akt.tu-berlin.de/menue/teaching/