



Universität Stuttgart



Stefanie Anstein
student advisor

WELCOME
to the program
Master of Science
Computer Science

March 2023

Overview

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Who is who?

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General responsibilities

- **Dean of the study programs: Prof. Dr. Andrés Bruhn**
Responsible for the organization of all study programs of the department
<https://www.vis.uni-stuttgart.de/en/institute/team/Bruhn-00001>



- **Head of the examination board of the program M.Sc. Computer Science: Prof. Dr. Melanie Herschel**
Responsible for deadline extensions, registration withdrawals, etc.
<https://www.f05.uni-stuttgart.de/fakultaet/personen/Herschel>



In case of any organizational questions ...

- **Dr. Stefanie Anstein:**

Student Advisor / Co-program manager

Pfaffenwaldring 5b, office 1.006

<https://www.ims.uni-stuttgart.de/institut/team/Anstein-00002/stefanie.anstein@ims.uni-stuttgart.de>



- **Dr. Katrin Schneider:**

Program manager

Universitätsstr. 38, office 1.416

www.f05.uni-stuttgart.de/fakultaet/personen/Schneider-00001/katrin.schneider@informatik.uni-stuttgart.de



In case of any general questions ...

... please ask:

- the coordinators of the International Service Point (ISP)
Meta Geisbüsch, LL.M. & Laura Busch, M.A.
 - support and contact point for the faculty's international students
 - promoting further internationalization at our faculty
 - events & networking activities for and with international students
 - E-Mail: internationalstudents@f05.uni-stuttgart.de
 - +49 (0)711 68567926 (Meta) / +49 (0)711 685 67277 (Laura)
 - in person during their office hours in Pfaffenwaldring 47, Room 4.270 or online (on appointment)
- stay informed via
www.f05.uni-stuttgart.de/en/faculty/international-students
and LinkedIn



Your academic advisor

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Your academic advisor ...

- can support you in planning your individual curriculum (via progress certificate, see <https://www.f05.uni-stuttgart.de/en/cs/students/master-programs/computer-science>)
- can help you to decide about useful combinations of modules from a great variety of modules to be chosen from
- can be assigned according to your chosen major

Please contact Stefanie (stefanie.anstein@ims.uni-stuttgart.de) if you're interested.

Progress certificate MSc Computer Science

Name:			
Matriculation number:			
Major (study profile):			
Advisor:			
Selected modules from CORE for the chosen profile (24 Credits)	Grade	Confirmation by advisor	

General plan of the program

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Study plan suggestion (flexible; you decide about the order of modules)

M.Sc. Computer Science (English), University of Stuttgart

Majors („Studienprofile“): Autonomous Systems / Service Technology and Engineering / Visual Computing

study plan suggestion (flexible)

Semester	Compulsory modules	Catalog Core* [24CP]	Catalog Extended* [12CP]	Catalog Breadth* [12CP]	Catalog Elective* [30CP]	total ECTS credit points**
1	Theoretical and Methodological Foundations of <major>*** [6CP]	Core modules worth 12CP	Extended modules worth 6CP	Breadth modules worth 6CP		30
2	Advanced Seminar Computer Science**** [3CP]	Core modules worth 6CP	Extended modules worth 6CP	Breadth modules worth 6CP	Elective modules worth 6CP	30
	Key Qualification („SQ“)**** [3CP]					
3		Core modules worth 6CP			Elective modules worth 24CP	30
4	Master's thesis [30CP]					30

*) The modules offered in the catalogs can be found in [C@MPUS](#).

**) 6CP are typically gained by 3V(lecture)+1Ü(exercise) = 4SWS/SH = 3h/week.

**) Either offered in winter or summer term.

****) To be taken in the second semester at the earliest.

Compulsory subjects

- Theoretical & Methodological Foundations of <your major> (6 CP; either offered in winter or summer term; filled with a course with a different name)
- Advanced Seminar Computer Science (3 CP; 2nd semester earliest):
 - seminar to get acquainted with research methodologies and scientific work
- Key qualification (3 CP; 2nd semester earliest):
 - obligatory for all students, free choice from large offer – registration necessary (previous to the start of the semester)

Catalog modules

- specific contents for each major – rules:
 - 24 CP from CORE
 - 12 CP from EXTENDED
 - 12 CP from BREADTH
 - 30 CP ELECTIVES
 - modules from bachelor programs can be used to a maximum of 6 CP for Extended, 6 CP for Breadth and 6 CP for Elective (in total at most 18 CP) – only if confirmed by the examination board
 - examination board can decide to include further modules in the catalogues, please send a request via S. Anstein

Master thesis

- you can register your thesis once you've gained 60 CP
- duration: 6 months

Example study plan for the major AUT

MSc Computer Science (English)

Example study plan for Major Autonomous Systems in Computer Science started in a summer term

Term	Compulsory	Breadth	Core	Core	Extended	ECTS
1		Advanced Information Management OR Data Engineering 6	Reinforcement Learning 6 Knowledge Graphs 6	Machine Learning 6	Mobile Computing OR Robust System Design 6	30
2	Theoretical and Methodological Foundations of Autonomous Systems 6 Advanced Seminar 3 Key Qualifications (SQ) 3	Information Integration OR Data Warehousing, Data Mining, and OLAP 6	Probabilistic Machine Learning 6		Embedded Systems Engineering OR Design for Reliability in Advanced Technology 6	30
3	Lab Course Artificial Intelligence OR Practical Course Information Systems 6	Virtual and Augmented Reality OR Scientific Visualization 6	Deep Learning OR Detection and Pattern Recognition 6	Analyzing Software using Deep Learning OR High-dimensional data approximation and learning 6	Software Engineering for AI-Based Systems OR System and Web Security 6	30
4	Master Thesis					30

Legend

6 ECTS typically are 3 lecture hours + 1 exercise hour per week. 3 ECTS typically are 2 lecture hours or 2 seminar hours per week

Example study plan for the major STE

MSc Computer Science (English)

Example study plan for Major Service Technology and Engineering started in a summer term

Term	Compulsory	Breadth	Core	Core	Extended	ECTS
1		Machine Learning OR Reinforcement Learning	Data Engineering	Advanced Information Management	IT Service Management OR High-dimensional data approximation and learning	30
2	Theoretical and Methodological Foundations of Service Technology and Engineering	Embedded Systems Engineering OR Real-time Concepts for Embedded Systems	Information Integration	Data Warehousing, Data Mining, and OLAP	Business Process Management OR Service Management and Cloud Computing, and Evaluation	30
	Advanced Seminar					
	Key Qualifications (SQ)					
3	Practical Course Visual Computing OR Laboratory Course Artificial Intelligence	Mobile Computing OR Analyzing Software using Deep Learning	Knowledge Graphs OR Machine Perception and Learning	Security and Privacy OR System- and Web Security	High Performance Computing OR software Engineering for AI-based Systems	30
4	Master Thesis					30

Legend

6 ECTS typically are 3 lecture hours + 1 exercise hour per week. 3 ECTS typically are 2 lecture hours or 2 seminar hours per week

Example study plan for the major VC

MSc Computer Science (English)

Example study plan for Major Visual Computing started in a summer term

Term	Compulsory	Breadth	Core	Core	Extended	ECTS
1		Knowledge Graphs OR System and Web Security	Scientific Visualization	Virtual and Augmented Reality	Correspondence Problems in Computer Vision OR Machine Perception and Learning	30
2	Theoretical and Methodological Foundations of Visual Computing	Simulation Software Engineering OR Distributed Systems I	Computer Vision	Information Visualization and Visual Analytics	Practical Course Visual Computing OR Practical Course Information Visualization	30
	Advanced Seminar					
	Key Qualifications (SQ)					
3	Laboratory Course Artificial Intelligence OR High Performance Computing	Security and Privacy OR High-dimensional data approximation and learning	Mobile Computing OR IT Service Management	Detection and Pattern Recognition OR Deep Learning	Analyzing Software using Deep Learning OR Software Engineering for AI-based Systems	30
4	Master Thesis					30

Legend

6 ECTS typically are 3 lecture hours + 1 exercise hour per week. 3 ECTS typically are 2 lecture hours or 2 seminar hours per week

Exam regulations & exam/module registra- tion

Exam regulations

- binding version in German & indicative version in English:
www.student.uni-stuttgart.de/en/study-programs/Computer-Science-M.Sc-00002./?page=examinations
- lists all obligatory modules & describes restrictions for the catalog modules, states (repetition) rules, deadlines etc.
- info on extensions and exceptions etc. (for academic accommodations due to special circumstances see also www.student.uni-stuttgart.de/en/organizing-studies/disability)
- most important rules (see also handout):
 - 4 semesters = regular duration
 - max. 9 semesters (independent of visa)
 - 4 SWS/SH/SSSt = “Semesterwochenstunden” = 3h per week (2x90min) = 6 ECTS credit points
 - 1 ECTS credit point = 30h student’s time (workload and weighting for average)

Exam regulations – regarding examinations

- exams can be written or oral: PL (written/oral exam), BSL (graded course achievement), USL (ungraded course achievement)
- graded exam:
1,0 (excellent) / 1,3 / 1,7 ...– 4,0 (acceptable)
- hint: there might be some preconditions to fulfill in order to be allowed to take part in an exam, e.g. homework etc.
- you have to register for exams in C@MPUS
- you can de-register from an exam until 7 days before it takes place – later de-registration is only possible if you hand in a doctor's certificate (examination board will decide about its acceptance)
- you cannot de-register from exam repetitions

Exam regulations – regarding exam repetitions

- you can only repeat exams you have failed
- one repetition is allowed for each failed exam – no influence on the grade
- 2nd repetition is allowed only 3 times during the whole program (contact us if you're in that situation)
- repetitions have to be carried out at the next possible date of the exam (in general after the following semester) & you have to register for them

Exam registration

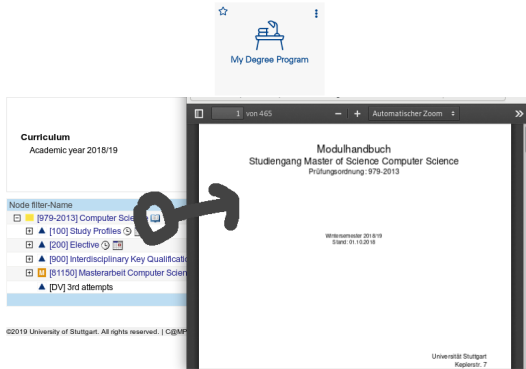
- one online registration period for binding exam registration in each semester via the C@MPUS system
- you are not allowed to attend exams without having registered during this period
- dates: `www.student.uni-stuttgart.de/en/exams/deadlines`
- hints:
 - sometimes de-registration is not possible via C@MPUS \Rightarrow contact examination board (e.g. oral exams)
 - to be sure, take a screenshot of your (de-)registrations

Module handbook

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The module handbook ...

- is a collection of all modules that belong to a program
- each module description includes an overview over contents/aims, name of the person responsible & the lecturer, CP, literature, exam ...
- can be found in the C@MPUS system:



Platforms: C@mpus and ILIAS

C@mpus is the online platform for ...

- finding the currently offered courses and their modules
 - creating a personal schedule (via **non-binding** registration for **courses**)
 - downloading certificates
 - registering exams (via **binding** registration for **modules**) and de-registering
 - getting an overview of your personal examination results (gained credit points; transcript)
-
- <http://campus.uni-stuttgart.de>
 - login (st1234567@stud-uni...) & password

ILIAS is the online platform for ...

- finding slides & further seminar/exercise information (you get linked to the courses via C@mpus; in some cases, registration is required)
- uploading exercise solutions etc.
- <https://ilias3.uni-stuttgart.de>
- login (st account) & password

The screenshot displays the ILIAS web interface. At the top, a dark header bar contains the text "Universität Stuttgart - Lehre & Lernen online". Below this is the University of Stuttgart logo. A breadcrumb trail reads "Repository » Engineering » Computer Science » Lehrveranstaltungen Sommersemester 2019". The main heading is "Lehrveranstaltungen Sommersemester 2019" with a folder icon. Below the heading are tabs for "Content" and "Info". A green box contains a notice: "Hinweis: Sowohl das Anlegen von jeglichen semester-/lehrveranstaltungsbezogenen ILIAS-K... Stuttgart geschieht ab dem WS 17/18 nur noch über C@MPUS. Die ILIAS-Kurse werden durc... übertragen. Direkt in ILIAS können in dieser Kategorie grundsätzlich keine Kurse mehr ang...". The "COURSES" section lists three items, each with an IPUS icon: 1. "Advanced Information Management" by PD Dr. Holger Schwarz, with registration details and a note to log in. 2. "Advanced Software Engineering: Non-Functional Aspects In Software Engineering" with similar registration details. 3. "Advanced Topics In Data Management" by Prof. Dr. Bernhard Mitschang and PD Dr. Holger Schwarz, also with registration details and a note to log in.

Your schedule

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List of currently offered courses

... extracted from C@MPUS for the MSc CS summer term 2023:

https://www.f05.uni-stuttgart.de/informatik/studierende/master/Lehrveranstaltungen/23S/MSc-CS_23S.pdf

In C@MPUS directly:

- Find curriculum tree view
- Show calendar view for overlaps
- Register for courses (non-binding)
- Find personal schedule in “Calendar”

Finding your courses via C@MPUS:

University of Stuttgart Germany C@MPUS Home

Favourites

Calendar (3.) My Examination Dates My Achievements My Degree Programme (1.) My Courses C@MPUS Documentation

[979-2013] Computer Science Yes 120

[100] Study Profiles Yes

[110] Visual Computing (O) → schedule Yes

[111] Compulsory Yes

[46760] Theoretical and Methodological Foundations of Visual Computing Yes 6

[46761] Theoretical and Methodological Foundations of Visual Computing Yes 1.

[46762] Vorleistung Yes 1.

[467601] Vorlesung Theoretische und Methodische Grundlagen des Visual Computing Yes 1.

Lectures in academic year	Part	Status	Place (1st session)	Time (1st session)
2019/20	(Assistant)			
020961000 19W 3SH L Theoretical and Methodological Foundations of Visual Computing	Weiskopf	BF	Universität 38 - V 38.02 (UN38/EG/V	14.10.19 11:30 - 13:00

Stefanie Anstein: intro M.Sc. CS

Further hints

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Some further hints ...

- Forward your student mail to your private account if you don't read it directly! We strongly **rely on you reading all our emails** (from different sources and of different relevance, but please keep track!)
- If you're on the waiting list for a dorm, make sure that you confirm regularly at the „Studierendenwerk“ that you're still searching for a room! Additional hint: couchsurfing ...
- Some institutes offer block courses (e.g. IAAS); please check the institutes' websites & C@MPUS.
- Please be aware that exams may take place during the lecture-free period.
- The International Office, in addition to the ISP, offers lots of help for international students – they're waiting for you to get your welcome package there!

Some more further hints ...

- Open learning space for maths and computer science questions: www.mint.uni-stuttgart.de/angebote/offener-lernraum
- “Makerspace” on campus Vaihingen for conducting individual projects: <https://uni-stuttgart.de/maked-digital>
- German language course advisable (via “Language Center” in C@MPUS, or self-organized as “Tandem”)
- further institutions to get information & help:
 - Examination Office & Admissions Office
 - Pfaffenwaldring 5c
 - International Office (*Internationales Zentrum*)
 - welcome service
 - international mentoring, learning groups, psycho-social counselling, student associations, leisure activities, help with German forms etc.
 - Pfaffenwaldring 60

Even more further hints ...

further institutions to get information & help:

- Student Counseling Center (*Zentrale Studienberatung*)
 - general and specific questions, e.g. disabilities, chronic illness
 - contact point for all unclear issues
 - courses on studying efficiently etc., see <https://www.student.uni-stuttgart.de/en/counseling/zsb/learning-counseling/>
 - Pfaffenwaldring 5c
- Student Services (*Studierendenwerk*)
 - housing, childcare, legal advice, social advice, psychological support, finances, disabilities, ...
 - <https://www.studierendenwerk-stuttgart.de/en>
- Student representatives CS
<https://fius.informatik.uni-stuttgart.de/index.php/en/startpage/>
 - support among students (e.g. old exams, social life etc.)
- “Ombudsperson”: a neutral and confidential contact person for people in need of support in university conflicts:
www.student.uni-stuttgart.de/en/counseling/ombudsperson

Even more further hints ...

further institutions beyond the university to get information & help:

- Welcome Center Stuttgart
(<https://welcome.stuttgart.de/welcomecenter/en/>)
 - help in many areas for new students: Welcome Club, Job Centre etc.
- German job centre 'Agentur für Arbeit':
<https://www.arbeitsagentur.de/en/welcome> (student job board etc.)
- Nightline Tübingen: an anonymous, confidential, unprejudiced and independent evening hotline (also available in English):
<https://nightline-tuebingen.de/>

Some dates to save ...

- Online seminars by the IZ
(<https://www.student.uni-stuttgart.de/en/startingout/international/orientation-days/registration>)
 - 'Living in Stuttgart for Newbies':
Tuesday, March 28, 4 p.m. CEST
 - 'Studying in Stuttgart for Newbies':
Tuesday, April 4, 2 p.m. CEST
 - 'Guidance on Formalities':
every Friday at 10 a.m. CEST until April 28
- binding module exam registration period: May 16 - June 6
- lecture breaks and public holidays (shops etc. closed!): see <https://www.uni-stuttgart.de/en/study/application/academic-calendar>

Some dates to save ctd.



University of Stuttgart

Faculty 5: Computer Science, Electrical Engineering
and Information Technology

*For newly enrolled students of the
English conducted Master's programs
who will start their studies
this summer semester*

Semester Opening

May 4, 2023, 6:00-7:30 pm

✓ For the Master's programs:

**Computational Linguistics * Computer Science *
Electrical Engineering (EENG) * Information Technology
(INFOTECH)**

✓ **Registration online by April 30, 2023 via C@mpus:**

search for "Semester Opening – For Newly Enrolled Students of the
International Master's Programs of Faculty 5"

- or register here:



More information on the ISP website:

<https://www.f05.uni-stuttgart.de/en/faculty/international-students/>



In case of any questions ...

... please ask:

- **Stefanie Anstein**

co-program manager, student advisor &

contact person examination committee

(office: 01.006 in Pfaffenwaldring 5b)

stefanie.anstein@ims.uni-stuttgart.de

If in doubt, please ask – the sooner the better! :)

(... and please use cc instead of single e-mails

if you contact several persons about the same issue, thanks.)

By the way, we're always grateful for feedback about

how we could improve our services (websites, advising etc.)!

- (for more general issues):

Meta and Laura at the International Service Point of faculty 5

www.f05.uni-stuttgart.de/studium/international-service-point/

- (for student-related issues):

CS student representatives

<https://fius.de/index.php/en/startpage/>

WELCOME again ...

... at the University of Stuttgart!

Time for questions!