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, focussing 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

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. Therefor 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

Grading: Type of exam: Language:
graded Portfolio examination English

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>Category</th>
<th>Duration/Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ergebnisprüfung) handout</td>
<td>written</td>
<td>5-10 pp</td>
</tr>
<tr>
<td>(Ergebnisprüfung) talk</td>
<td>oral</td>
<td>45 min</td>
</tr>
</tbody>
</table>
Duration of the Module
This module can be completed in one semester.

Maximum Number of Participants
The maximum capacity of students is 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

- **Computer Science (Informatik) (Master of Science)**
  - StuPO 2015

- **Elektrotechnik (Master of Science)**
  - StuPO 2015

- **Informatik (Master of Science)**
  - MSc Informatik PO 2013

- **Technische Informatik (Master of Science)**
  - StuPO 2013

- **Wirtschaftsinformatik / Information Systems Management (Master of Science)**
  - StuPO 2013

- **Wirtschaftsinformatik / Information Systems Management (Master of Science)**
  - StuPO 2017

- **Wirtschaftsingenieurwesen (Master of Science)**
  - StuPO 2015

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