

Welcome to Web and Data Science at Universität Koblenz-Landau

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The **Past**: Web Science at Universität Koblenz-Landau

Koblenz

(Local administration)

Education

Philologie / Cultural Science

Mathematics / Natural Science

Computer Science

Mainz

(Overall administration)

Landau

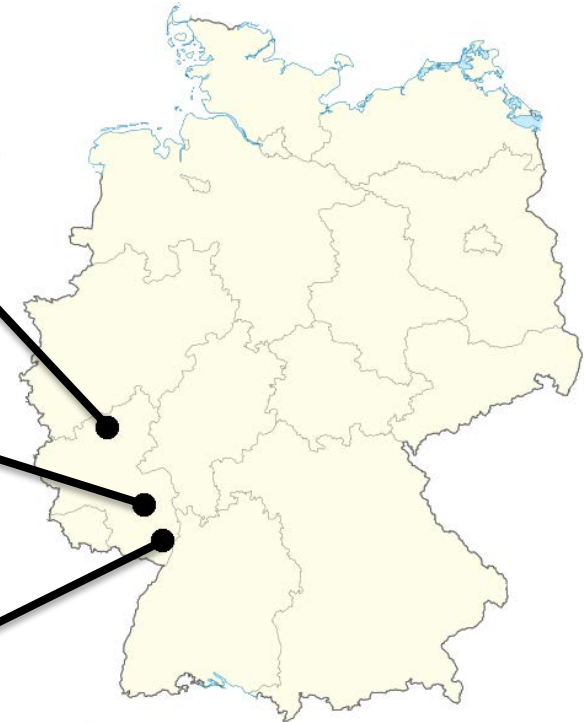
(Local administration)

Educational Science

Cultural and Social Science

Natural and Environmental Science

Psychology



Now and **Future:** Web **and Data** Science at Universität **Koblenz**

Koblenz

(Overall administration)

..

Fall 2019

- New beginners enter into the programme „Web and Data Science“
- Former „Web Science“ students may change into the programme „Web and Data Science“

Fall 2022

- University of Koblenz (without Landau) will be established
- You need to do nothing about it.



Web and Data Science (MWDS)

- You have been automatically enrolled in MWDS
- Some former MWS students will transfer to MWDS
- You need to do nothing about it.

Department of Computer Science

approximately

- 1900 students,
- 22 professors
- 100 scientific staff
- 125 doctorates,
12 „Habilitationen“
- 20 non-scientific staff
- Third-party-funds in 2018: approx € 2.5 M
- around 200 scientific publications per year
- (Inter)national research networks
- Economic factor in this region

About Institute WeST

Founded in 2009

by Prof. Dr. Steffen Staab



Interim Head of Institute

PD Dr. Matthias Thimm



Rests upon three institutes:

- Institute for Computer Science
- Institute for Management
- Institute for Information Systems



Focus topics

Social Web & Web Retrieval

understanding social relations within the Web
understanding Web 2.0 contents

Semantic Web & Knowledge Representation

represent the meaning of linked data

Interactive Web und Human Computing

make the web more user-friendly
solve problems by interaction of web and user, eye tracking

Machine Learning & Data Science

Acquire knowledge from data, understand data

Web Science and Management

understand social processes in the web to predict business behaviour

**WHAT TO DO FIRST (ONCE YOU GET
HERE)**

Get a User Account

<https://management.uni-koblenz.de/tools/register/register.cgi?language=en>

- Wireless network
- E-Mail, newsgroups
- KLIPS (registering for courses and exams)
- OLAT (Online Learning And Training)
- Owncloud, Webspaces
- SVN
- Office 365, Microsoft Dreamspark, Apple on Campus and others

WHAT MASTER STUDIES MEAN

Academic freedom means that you are free...

...to come or not to come

...to study or not to study

...to self-improve or not

You do not have to attend classes, but...

Review of Educational Research

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Class Attendance in College

A Meta-Analytic Review of the Relationship of Class Attendance With Grades and Student Characteristics

Marcus Credé, Sylvia G. Roch, Urszula M. Kieszczynka

First Published June 1, 2010 | Research Article

[Download PDF](#)[Article information](#)

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Abstract

A meta-analysis of the relationship between class attendance in college and college grades reveals that attendance has strong relationships with both class grades ($k = 69$, $N = 21,195$, $\rho = .44$) and GPA ($k = 33$, $N = 9,243$, $\rho = .41$). These relationships make class attendance a better predictor of college grades than any other known predictor of academic performance, including scores on standardized admissions tests such as the SAT, high school GPA, study habits, and study skills. Results also show that class attendance explains large amounts of unique variance in college grades because of its relative independence from SAT scores and high school GPA and weak relationship with student characteristics such as conscientiousness and motivation. Mandatory attendance policies appear to have a small positive impact on average grades ($k = 3$, $N = 1,421$, $d = .21$). Implications for theoretical frameworks of student academic performance and educational policy are discussed.

You are free to come as you like, but...

...coming late to class

- disturbs the concentration in the room
- is a nuisance to fellow students and lecturers
- destroys yours and your peer group's reputation

We all have different talents, but....



- You will have to acquire some missing skills without advice from lecturers/tutors
- You will not excel without some proficiency in **math** and **programming**
- Also collaborate and help each other without plagiarizing or free-riding

Seminars and Group work

- Free riding
- Not showing up / showing up late
- Mediocre preparation

no formal penalty (except for worse grades), but

- disrupts the work of your peers
- makes life of your peers hard
- tarnishes your reputation as individual and group

Consistency

<https://www.youtube.com/watch?v=njeAb4CLQeI>



Why consistency matters in Relations and Leadership - Simon Sinek

Motivational Stories • 28.317 Aufrufe • vor 4 Monaten

Good leaders are not made over night, its a life long process. Just like a relationship, leadership is accumulation of small little ...

2/3rd of students fail the first exam in „Introduction to Web Science“

Why? Not because it was hard, but

- It is a lot
- It may build on things you do not know

See the material and ask: **What do I not know about it?**

Academia in Germany

Please be punctual

- c.t. = cum temporae = + 15 minutes
- s.t. = sine temporae = on time
- 2 SWS = 90 min/week

Communication styles

- Less hierarchical than Asia, not as informal as US
- Be polite, but clear
- „Dear Professor/Dr. \$lastname“ or „Dear Mr./Ms. \$lastname“

Independence and autonomy

- **First** inform yourself, **then** don't be afraid to ask
- Think and work independently

Work hard, play hard

- Enjoy Koblenz and Germany!
- Learn German

After Corona you will have access to:

- Koblenz libraries
- Sports
 - AHS – Allgemeiner Hochschulsport (**also online**)
 - Sport clubs
- Sommer-Uni (Campus festivals)
- University choirs and orchestras

Sources of Information

German culture

<https://www.studying-in-germany.org/german-culture/>

Campus life

[Facebook \(first semester\)](#)

[Unipedia](#)

[Welcome Center](#)

[KOSINUS](#)

M.Sc. Web Science

Fellow students

[„Anhang 9
Prüfungsordnung“](#)

[WeST website](#)

[MoMa](#)

[KLIPS](#)

[Facebook \(Web Science\)](#)

M.SC. WEB AND DATA SCIENCE

Goals



Deal with **complex tasks** in research and development

Quickly familiarise with all topics of the subject

Work **autonomously**

Have the technical and social skills for **leading**

Qualify for a **Ph.D. programme**

Curriculum: Sources

[Gemeinsame Prüfungsordnung für die Bachelor- und Masterstudiengänge des Fachbereichs Informatik vom 09. Juli 2019](#)

legal foundation

[Courses offered in English](#)

At the faculty for Computer Science

[WeST website](#)

<http://west.uni-koblenz.de/studying/mwds/curriculum>

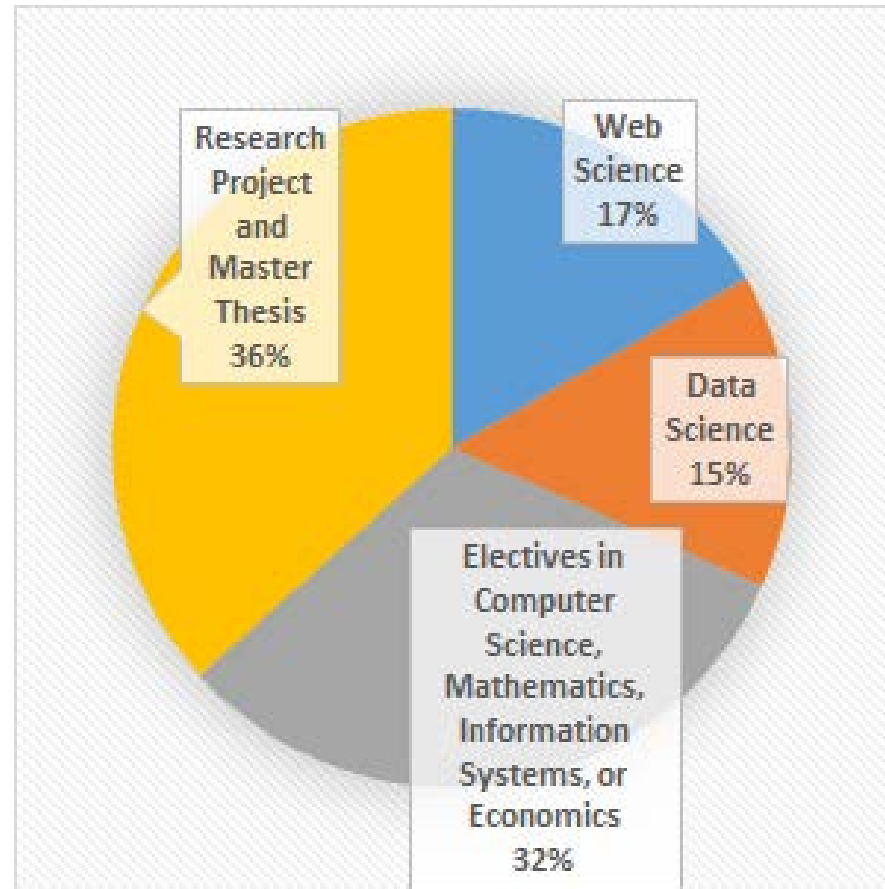
<http://west.uni-koblenz.de/studying/mwds/courses>

(not necessarily complete)

[KLIPS](#)

up-to-date, complex, you must work with it

Topics



+ Research work,
Seminar,
Soft Skills
+ Master Thesis

Curriculum

	Foundations of Web Science	Data Science	Electives			Research work, seminar, soft skills	Master Thesis
Year 1 Winter	[1] Network Theory and Dynamic Systems	[2] Big Data	[3] 1st module computer science (elect.)	[4] 1st module interdiscipl	[5] 2nd module computer science (elect.)		
Year 1 Summer	[6] Introduc. to Web Science	[7] Introduction to Data Science	[8] 2nd module interdisciplinary	[9] 3rd module computer science (elect.)		[10] Seminar Web Science	
Year 2 Winter	[11] Engineering Web and Data- intensive Systems	[12] Machine Learning			[13] 3rd module interdiscipl.	[14] Team training, research lab	
Year 2 Summer							[15] Thesis [16] colloquium

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Foundations of Web Science

3/3 Modules, 20 ECTS

Module No.	Module Name	Lang.	SS20	Semester	Type	ECTS
04IN2026	Introduction to Web Science	en			L4+T/S2	8
04IN2027	Network Theory & Dynamic Systems	en	yes	1-4	L3+T1	6
04IN2012	Engineering Web and Data-intensive Systems	en				6

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Data Science

3/3 Modules, 18 ECTS

Module No.	Module Name	Lang.	SS20	Semester	Type	ECTS
04IN2102	Big Data	en		1	L2+T/S2	6
04IN2043	Introduction to Data Science	en		1	L2+T/S2	6
04IN2028	Machine Learning	en		1	L2+T/S2	6

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Year 2 Summer							[15] Thesis [16] colloquium

Electives (Computer Science)

3/18 Modules, 18 ECTS

Module No.	Module Name	Lang.	SS20	Semester	Type	ECTS
Web and Society						
04WI2010	E-Participation		yes		L2+T/S2	6
04IM2006	Online Consumer Behavior				L2+T/S2	6
04IM2008	New Product Development				L2+T/S2	6
04IN2042	Computational Social Science				L2+T/S2	6
04IN2023	Semantic Web					6
04IN1021	Web Retrieval					6

You can choose other modules!

Electives (Interdisciplinary)

3/18 Modules, 18 ECTS

Module No.	Module Name	Lang.	SS20	Semester	Type	ECTS
Economics, Management, Mathematics, etc.						
04WI2019	Business Software		yes			6
03MA2504	Linear and Network Optimization		yes			6
04IM2010	Entrepreneurial Strategies		yes			6

You can choose other non-computer science modules!

Curriculum

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Year 2 Summer							[15] Thesis [16] colloquium

Research work, seminar, soft skills, Master Thesis

4/4 Modules, 46 ECTS

Module No.	Module Name	Lang.	SS20	Semester	Type	ECTS
04IN2011	Seminar in Web Science	de/en	yes, various		S2	4
04FB2003	Research Work after training in team and leadership		yes		T2+P6	12
04FB2004	Master Thesis				Thesis	27
04FB1004	Colloquium				S2	3

Curricular Advice



Have a look at the [course requirements](#)
[KLIPS](#), [MoMa](#)

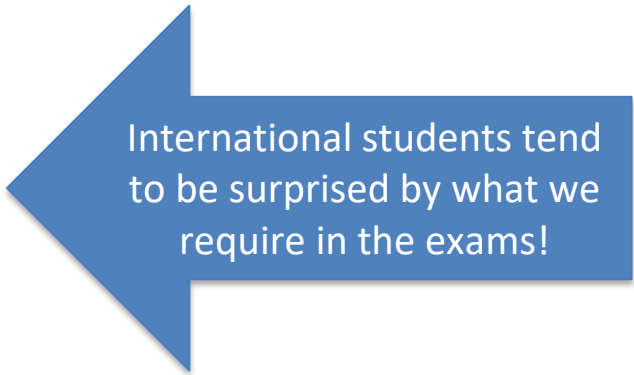
Complete the [Social Skill module](#) as early as possible

If you find a suitable module that is not unlocked for
Web and Data Science in KLIPS: [ask me](#)

Examination

Module Exams (14 modules)

- written or oral exams
- course achievements
- research paper (optional)



International students tend to be surprised by what we require in the exams!

Master Thesis + Colloquium (2 modules)

Final grade:
$$\frac{\sum_{i=1}^{16} ECTS_i \times grade_i}{\sum_{i=1}^{16} ECTS_i}$$

German skills determine migrants' salaries

- <https://www.spiegel.de/karriere/deutschkenntnisse-entscheidend-fuer-gehalt-von-migranten-a-1290343.html>
- Migrants with very good German can earn as much as locals
- The better the level of German, the higher the salaries of migrants
- If you plan to stay longer in Germany, take all opportunities for studying German in courses that are offered to you by the university



Any questions?