

MSc Data Science Registration Session

Winter Semester 2024/2025



Who are we?

Emmelie Korell: Program coordinator

Gabriele Inciuraite: Peer mentor

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Welcome from the faculty: Prof. Dr. Katinka Wolter

Head of Joint Commission Master Data Science and head of the Dependable Systems Group at the Computer Science Institute

Master Data Science: Aims and Focus Graduates are...

- familiar with the essential methods of modern data science and the associated mathematical,
 computer-science and subject-specific fundamentals.
- able to analyse data analytical problems independently, compare different methodological approaches and assess their advantages and disadvantages.
- able to mathematically formalise newly emerging data analytical problems, develop methods to solve them, implement them in an application-oriented manner and interpret them appropriately.
- familiar with problems and solutions for handling data from an **ethical**, **legal** and **security** perspective and are aware of the **limits** and **risks** of data science methods.
- familiar with the principles and general principles of scientific work and good scientific practice and can take these into account in their first scientific activities.

Master Data Science: Profile Areas

The graduates are able to carry out independent research and development activities in the field of data science in a profile-oriented manner:

- Data Science in Life Sciences
- Data Science Technology



- 1. What is your name and how to pronounce it?
- 2. What are your pronouns? she/her he/him, they/them?
- 3. Where do you come from?
- 4. When are you joining us in person?
- 5. Fun fact about you!

Program Administration

Program Administration

Joint Comission (Gesamtkomission) lead by Prof. Dr. Katinka Wolter

Examination Board (Prüfungsbüro) lead by Prof. Dr. Claudia Schillings

Examination Office (Examination board): Maria Kokenhöff

Program coordinator: Emmelie Korell

Module Administration: The Lecturers

The Joint Commission (Gemeinsame Kommission) lead by Prof. Dr. Katinka Wolter

The Joint Commission Data Science (GK) is composed of representatives of the two organising departments (Mathematics & Computer Science and Education & Psychology). The committee is organized in a ratio of 7:2:2:2 from the status groups of professors, scientific staff, other staff and student representatives.

Their tasks include organisation and development of the course programme, appointment of other boards, monitoring development of existing regulations (e.g. study regulations) and making decisions on all fundamental questions of the study program. The GK meets at regular intervals (once per semester or more frequently) to discuss problems and developments in the program.

https://www.mi.fu-berlin.de/fb/beauf-aussch/Gemeinsame-Kommission-fuer-den-Masterstudiengang-Data-Science/index.html

The Examination Board (Prüfungsausschuss) Lead by Prof. Dr. Claudia Schillings

The Examination Board is responsible for decisions and questions relating to examinations and the final master thesis. It also decides on the recognition of academic achievements from elsewhere.

In practice, the work mainly consists of procedures for the recognition of credits and occasional decisions on the organisation of examinations as well as disputes or cases of doubt. Most tasks are usually delegated to the chairperson.

Corresponding requests should first be sent by email to the chairperson or the examination board.

https://www.mi.fu-berlin.de/fb/beauf-aussch/pruefungsausschuss-data-science/index.html

The Examination Office (Prüfungsbüro): Maria-Alexandra Kökenhoff

Administrative information, transcript of Records (TORs), Campus Management administration, consultation with regards to examinations and formalities, and much more... see FAQ.

maria.koekenhoff@fu-berlin.de

+49 30 838 65732

Consultation hours: Wednesdays 11 am – 1 pm

Arnimallee 14, Room 1.1.14a/b

https://www.imp.fu-berlin.de/fbv/pruefungsbuero/index.html

Program Coordinator: Emmelie Korell

Coordination & Organization of the program:

- addition of new courses to the course catalogue,
- keeping the study regulations up-to-date,
- further development of the program.

emmelie.korell@fu-berlin.de

Office hours: Tuesdays, 2 - 3 pm

Arnimallee 6, Room 0.11

Student Representative: Gabriele Inciuraite

Student representation at the Joint Commission and the Examination board.

Also, a peer mentor.

Feel free to contact me if you have specific needs that should be represented at these organisational organs, if you need orientation, don't know how to proceed/whom to contact, also concrete questions - I will try to help to the best of my knowledge.

gabriele.inciuraite@fu-berlin.de

Program Structure and Content

The Study and Examination Regulations (Studien- und Prüfungsordnung)

You should be familiar with the study and examination regulations (SPO).

There you can find detailed information about each course, its length, number of ECTS (LPs in German) rewarded, estimated hours of work (SWS = Semesterwochenstunde), and course regulations.

- → German version (legally binding)
- → English translation

Recommended First Semester Schedule (all courses in person)

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-10:00					
10:00-12:00	Statistics Lecture	Statistics Exercise			
12:00-14:00	Programming				Profile Areas Ring Lecture
14:00-16:00	Programming				Profile Areas Project Seminar
16:00-18:00		Machine Learning Lecture	Machine Learning Exercise	Machine Learning Lecture	

Preliminary schedule for the first two weeks

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-10:00					
10:00-12:00	Statistics Lecture				Programming (online)
12:00-14:00		Programming (online)	Programming (online)	Programming (online)	Profile Areas Ring Lecture
14:00-16:00	Programming (online)				Profile Areas Project Seminar
16:00-18:00		Machine Learning Lecture	Machine Learning Exercise	Machine Learning Lecture	Programming (online)

Recommended Schedule DS in Life Sciences

2nd Semester	3rd Semester	4th Semester
Module Data Sciences in Life Sciences 15 ECTS		Master Thesis 30 ECTS
Modules from the Profile Area 20 ECTS	Modules from the other Profile Area 10 ECTS	
	Module Ethical Foundations of DS 5 ECTS	
	Research Internship 10 ECTS	

Recommended Schedule DS Technologies

2nd Semester	3rd Semester	4th Semester
Modules from the Profile Area 30 ECTS	Modules from the other Profile Area 15 ECTS	Master Thesis 30 ECTS
	Software Project 10 ECTS	
	Module Ethical Foundations of DS 5 ECTS	

Electives in DS in Life Sciences

- Modul: Spezielle Aspekte der Data Science in Life Sciences (5 LP)
- Modul: Aktuelle Forschungsthemen der Data Science in Life Sciences (5 LP)
- Modul: Masterseminar Data Science in Life Sciences (5 LP)
- Modul: Ausgewählte Themen der Data Science in Life Sciences (10 LP)
- V-Modul: Machine Learning in Bioinforma- tics (DS/5 LP)
- V-Modul: Big Data Analysis in Bioinforma- tics (DS/5 LP)
- Praxismodul: Applied Machine Learning in Bioinformatics (DS/5 LP)

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Electives in DS Technology

- Modul: Spezielle Aspekte der Data Science Technologies
- Modul: Aktuelle Forschungsthemen der Data Science Technologies (5 LP)
- Modul: Ausgewählte Themen der Data Science Technologies A (10 LP)
- Modul: Ausgewählte Themen der Data Science Technologies B (10 LP)
- Modul: Masterseminar in Data Science Technologies (5 LP)
- Modul: Softwareprojekt Data Science B (10 LP)
- Modul: Datenbanksysteme Data Science (5 LP)
- Modul: Verteilte Systeme (5 LP)
- Modul: Mobilkommunikation (5 LP)
- Modul: Telematik (10 LP)
- Modul: Höhere Algorithmik (10 LP)
- Modul: Rechnersicherheit (10 LP)
- Modul: Mustererkennung (5 LP)
- Modul: Netzbasierte Informationssysteme (5 LP)
- Modul: Künstliche Intelligenz (5 LP)
- Modul: Spezielle Aspekte der Datenverwaltung (5 LP)

More Electives are Possible

- Modul: Interdisziplinäre Zugänge im Rahmen von Data Science A (5 LP)
- Modul: Interdisziplinäre Zugänge im Rahmen von Data Science B (10 LP)

Furthermore:

- Upon application and with the approval of the Examination Board, modules totalling 15 LP from **other Master's degree programmes** can be included in the compulsory elective area instead of the modules in accordance with bb), provided that the student has access to the respective modules.
- The selection and crediting of **further modules in the compulsory elective area** can be applied for after consultation with the Examination Board if these fit in with the qualification objective of this Master's degree programme. Each module can only be taken once.
- Each module can only be completed once.



The Course Catalogue (Vorlesungsverzeichnis)

To learn what courses are offered in the given semester, study the course catalogue and chose topics you feel passionate about!

Chose Data Science catalogue with the code **0590b_MA120** for the courses in the current study regulation.

Keep in mind that some courses may be added as late as the first or second week of the lecture period!

Keep in mind that most courses are offered once a year.

Tip: If you want to see all courses offered within an institute, check 'Gesamtes Lehrangebot der ...'.

https://www.fu-berlin.de/vv/en/fb?

Academic Calendar

Winter Semester 2024/2025

- Semester length: From October 1, 2024, through March 31, 2025
- Lecture period: From October 14, 2024, through February 15, 2025
- Winter break: From December 23, 2024, through January 4, 2025
- Public holidays:

October 3, 2024 – Day of German Unity

December 25, 2024 – Christmas Day

December 26, 2024 – Second Day of Christmas

January 1, 2025 – New Year's Day

March 8, 2025 – International Women's Day

- Lecture-free period: Begins February 16, 2025
- Course registration: Begins October 1, 2024
- Allocation of places in courses with limited capacity: Begins October 11, 2024, from 12:00 p.m.
- Applications for a leave of absence: Final deadline November 25, 2024
- Applications for part-time study: Final deadline October 1, 2024
- Registration renewal for 2024/25 winter semester: by July 19, 2024
- Registration renewal for 2025 summer semester: Final deadline February 14, 2025
- Registration for auditing students affiliated with a different university (Nebenhörer*innen): From October 1, 2024, through November 11, 2024

Important deadline: there is a fee for late reregistration, if you are still late, you will be exmatriculated. The information for **re-registration** will come via zedat Email - don't miss it!

Campus Management: Official Course Enrolment



The registration period for the winter semester 2024/25 starts on Tuesday, 01.10.2024 at 9 am. The registration period ends on Friday, 01.11.2024 at midnight. Throughout the registration period, registration and de-registration for modules and courses with unlimited capacity is possible.

Until Friday, 11.10.2024 noon, it is possible to submit priority requests for courses with limited capacity. Direct registration possible until Friday, 01.11.2024 when there are free spots.

Later registrations and de-registrations are only possible via the examination office (find a form on the website). Please try to stick to the deadlines.

Whiteboard: Learning Material System



- Course resources
- Registration for tutorials
- Homework uploads and grading
- Course announcements (sometimes via e-mail)
- Lecturers send messages to all course participants
- Exam registration (usually for bigger courses)

Explore the system and make sure to sign up for the courses.

Tip: you can also sign up for courses that you don't officially attend or courses from previous semesters and get access to course materials.

Summary: Where do I learn details about my courses each semester?

- Exam and Study Regulations: official requirements
- Course Catalogue: what/when/where is offered this semester
- Whiteboard: learning material, announcements from the lecturer (sometimes via e-mail for all participants in Whiteboard)
- In person: Course organisation announced in the first lecture
- Campus Management (only this is binding): for official enrolment in the course (see deadlines)



Exam Regulations

General rule: you have three attempts at each exam: after the third fail in a module exmatriculation follows.

Each module offers two exams after the lecture period: one right after the lecture period and one later (usually just before the next semester starts).

To take part in the exam, you must be registered for that module in that semester in **Campus Management** (see slide), sometimes an aditional exam registration in **Whiteboard** is needed (it will be communicated by the module lecturer).

Before an exam starts, participants are asked if they feel fit to participate - until this point you can leave any time without it counting as an exam attempt. Only from this point on you are **officially participating in the exam**. If you pass, the **grade is final** and no grade improvement is possible.

If you did not participate in the exam or participated and failed, you can repeat the module as often as possible, just make sure you are registered on **Campus Management** each time to have access to the exam. Modules are usually repeated once a year.

You usually have to pass the **module exercise** with some condition. You only need to do it once - as soon as it is registered in Campus Management as passed, you do not have to redo the exercise. You can do it for your own learning though.

*Special condition: When you are registered for a course on Campus Management for the first time, you get an extra attempt for improving the grade: you can go to both exam appointments in that semester and have the better grade count, given that both attempts were passed (see § 12 Wiederholung von Prüfungsleistungen in SPO).

Recommended Grading Scale for Exams

Punkte	Note	Prädikat
100 - 94,9 %	1,0	sehr gut
<94,9 - 89,5 %	1,3	sehr gut (-)
<89,5 - 84,3 %	1,7	gut (+)
<84,3 - 79,0 %	2,0	gut
<79,0 - 73,7 %	2,3	gut (-)
<73,7 - 68,2 %	2,7	befriedigend (+)
<68,2 - 63,1 %	3,0	befriedigend
<63,1 - 57,9 %	3,3	befriedigend (-)
<57,9 - 52,6 %	3,7	ausreichend (+)
<52,6 - 50,0 %	4,0	ausreichend
< 50,0 %	5,0	nicht bestanden

Grading Conversion

ECTS Definition German Grade ECTS Grade Excellent A 1,0; 1,3 Very Good В 1,7; 2,0 Good 2,3; 2,7 Satisfactory D 3,0; 3,3 Sufficient Ε 3,7; 4,0 Failed FX/F 4,3; 4,7; 5,0

Diversity

Diversity and Anti-Discrimination

Freie Universität Berlin strives to be a place characterised by a positive work environment where equity is a fundamental value. The university is committed to ensuring that all of its members treat each other respectfully and fairly, foster a supportive atmosphere, and pay attention to how power dynamics and differences impact attitudes and behaviour.

Discriminatory behaviour can have negative impacts on a person's personal development, their self-esteem, as well as their ability to learn, make decisions, and act independently. They are anathema to Freie Universität Berlin's values and expectations. They can be detrimental to people's relationships, health, and social status.

Treating each other with respect means discrimination, sexualised harassment and violence, bullying, and stalking will not be tolerated.

Anti-Discrimination Policy

Diversity and Anti-Discrimination

Freie Universität Berlin aims to establish and promote:

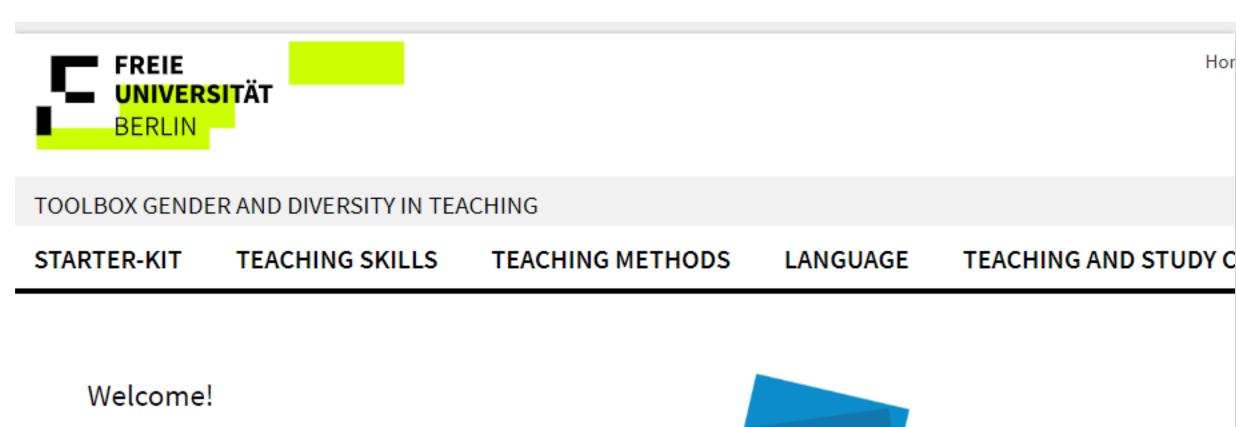
- A constructive work environment characterised by mutual trust and appreciation
- Respect for one another and the acknowledgment of every individual's dignity
- Respectful attitudes among its members and to dismantle any and all forms of discrimination
- A sense of individual responsibility for creating and maintaining a positive and non-discriminatory environment for teaching, studying, and working.

Taking a Stand against Antisemitism, Racism and Discrimination at Freie Universität Berlin

Gender-neutral Language

Everyone tries to be respectful to each other!

- Please try to use gender-inclusive or genderneutral language
- Please try to avoid gender stereotypes in your language (or on slides, such as a male professor and a female assistant...)
- You might want to inform your colleagues about the pronouns that you would like to use



We appreciate your interest in gender- and diversity conscious teaching at university.

On the following pages you will find introductory information, practical advice for your classroom, and suggestions for further reading.

We hope you find the reading interesting and the implementation rewarding!



Compensation for Disadvantages (Nachteilsausgleich)

https://www.fu-berlin.de/en/sites/diversitaet-und-lehre/index.html

German: https://www.fu-berlin.de/sites/diversitaet-und-lehre/nachteilsausgleiche/ index.html

Contact: https://www.fu-berlin.de/sites/diversitaet-und-lehre/ansprechpartner_innen/index.html

Registration is centrally organized by the Freie Universität Berlin.

→ You must do it directly with the Student Services Center.

Conflict Management

Issues with the Faculty / Coordination

- Direct communication with the relevant lecturer
- If you do not want to bring an issue up personally (e.g., protect the whistle blower): Student Representatives

Misbehavior:

- Diversity and Antidiscrimination Office
- Frauenbeauftragte (women's representative): Sera Renée Zentiks
- Ombudsperson: Prof. Dr. Ralf Kornhuber
- (In some cases the Program Coordinator / Head of Examination Board)

About Grading / Exams etc.:

- First person to talk to: the lecturer
- If no solution can be found: the Examination Board



Mentoring

Ask the International Student Mentor:

- About whom to ask something...
- About where to find what...
- All the questions you do not want to ask the faculty...

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https://www.mi.fu-berlin.de/stud/beratungszentrum/index.html

Mental Health Support

- support.points are the first point of contact for all concerns regarding mental health during studies
- No concern is too big or too small
- All support.points are open to all students and employees of the FU
- Consultations are confidential, staff are bound to secrecy
- All information about the support.points (locations, consultation hours) + infos, e.g. on how to find a psychotherapy



https://www.fu-berlin.de/en/sites/mentalwellbeing/Support Points/index.html



Where can we work on group projects?

- BoB: Library without books (Department of Physics)
- Student rooms in the basement floor of Takustraße 9 (Institute for Informatics)
- Coffee Area of the π building Arnimallee 6 (Institute for Mathematics)
- Multiple Cafeterias and student cafes across the Campus
- * University Libraries are meant to be quite spaces for individual work

ZEDAT Account: Multiple Services

ZEDAT-PORTAL

E-MAIL/TELEFON DRUCKEN DIENSTE SOFTWARE ACCOUNT



E-Mail/Telefon

- Webmail (UNIX-Mail)
- E-Mail-Einstellungen
- Mailinglisten
- FU-Telefonbuch



Drucken

- Konto
- Konto aufladen
- Aufträge
- Einstellungen
- Hilfe



weitere ZEDAT-Dienste

- Sync & Share Box.FU
- Dateiablage Login-/Userpage-Server
- Informationen zu Userpage
- Userpage-Datenbanken



Account

- Übersicht
- Passwort



Dienste für Studierende

- Campuscard
 Studierendenausweis, Bibliotheksausweis
 Mensakarte
- Deutschlandsemesterticket
 □
 □
- Self-Services der Studierendenverwaltung
 Immatrikulationsbescheinigung, Rückmeldung,
 Adressänderung etc.
- Campus Management

 Studienorganisation und Modulanmeldung
- Blackboard E-Learning
- Webex-Meetings

 Videokonferenzen und Online-Lehre
- Webex Webversion ☐ Webex (vormals Webex-Teams)
- Provisorischer Bibliotheksausweis



Software

- Software (private Nutzung)
- IT-Handbücher



weitere FU-Dienste

- EasyDB Bilddatenbank ■●
- Kunst und Funktion ■
- User-Wikis 🕕
- User-Blogs 🕀

E.g., Semester ticket for Transportation

Semester Abroad

If you want to go abroad, an optimal time would be the **3rd Semester.** You need to take care of it early!

Deadlines for applications for **direct exchange** programs start as early as **NOVEMBER!**Deadlines for **ERASMUS+** program is at the end of **JANUARY!**

→ Find more information <u>here</u> and <u>here</u>.



Research Assistant Jobs and Internships

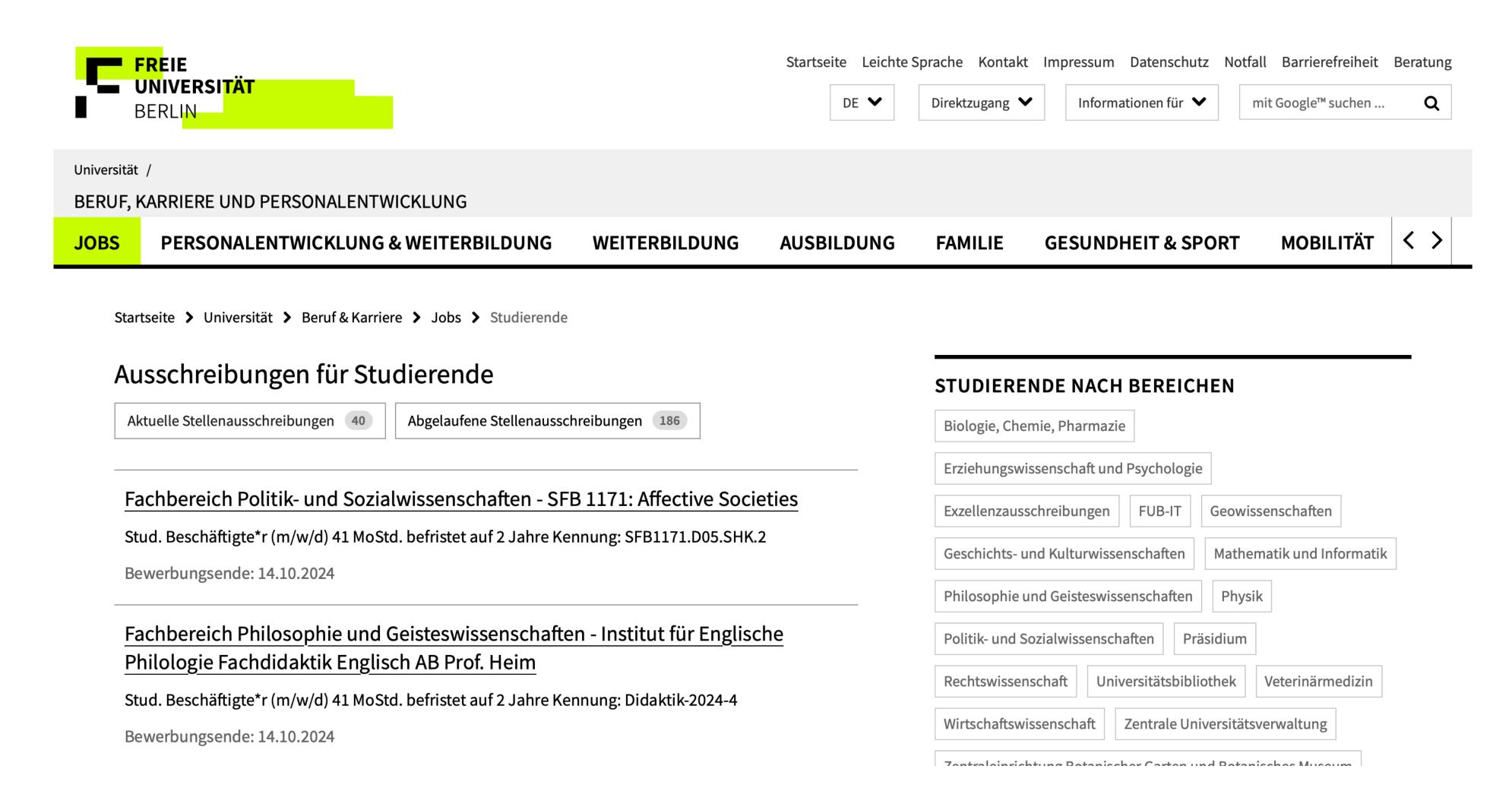
There are many opportunities to work research, but you have to actively look for them. These are the usual ways:

- For unpaid internship: find research groups that are interesting for you and apply by sending a short motivational letter and your CV.
- Paid student positions in research are called Research Assistant (RA) positions: those are usually announced on a website of a given institution with requirements, deadlines, etc.

Where to look for research groups (and for RA positions):

- All Berlin Universities (such as FU, HU, TU, Charite...)
- Research Institutes and Societies (such as Zuse Institute Berlin, Max Planck Institutes, Fraunhofer Society...)

Research Assistant Jobs at the FU Berlin



https://www.fu-berlin.de/universitaet/beruf-karriere/jobs/stud/index.html



University Sports



Startseite AGB Datenschutz FAQs Team Kontakt

ZENTRALEINRICHTUNG HOCHSCHULSPORT

SPORTPROGRAMM

BILDUNG

EVENTS

WETTKAMPF- UND SPITZENSPORT

DER HOCHSCHULSPORT

Startseite > Sportprogramm

Sportprogramm

Ob allein oder im Team - wir bieten ein umfangreiches Repertoire an Sportkursen, Veranstaltungen und Reisen aus den Bereichen Sportspiele, Fitness, Tanzsport, Kampfsport, Ballspiele, Wasser-, Mannschafts- und Gesundheitssport.

Unter Berücksichtigung des Leitbildes der Universität und auf Grundlage der Zielvereinbarung für den Hochschulsport gestalten wir jedes Semester ein umfangreiches und qualitativ hochwertiges Kursangebot in mehr als 120 Sportarten und mit bis zu 800 Einzelveranstaltungen pro Semester.

Inhaltsverzeichnis



https://www.hochschulsport.fu-berlin.de/en/sportprogramm/index.html

International Club



We are a group of students who want to promote the internationalization at the Freie Universität Berlin. We organize a wide range of events and activities for international and national students. You can find further information about us in the table of contents below.

Most of our events are open to everyone. Excursions and similar events require registration in advance. If you have any questions, just send us an e-mail (<u>club@international.fu-berlin.de</u>).

If you are interested in participating, please register directly via https://lists.fu-berlin.de/listinfo/Club and become a member.

In addition, you could also follow us on Instagram.

Visit us during office hours every Tuesday from 4:30 to 5:30 PM! For questions concerning applications, prerequisites and specific questions to your field of study, please contact directly the Student Records and Registration Office.

https://www.fu-berlin.de/studium/international/internationaler_club/index.html

The Upcoming Welcoming Session

Wednesday, 16.10.2024 at 5 pm we will welcome your an in person welcoming event at Takustr. 9, Seminar room 006.

Afterwards everyone is invited to jointly go to a Meetup for new international master students and socialise some more!



Thank you for joining!