Research Colloquium on Algorithms and Complexity

Module title: Research Colloquium on Algorithms and Complexity

Credits: 3
Responsible person: Niedermeier, Rolf

Office: TEL 5-1
Contact person: Thielcke, Christlinde

Display language: Englisch
E-mail address: lehre@akt.tu-berlin.de

Learning Outcomes
Participants of this module have learned how to critically read and evaluate scientific papers. They are able to work independently to gain an understanding of current research results and the methods and proofs behind. They can communicate the central ideas behind and discuss the value of the presented findings. They know about the key features of good oral presentations and the preparation of a corresponding handout (2-4 pages).

Content
In this seminar recent research of our group and special invited guests is presented. The main topics arise from algorithms, complexity, and corresponding applications. The seminar is an excellent opportunity for advanced students to get in touch with current topics in our research field, or to present their own results in this context.

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>Research Colloquium on Algorithms and Complexity</td>
<td>SEM</td>
<td>0434 L 230</td>
<td>WS/SS</td>
<td>2</td>
</tr>
</tbody>
</table>

Workload and Credit Points

<table>
<thead>
<tr>
<th>Research Colloquium on 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>
<tr>
<td></td>
<td></td>
<td></td>
<td>90.0h</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 conference style talks. Participating students have to write a handout (2-4 pages), where central ideas and methods presented in the talk are summarized.

Requirements for participation and examination
Desirable prerequisites for participation in the courses:
a) obligatory: Bachelor in Computer Science, Technical Computer Science, or Mathematics
b) desirable: Further knowledge on algorithms and complexity

Mandatory requirements for the module test application:
No information

Module completion
Grading: graded
Type of exam: Portfolio examination
Language: 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>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 one semester.

Maximum Number of Participants
The maximum capacity of students is 12

Registration Procedures
Please register at QISPOS or directly at the examination office.

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

Recommended literature:

Recommended Reading:
The participants are asked to research on their own in order to contribute to the seminar.

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

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Modulelist:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Engineering (Master of Science)</td>
<td>SS 2017 WS 2017/18 SS 2018</td>
</tr>
<tr>
<td>Computer Science (Informatik) (Master of Science)</td>
<td>SS 2017 WS 2017/18 SS 2018</td>
</tr>
<tr>
<td>Elektrotechnik (Master of Science)</td>
<td>SS 2017 WS 2017/18 SS 2018</td>
</tr>
<tr>
<td>Informatik (Master of Science)</td>
<td>MSc Informatik PO 2013</td>
</tr>
</tbody>
</table>

Miscellaneous
No information