Name of Module: Algorithmic Research in Teams		CP (ECTS): 9	Short Name: MINF-VS-ART.S13
Person Responsible for Module: Prof. Rolf Niedermeier	Secretariat: TEL 5-1	e-mail address: lehre@akt.tu-berlin.de	
Module Description			

1. Qualification Aims

Participants of this module know how to approach concrete problems in algorithmic research. They can present- in written and oral form-their research findings in a concise and understandable manner. They are able to judge and classify current research results as well as their own findings.

The course is **principally** designed to impart
technical skills   **40%**, method skills   **40%** system skills   **0%** social skills   **20%**

2. Content

The research project addresses recent selected research publications. Typically, the research topics will feature questions in algorithmic research, e.g., data clustering, computational biology, data mining, graph algorithms with applications. The project will contain the following parts of algorithmic research:

Reading and understanding of previous research contributions.
Identification of open questions and potential improvements.
Active participation in the research process together with other participants and the advisors.
Development of technical writing skills in English.
Submitting a small paper for publication in an international venue.

The participants will work in groups of size two to four in close cooperation with the advisors.

3. Module Components

Course Name	Course type	Weekly hours per semester	CPs (acc. to ECTS)	Compulsory(C) / Compulsory Elective (CE)	Semester (WiSe / SoSe)
Algorithmic Research in Teams	PJ	6	9	C	SoSe

4. Description of Teaching and Learning Methods

The algorithmic research project will feature
joint informal research discussions,
presentations of research results by the participants, and
drafting of an english manuscript with the help of the advisors.

5. Prerequisites for Participation

a) obligatory: Basic knowledge of algorithms

6. Target Group of Module

Computer Science Master with focus "Reliable Systems"
Computer Science Master with focus "Intelligent Systems"
Computer Science Diploma
Computer Engineering Master with focus "Software Engineering"
Computer Engineering Master with focus "Information Systems"
Computer Engineering Diploma

7. Work Requirements and Credit Points

Course Type	Calculation Factor	Hours
Presence during the project	15x6	90
Independent reading & research, drafting of manuscripts:		180
Total		270

8. Module Examination and Grading Procedures
Prüfungsäquivalente Studienleistung (PÄS): 50 % oral presentations in the course (cannot be compensated) 50 % manuscript (cannot be compensated)

9. Duration of Module
1 semester

10. Number of Participants
Max. 9 participants

11. Enrolment Procedures
http://www.akt.tu-berlin.de/

12. Recommended Reading, Lecture Notes
Lecture notes available in paper form?   yes Ÿ   no **X** Lecture notes available in electronic form?   yes Ÿ   no **X** The scientific literature relevant to the project will be handed out during the course.

13. Other Information