Software Systems Engineering
Introductory Meeting WS 2010/2011

Prof. Gerhard Lakemeyer, Ph.D.

Dipl.-Inform. Stefan Schiffer, Patrick Selders

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

October 11, 2010
1 Organization
2 Academic Advisor
3 Practical Things
4 Structure
5 Courses & CAMPUS
6 Exams
7 Thesis
8 Scholarships
9 Residence Permit
10 Transfer of Credits
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/SSE/](http://dbis.rwth-aachen.de/SSE/)
  - **Mailinglist:** please subscribe to mailing list **sse2010** at ...
    /[mailing-lists/sse20XX](.../mailing-lists/sse20XX)
Master Programme Software Systems Engineering

Welcome page with recent news (if available)

Welcome to the web pages of the international Master Programme Software Systems Engineering offered by the Department of Computer Science at RWTH Aachen University.

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**.

For more information on the programme and how to apply, please follow the links to the left. General information about the Department of Computer Science at RWTH Aachen University can be found [here](#).

News

The **Introductory Meeting** for new Software Systems Engineering students will be held on Monday, October 11, 10:00 a.m.

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Send this — Print this
Academic Advisor

- Your Advisor
  - 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
  - may depend on the 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
  - http://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 sse2010!
New Structure in SSE

- Starting from this winter term (WS 2010/2011) SSE programme has a new structure
- You are “MPO2010” (master exam. rules 2010) let people know which version is yours! especially ZPA, student service, and other administr.
- (old structure is referred to as “MPO2005”)
# SSE: The Programme at a Glance

<table>
<thead>
<tr>
<th>2 years</th>
<th>1st Sem.</th>
<th>2nd Sem.</th>
<th>3rd Sem.</th>
<th>4th Sem.</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 35</td>
<td>0 – 35</td>
<td>0 – 35</td>
<td>0 – 35</td>
<td>Software Engineering</td>
<td>30</td>
</tr>
<tr>
<td>0 – 35</td>
<td>0 – 35</td>
<td>0 – 35</td>
<td>0 – 35</td>
<td>30</td>
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<tr>
<td>0 – 35</td>
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<td>30</td>
<td></td>
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<tr>
<td>ECTS</td>
<td>ECTS</td>
<td>ECTS</td>
<td>ECTS</td>
<td>ECTS</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table: Structure of the SSE Programme
SSE: The Programme at a Glance

What is required? (2 years = a total of 120 ECTS)

<table>
<thead>
<tr>
<th>Cover courses from five areas:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Computer Science</td>
<td>12 – 35 ECTS</td>
</tr>
<tr>
<td>Communication</td>
<td>0 – 35 ECTS</td>
</tr>
<tr>
<td>Data &amp; Information Management</td>
<td>0 – 35 ECTS</td>
</tr>
<tr>
<td>Applied Computer Science</td>
<td>0 – 35 ECTS</td>
</tr>
<tr>
<td>Software Engineering</td>
<td>16 – 35 ECTS</td>
</tr>
<tr>
<td>mandatory Lecture Software Project Management (4 ECTS)</td>
<td></td>
</tr>
</tbody>
</table>
SSE: The Programme at a Glance

- **Courses** 90 ECTS
  - Lectures in five areas 68 ECTS
  - two Seminars $2 \times 4 = 8$ ECTS
  - one Lab Course 7 ECTS
  - Seminars and Lab must be from at least two different areas
  - depth oral colloquium ("Schwerpunktkolloquium") 3 ECTS
    on 2-3 connected courses (often from one area)
    ask examiner (professors) for possible combinations
  - German Language Course 4 ECTS
    for german-speaking students: replaceable by additional lecture/seminar/lab/course (w/ grade!)

- **Master’s Thesis** 30 ECTS
## Sample Schedule

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 courses</td>
<td>3 courses</td>
<td>3 courses</td>
<td>Master’s Thesis</td>
</tr>
<tr>
<td>3×V3Ü2 [3×6ECTS]</td>
<td>3×V3Ü2 [3×6ECTS]</td>
<td>3×V3Ü2 [3×6ECTS]</td>
<td>[30ECTS]</td>
</tr>
<tr>
<td>+ V2Ü1 [4ECTS]</td>
<td>Proj. Mgmt.</td>
<td>Lab Course</td>
<td>Depth Oral Colloquium</td>
</tr>
<tr>
<td>+ V3Ü1 [6ECTS]</td>
<td>V2Ü1 [4ECTS]</td>
<td>4h [7ECTS]</td>
<td>[3ECTS]</td>
</tr>
<tr>
<td></td>
<td>Seminar 1</td>
<td>Seminar 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2h [4ECTS]</td>
<td>2h [4ECTS]</td>
<td></td>
</tr>
<tr>
<td>German-I</td>
<td>German-II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2h [2ECTS]</td>
<td>2h [2ECTS]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chairs/Teaching and Research Areas

- Overview:
  
  http://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
Courses Offered

- Filed in one of the five areas
- Information on Courses
  - CAMPUS (information system of RWTH)
    - http://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
    - Master of Science → Informatik (M.Sc.) → ...
  - Detailed descriptions also on the chairs’ websites
  - Some courses in Electrical Engineering
  - Introductory Presentation at beginning of each semester
Lectures during WS 2010/2011

DE: Diplomstudiengänge (D)
DE: Magisterstudiengänge (M.A.)
DE: Lehramtsstudiengänge (GYM+GS,BK,SII)
DE: Medizinische Studiengänge (St)
DE: Bachelor of Arts (B.A.)
DE: Bachelor of Science (B.Sc.)
DE: Master of Arts (M.A.)
DE: Master of Science (M.Sc.)

DE: Nichtkonsekutive/internationale Masterstudiengänge (M.Sc.)
DE: Aufbau- (A), Ergänzungs- (E) und Zusatzstudiengänge (Z)
DE: Prüfungen (Zentrales Prüfungsamt)
DE: Sprachenzentrum
DE: Interdisziplinäres Lehrgangsbot
DE: Studierende unterrichten Studierende
DE: Lehrerfortbildungsverzeichnis
DE: Schülervorlesungsverzeichnis
DE: Seniorenstudium
DE: CAMPUS-Studiengang

Aktuelles:

- CAMPUS Schulungstermine finden Sie im Veranstaltungsverzeichnis des Rechen- und Kommunikationszentrum der RWTH Aachen.
- Sommersemester 2011: Das SS 2011 ist seit 29.9.2010 für Dozenten und Fachstudienberater zur Planung freigegeben. Wichtige Termine der Planungsphase sind:
Automotive Systems Engineering (M.Sc.)
Biomedical Engineering (M.Sc.)
Chemical Engineering (M.Sc.)
Combustion Engines (M.Sc.)
Communications Engineering (M.Sc.)
Computer Engineering (M.Sc.)
Electrical Power Engineering (M.Sc.)
Energy Engineering (M.Sc.)
Media Informatics (M.Sc.)
Metallurgical Engineering (M.Sc.)
Production Engineering (M.Sc.)
Production Systems Engineering (M.Sc.)
Software Systems Engineering (M.Sc.)
Textile Engineering (M.Sc.)

Aktuelles:

- **CAMPUS Schulungstermine** finden Sie im [Veranstaltungsverzeichnis](#) des Rechen- und Kommunikationszentrum der RWTH Aachen.
- **Sommersemester 2011**: Das SS 2011 ist seit 29.9.2010 für Dozenten und Fachstudienberater zur Planung freigegeben. Wichtige Termine der Planungsphase sind:
The Master Programme in **Software Systems Engineering** focuses on the design and implementation of complex software systems, including their embedding in technical and socio-technical systems. It is these latter aspects that distinguish this programme from other master programmes in Computer Science. This two-year Master programme is primarily intended for international students holding a Bachelor degree in Computer Science or a closely related field.

**Link:** [http://dbis.rwth-aachen.de/SSE/](http://dbis.rwth-aachen.de/SSE/)

**E-Mail:** msc-pgm@informatik.rwth-aachen.de

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**Software Systems Engineering (M.Sc.)**

- Theoretical Computer Science
- Communication
- Data and Information Management
- Applied Computer Science
- Software Engineering

**[MPO2005] Theoretical Computer Science**

**[MPO2005] Practical Computer Science**

**[MPO2005] Areas of Specialization**
- Seminar
- Lab
- Non computer science related studies

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**Aktuelles:**

- **CAMPUS Schulunstermine** finden Sie im [Veranstaltungsverzeichnis](http://www.rwth-aachen.de/de/veranstaltungen) des Rechen- und Kommunikationszentrum der RWTH Aachen.
- **Sommersemester 2011**: Das SS 2011 ist seit 29.9.2010 für Dozenten und Fachstudienberater zur Planung freigegeben. Wichtige Termine der Planungsphase sind:
Seminars & Lab Courses

- Central allocation procedure w/in Computer Science faculty
  https://www.graphics.rwth-aachen.de/apse
- takes place at end of preceding semester
  - in January for summer term
  - in June for winter term
- register and choose which seminar(s)/lab you want
  slots are being allotted thereupon
- E-Mail with instructions will be send

  http://web-info8.informatik.rwth-aachen.de/stube/Ankuendigung_zentrale_Anmeldung.pdf
Information about Exams

For all courses

- 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 needed

- you have to register for each exam via CAMPUS
  - register for “exam”-event corresp. to each course
  - usually either two dates (if written) [de: Klausur]
    or individual dates (if oral) [de: mündl. Prüfung]

- registration deadline:
  - summer: next to last Friday in May
  - winter: next to last Friday in November
- if you fail at an exam (3 tries max!)
  you will automatically be re-registered
CAMPUS-Office

- web-based study organizer
  - https://www.campus.rwth-aachen.de/office
  - login with your matriculation number and password

- features
  - browse courses in CAMPUS
  - timetable of your courses
  - list of registered exams
  - results of exams taken so far
  - online-access to central examination office
  - online-access to student secretary
  - ...

October 11, 2010
settings

CAMPUS

your (course) registrations
timetable
weekly view

Central Examination Office (ZPA)
registered exams
mark sheet
certificates
exams (de-)registration

student secretary
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 going to ZPA**
  - present your student ID
  - tell the name of the Master Programme (i.e. Software Systems Engineering)
  - explain what your request is about
Master’s Thesis

- Usually during the final six months of the programme
- Try to find a topic a bit earlier (orientation phase)

**Before:**
- Topic is usually chosen from an area you want to put emphasize in (i.e., you are very interested in)
- Registration is necessary
- Prerequisites: successful completion of 60 ECTS

**After:**
- Thesis will be graded by your first supervisor and another faculty member (second supervisor)
- You have to present and defend your thesis within an oral (makes up 3 ECTS from the total 30 ECTS)
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 (german language) 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 of 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
  - will be filed according to SSE-Programme structure
  - maximum: 30 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 you want to be transferred
    (incl. your name, email, immatriculation #, prioritization)
  - copy of the transcripts of your previous studies
  - (official) description of grading scheme
Software Systems Engineering

Questions?