

Software Systems Engineering

Introductory Meeting WS 2009/2010

Prof. Gerhard Lakemeyer, Ph.D.

Dipl.-Inform. Stefan Schiffer, Patrick Selders

RWTH Aachen University
Knowledge-Based Systems Group
(Lehr- und Forschungsgebiet Informatik 5)

12. Oktober 2009

Master Programme Coordination

- Head: Prof. Gerhard Lakemeyer, Ph.D.
Office hours: Thursday, 13h00 – 14h00
- Course guidance:
Dipl.-Inform. Stefan Schiffer
Patrick Selders (student assistant)
 - Office hours: by appointment
 - Mail: msc-pgm@informatik.rwth-aachen.de
- Internet
 - **Website:** <http://dbis.rwth-aachen.de/msc/>
new version soon: <http://dbis.rwth-aachen.de/SSE/>
 - **Mailinglist:**
please subscribe to mailing list `msc2009` at
[.../maillist/msc2009/msc2009-index.html](http://maillist/msc2009/msc2009-index.html)

Welcome to the Web pages of the
International Master Programme Software Systems Engineering
offered by the Department of Computer Science

[How to apply to the programme!?](#)

[RWTH Aachen Application Portal](#)

This two year Master programme is primarily intended for international students holding a Bachelor degree in Computer Science or a closely related field from an internationally recognized university. The programme is offered in **English and German**. For more information on the programme and how to apply, please, follow the links below. General information about the Department of Computer Science at RWTH Aachen can be found [here](#).

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Course wide course information system [CAMPOS](#) is online!

Any questions? - Mail us: msc@at.klog.dot.rwth-aachen DOT de

New Website (available shortly)

<http://dbis.rwth-aachen.de/SSE/>



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Master Programme Software Systems Engineering

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September 2009

Su	Mo	Tu	We	Th	Fr	Sa
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
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27	28	29	30			

Ralf Klamma / Patrick Seiders / Daniel Dünnebacke / Holger Janßen last modified: 26.06.2009

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RWTH AACHEN

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Your Advisor

- Academic Advisors
 - faculty members of the department
 - assigned to each student by end of October
 - will advise you regarding the courses you should take
 - will possibly supervise your thesis
- Change of Advisors
 - you may decide to change your advisor
 - depends on the area of specialization you choose
 - your new advisor has to agree
 - please contact msc-pgm@informatik.rwth-aachen.de
 - there's no deadline for a change

Practical Things to Do ...

- Get a computer account
 - *Rechnerbetrieb Informatik* (RBI)
 - user administration office, room 4U16a, Basement, E1
 - www-rbi.informatik.rwth-aachen.de
 - office hours:
 - Mo: 9am - 12am, 1pm - 7 pm
 - Tu-Th: 9am - 12am, 1pm - 9 pm
 - Fr: 9am - 12am, 1pm - 6 pm
- Send your current mail address to msc-pgm (if it has changed since application)
- Subscribe to the [mailing list msc2009!](#)

SSE: The Programme at a Glance

What is required?

(Duration: 2 years)

- **Practical** Computer Science (≥ 20 credits)
 ≥ 3 courses (≥ 10 hs of lectures, e.g. 4+4+2hs)
- **Theoretical** Computer Science (≥ 20 credits)
 ≥ 3 courses (≥ 10 hs of lectures, e.g. 4+4+2hs)
- Area of **Specialization** (≥ 24 credits)
 ≥ 3 courses (≥ 12 hs of lectures, e.g. 4+4+4hs)
- Seminar in your area of specialization (4 credits, 2hs)
- Project Management (4cr/2hs of lectures + 8cr/4hs lab)
- Master Thesis (30 credits)
- Free Choice (10 credits):
 - english-speaking: German Language classes (ZDaF)
 - german-speaking: any lecture/seminar/lab/course (with grade!)

Sample Schedule

Fall	Spring	Fall	Spring
4 courses (4+4+4+2 h)	3 courses (4+4+4 h) Seminar (2 h)	2 courses (4+4 h) Proj.Man. +Lab	Master Thesis

Chairs/Teaching and Research Areas

- Overview:
www.informatik.rwth-aachen.de/Lehreinheiten/index_eng.php
- 12 Chairs
 - one “chair professor” each (head of department)
 - additional professors (teaching and research areas)
- Details on chairs:
 - Follow links on overview site
 - Switch the language, if necessary
 - Check the “teaching” and “research” links

[Homepage](#)[Home](#)[Workshops](#)[Development](#)[Research](#)[Study and Teaching](#)[Information for High School](#)[Students](#)[Services](#)[About Us](#)[Contact](#)[Helpdesk](#)[Search](#)[Login/Join](#)**Chairs****Computer Science 1**

- Algorithms and Complexity
Prof. Dr. Bernhard Wolfing
- Theoretical Computer Science
Prof. Dr. Peter Rossmanith

Computer Science 2

- Software Modeling and Verification
Prof. Dr. Ina Schabert
- Programming Languages and Verification
Prof. Dr. Jürgen Giesl
- Theory of Hybrid Systems
Prof. Dr. Eike Bartel

Computer Science 3

- Software Engineering
Prof. Dr. Manfred Hög, Prof. Dr. Bernhard Rumpe
- Software Construction
Prof. Dr. Hans-Ludwig

Computer Science 4

- Communication Systems
Prof. Dr. Otto Spaniol
- Distributed Systems
Prof. Dr. Klaus Wehrle
- Mobile Network Performance
Prof. Dr. James Gross

Computer Science 5

- Information Systems and Database Technology
Prof. Dr. Matthias Jarke
- Knowledge-Based Systems
Prof. Gerdert Lakenmeyer, Ph.D.
- Fraunhofer Institute for Applied Information Technology (FIT)
Prof. Dr. Thomas Berlage, Prof. Wolfgang Pfütz, Ph.D., Prof. Dr. Thomas Rosa

Computer Science 6

- Human Language Technology and Pattern Recognition
Prof. Dr. Hermann Ney

Computer Science 7

- Theory of Discrete Systems
Prof. Dr. Dr.h.c. Wolfgang Thomas
- Mathematical Foundations of Computer Science
Prof. Dr. Eike Gröbe

Computer Science 8

- Computer Graphics and Multimedia
Prof. Dr. Leif Hobbie
- Mobile Multimedia Processing
Prof. Dr. Berndt Lohse

Computer Science 9

- Data Management and Data Exploration
Prof. Dr. Thomas Seidl
- Computer-Sided Learning
Prof. Dr. Udo Schödl

Computer Science 10

- Media Computing
Prof. Dr. Jörn Böckem

Computer Science 11

- Software for Embedded Systems
Prof. Dr. Stefan Kowalewski

Computer Science 12

- Scientific Computing
Prof. Christian Bischof, Ph.D.
- Software and Tools for Computational Engineering
Prof. Dr. Uwe Naumann
- Performance Analysis of Parallel Applications
Prof. Dr. Felix Wolf
- Virtual Reality Group
Prof. Dr. Tordsten Kullen

LMIC

- IT-Security
Prof. Dr. Ulrike Meyer

ACES

- Automation and High Performance Computing
Prof. Paolo Bortolan, Ph.D.

Area of Specialization

- During the programme, you have to choose an area of specialization
- Possible areas of specialization coincide essentially with the research areas of the faculty members
- You have to clarify with your academic advisor which courses belong to your area of specialization
- You may change your academic advisor according to the area of specialization you choose

Courses Offered

- Practical Courses
- Theoretical Courses
- Information on Courses
 - CAMPUS (information system of RWTH)
www.campus.rwth-aachen.de/rwth/all_en/groups.asp
 - Nichtkonsekutive/internationale Masterstudiengänge (M.Sc.)
 - Software Systems Engineering (M.Sc.)
 - For German-speaking students:
 - Diplomstudiengänge
 - Informatik, Hauptstudium
 - Detailed descriptions on the chairs' websites
 - Some course in Electrical Engineering



Studiengänge
Organisations- und
Lehrereinheiten
Hörsäle
Prüfungsordnungen
Suchen
Login für
Mitarbeiter
CampusOffice für
Studierende
Hardwareportal
Kooperationsdaten-
bank (DACOR)

Version 3.15.116

CAS Campus



So, 11.10.2009

Impressum Disclaimer

Theoretical Computer Science ⓘ
Practical Computer Science ⓘ
Areas of Specialization ⓘ
Embedded Systems
Automata theory and logic in CS
Complexity and Algorithm Theory
Computer Based Cooperative Work
Computer Based Learning
Computergraphics and Multimedia
Data Management and Exploration
Dependable Distributed Systems
Distributed Systems
Human Language Technology and Pattern Re
Information Systems and Database Technol
Knowledge-Based Systems
Logic and complexity theory
Media Computing and Interactive Systems
Programming Languages and Verification
Programming Languages and Analysis
[DE: Scientific Computing]
Software Construction
[DE: Software Engineering]
Theoretical Computer Science
Visual Knowledge Management
Seminar ⓘ
Lab ⓘ
Non computer science related studies ⓘ

[overview](#)

Aktuelles:

- **NEU: Ab dem Sommersemester 2009** können die Angaben zur [studentischen Lehrveranstaltungsbeurteilung](#) in CAMPUS über die Rolle Dozent gepflegt werden.
- **CAMPUS Schulungstermine** finden Sie im [Veranstaltungsverzeichnis](#) des Rechen- und Kommunikationszentrum der RWTH Aachen.
- **Sommersemester 2010:** Das SS 2010 ist seit 23.09.2009 für Dozenten und Fachstudienberater zur Planung freigegeben. Wichtige Termine der Planungsphase sind:
 - **01. Dezember 2009:** Stichtag für Dozenten zur Bestätigung von Veranstaltungen. Termine unbestätigter Veranstaltungen in allen zentral verwalteten Hörsälen werden gelöscht.
 - **15. Januar 2010:** Stichtag für Dozenten zur Veranstaltungsbearbeitung für gedruckte Verzeichnisse.
 - **22. Januar 2010:** Stichtag für Fachstudienberater zur Strukturierung und Sortierung der Studiengänge für gedruckte Verzeichnisse.
 - **25. Januar 2010:** Offizielle Freischaltung des Planungssemesters.

Information about Exams

- For all courses (practical, theoretical, area of spec.):
 - exam at the end of the course
 - either oral (30 min) or written (60 – 90 min)
 - admission to exams may have prerequisites (e.g. 50 % of homework assignments)
- Registration for exams
 - you have to register for each exam
 - either via internet (CAMPUS-Office)
tentative dates: between Nov., 24 and Dec., 16
 - or personally at the Central Examination Office (ZPA)
tentative date: Dec., 11, 10h00 – 12h30, room 18
 - check final dates at

<http://www.rwth-aachen.de/go/id/rbg/>

Central Examination Office (ZPA)

- Location
 - in the **Super C** building (Templergraben 57)
 - registration officers in **room 2.25**
 - Ms. Cüpper, Ms. Kutsch
Mo,Di,Do,Fr: 10.00 - 12.30; Mi: 13.00 - 16.00
- Things to do when registering personally
 - present your student ID
 - tell the name of the Master Programme
(i.e. Software Systems Engineering)
 - tell the title of the course and the name of the instructor

Master Thesis

- Usually during the final six months of the programme
- Before:
 - Topic is usually chosen from your area of specialization
 - Registration is necessary
 - Prerequisites: successful completion of
 - theoretical and practical area
 - seminar and project management (lecture and lab)
- After:
 - Thesis will be graded by your advisor and another faculty member
 - You have to present and defend your thesis within an oral

Scholarships for the 2nd SSE year

- The grant
 - 300 Euros per month for 3rd and 4th semester
 - limitations:
 - no other scholarships
 - additional work not more than 10 hours per week
- Personal requirements
 - enrolled in a master programme at RWTH Aachen
 - bachelor degree grading equals German “very good”
 - performance in first two semesters far above average
 - ZDaF certificate after first two semesters of programme
- Will be announced

Prolongation of residence permit

- If you cannot finalize programme in time, it is possible to prolongate your residence permit
- Procedure:
 - get your intermediate transcripts at the central examination office
 - get a certificate at the international office
 - take certificate to aliens department of local authorities
- Further information:
 - Ulrike Brands
 - ulrike.brands@zhv.rwth-aachen.de

Transfer of Credits

- Transfer credits to speed up your studies
- What can be transferred:
 - credits from your bachelor and master programmes so far
 - programmes should have taken **equal or more than four years**
 - courses should be similar to courses in the SSE programme
 - only for practical or theoretical computer science
(**not** for area of specialization)
 - maximum: 20 credits
 - grades of transferred courses have to be better than German 3.0
- Deadline: end of November (we will send detailed instructions)
- We need:
 - letter containing which courses are to be transferred
(incl. your name, email, immatriculation #)
 - copy of the transcripts of your previous studies
 - grading scheme

Software Systems Engineering

Questions?

