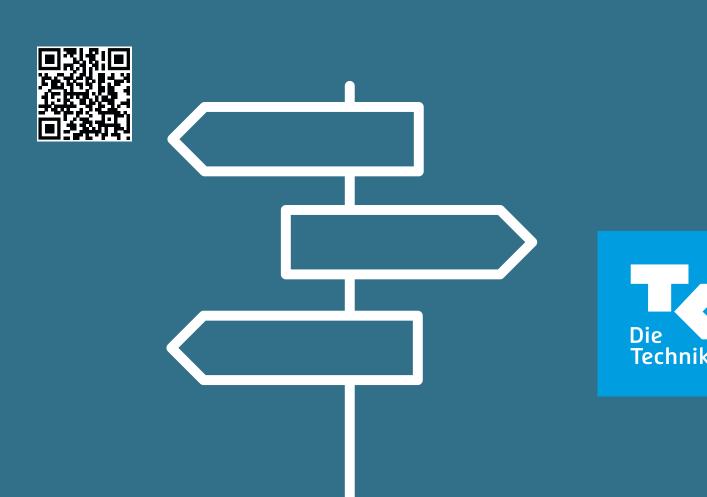


Your path to healthy student life

Discover the new TK-StudyGuide! It's so important to stay healthy during your studies or vocational training. That's why we have a whole range of support services, including free webinars and lots more. Take a look:



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Editorial

Welcome to the Computer Science, Cyber Security and Life Science Informatics programs at the University of Bonn!

You probably have many questions regarding your degree, your course of study, life in Germany, especially in Bonn, how the University of Bonn works and much more. But don't worry, we all have been there and therefore can hopefully answer some, if not all of your questions. In addition to this magazine we also organize an Orientation Unit (OE because in German it's OrientierungsEinheit), in which we show you around campus and provide some insight into student life, in addition to getting you to know each other. Any remaining questions after reading this can and will be answered by us, so do not hesitate to ask us anything you want! You can either come to our office in room 0.019 right in the foyer of the Institute for Computer Science or reach out to us by e-mail via fs@fachschaft.info.

With kind regards Your student body council

The Student Body

Where is the student body?

You can find us almost every day in the student body rooms 0.019 and 0.020, right next to the foyer, and we're always happy to have visitors! Whether you have a question, need advice, want to get involved, or just want to relax and chat over a popsicle just drop by. The left room, the office, is primarily for productivity, questions, and the like, while the right room features sofas that invite you to relax and socialize

Our website lists official opening hours, but these are just the times when we guarantee that someone will be there (known as AwD). Usually you can find someone there almost all day.

What does the student body do?

Work for freshers In order to give all new students the best possible start to their studies, we organize an information and orientation event, the OU (Orientation unit), during the first week of the semester (more information at https://oe.fachschaft.info/en/master) and we publish this magazine digitally and in print. Of course, you are also welcome to come to us before and after the OU if you have any questions.

Advice During the semester, we are available for you daily and try to help you with any concerns, needs, or problems you may have regarding your studies. See location and opening hours above. Just drop by! We are also happy to answer any questions you may have via email at fs@fachschaft.info!

We also represent you if you have any problems with lecturers, tutors, or the examination office. You can report problems, usually anonymously, and we will then talk to the relevant people on your behalf.

If we cannot help you with your current issue directly, we try our best to redirect you to a person or office that can.

Committee work Student representatives have seats on many university committees the representatives are proposed by the student body. In these committees, we get to be part on decisions, such as what changes should made to the examination regulations, how funds for the improvement of teaching quality should be distributed, or which new lecturers are to be hired. If such topics are important to you, contact your student body!

Services The student body offers a wide range of services for your everyday student life. These include, for example:

- **Beverages** For 1.20€per bottle (1€with a 10-bottle card!), we offer Spezi, lemonade, mate, and cola, as well as a variety of seasonally changing flavors
- Coffee & Tea are available free of charge!
 Just make your own with the machines, powder, and tea bags provided. Cow milk and oat milk are available in the refrigerator.
- Popsicles are also free of charge, for as long as the freezer is full. What's your favorite flavor?
- Past exams No idea what will be on the exam? Then take a look at last year's exams! Simply log on to the university Wi-Fi and go to https://altklausuren.fachschaft.info
- Hot water bottles with fluffy covers can be borrowed from us at any time to relieve stomach aches or keep you warm on cold days.
- Staplers, hole punches, ring binders, or laminators are available for free use for your daily bureaucratic needs.
- Notebooks are available for free while supplies last.
- Lockers Don't feel like carrying your books or bike helmet around all day? Then rent a locker from us (free of charge, €15 deposit).
- Lecture survey (VLU) Each semester, you can anonymously review your modules here. Results: https://vlu.fachschaft.info

Events From game nights and parties to joint exam preparation with waffles, alumni presentations and lecture series to barbecues and cocktail evenings the student body organizes many events for you throughout the year. (Don't want to miss out? Check out the fs-news and Socials below.)

Have a cool idea for an event yourself? Talk to us! We are happy to support you with the organization by providing money and materials, booking rooms, helping with permits, and contacting our network of event helpers.

Would you like to help with events, but not be the main organizer? Then join the fs-engel mailing list! (Sign up via our website)

Master-Inform

Information on all channels

You can find a lot of information on our student body **website**: https://www.fachschaft.info. In addition, you can subscribe to our **mailing list** fs-news. You can also get regular information about events and PSAs on **Mastodon** (@fachschaft_info@toot.kif.rocks), **Instagram** (@fachschaft_info) and the unofficial **Discord** servers. All links can be found in the sidebar of the website. There are also several mailing lists where you can receive interesting offers for jobs, events, and studies.

Who is the student body? Can I join too?

The student body consists of students like you, who have decided to volunteer their time to help other students.

Anyone can join the student body and is technically already a member. If you decide to become active in the student body, there are many areas where we can use your help and where you can get involved.

Formally, two committees are elected: the FSV is elected by all students in the department and, the

FSR, who handle day-to-day business is elected by the FSV. Student council elections are held every year in the summer semester. Come along and cast your vote or even stand as a candidate yourself!

Nevertheless, being elected is not a prerequisite for participation. Our meetings (currently Wednesdays at 6 p.m., room 0.016) are open to the public and all students are welcome to join in on the discussion and vote on motions.

Anyone can be elected to a position within the student body and be responsible for an area such as social media, beverages, IT, or old exams, for example. We are also always happy to recommend interested newcomers for committee seats (see above). If you want to start small, you can help out at an event as an angel or take on an AwD together with an experienced student representative.

We are happy to help you find the right project for you and will not leave anyone out in the cold with student body work. You are also welcome to just drop by ans socialize without having to take on any tasks right away.

Your Student Body Representatives







Linus



Michael



Jonas

Awareness

Hello, we hope you had a great first week of your studies! We Anna, Robin, Linus, Sophia, and Tina are the Awareness Team of the Student Body Council Computer Science, and we want to make sure that everyone feels comfortable at the institute. You can find us at game nights, the OU, and the summer party, where we want to make sure you feel comfortable and can enjoy the event, and we are available to talk to if anything happens. Of course, you can also come to us outside of events or send us an email if someone treats you or your fellow students in a disrespectful manner or repeatedly violates the Code of Conduct and you cannot or do not want to confront them yourself.

The Code of Conduct aims for for respectful interaction in which everyone feels comfortable. You can find it at the following link:

Code of Conduct

https://www.sp.uni-bonn.de/dokumente/idx/Sonstige/Fachschaften/COC-Informatik.html

Is something bothering you about your everyday life at university? Have you had a bad experience with other people at university, or do you just need someone to talk to? Then feel free to contact us:)

We have an email address that all members of the team have access to:
informatik.awareness@protonmail.com You can reach us via the shared address or via our individual addresses (see below). This is us:)



Anna Beckers anna.awareness @proton.me



Linus Rodríguez Gómez linus.awareness @protonmail.com



Robin Meth robin.awareness @protonmail.com



Sophia Sirtl sophia.awareness @protonmail.com

Please note that we generally cannot offer psychosocial counseling. If you are unsure which form of support would be right for you or would like a first point of contact that is closer to everyday student life, you can contact us; we will be happy to discuss possible places where you can find the support you need and refer you there if you wish.

Gender equality

Although legal gender equality is enshrined in law in many countries, including Germany, the reality of everyday life paints a different picture. Discrimination based on gender continues to exis - whether subtle or overt, structural or individual.

Gender equality means more than equal rights on paper: it strives to ensure that all peopleregardless of their genderhave the same opportunities, rights, and possibilities in all areas of life. Gender equality encompasses both formal and de facto equal treatment.

This does not mean that differences should be ignored. Rather, it is about ensuring that no one is disadvantaged or privileged on the basis of their gender - whether in professional life, education, family, or politics. Education is, of course, very important to us, as there is still considerable inequality in some subjects, particularly in the fields of STEM, which is not accepted at our institute.

Why exactly is equality important?

An equal society promotes not only justice, but also economic and social stability. Studies show that diverse teams make better decisions, that companies with more women in leadership positions are more successful, and that children benefit from egalitarian role models. Gender equality thus contributes to the development of an inclusive, innovative, and resilient society. And, of course, gender equality also plays an important role when it comes to satisfaction and participation.

Those who are not at the table are not taken into consideration. Why do facial recognition programs recognize some faces worse than others? Why do algorithms sort applications according to patterns that reinforce discrimination? Often because the teams that developed them were too one-sided - not out of malice, but because of blind spots.

What relevance does equality have in computer science? Computer science is a male-dominated field, which is partly due to gender stereotypes and probably further reinforces them. These stereotypes often start early on - for example through gender-specific socialization, a lack of role models, or subtle signals in school, the media, and the family. This can lead to many non-cis¹ male individuals not discovering their interest in computer science in the first place or not feeling confident enough to pursue this field. And the fewer women and gender-diverse people there are in computer science, the less it appears to the outside world as a field in which women and gender-diverse people are welcome.

It is therefore important that non-cis male¹ individuals do not feel like they are being overlooked: that they feel treated equally, seen, and respected in the same way. It is also important that cis-male individuals do not feel that they have to conform to certain role models: that they have to be particularly tech-savvy, assertive, or performance-oriented in order to belong.

Our goal is to create a collaborative atmosphere and a sense of equality, regardless of gender. This also includes regularly questioning existing structures in order to reduce potential barriers. In addition, conscious openness can help break down barriers before they arise.

Who is affected?

The issue of equality affects everyone - not just women, but also men and non-binary individuals. Gender roles restrict everyone: men often face pressure to perform and emotional restraint, while women and non-binary people more frequently struggle with prejudice and structural barriers.

Recognizing and overcoming these role models is a collaborative process. We **all** benefit from gender equality. Through joint action, gender equality can become a reality - and not just remain a legal promise. And you too can contribute to this: through awareness, respect, and a willingness to question your own perspective.

Gender equality activists in the Student Body Council Computer Science

As the Student Body Council's equal opportunities officer, I actively promote gender equality, equal opportunities, and a discrimination-free environment. My goal is to draw attention to structural inequalities, promote awareness of the issue, and initiate concrete improvements, especially within the field of computer science.

You can always contact me in confidentiality - whether you have experienced or observed discrimination or unequal treatment, are looking for support, or simply need someone to talk to. If you are interested in getting involved in this area yourself or have questions about equality issues, I would be happy to discuss them with you.

Together, we can help make our student council more open, fair, and inclusive.



Paria Ghaffari paria.gleichstellung @protonmail.com

Strenghtening equality in computer science



In our computer science department, equal opportunities are not just a principle, but are actively promoted. Since 2020, the "GIDIS" (german "Gleichstellung in der Informatik stärken") working group has been dedicated to strengthening equality in our institute.

Our commitment extends across all levels - from students and doctoral candidates to postdoctoral researchers, professors, and staff. We are committed to ensuring that everyone has the same opportunities and support.

What could be interesting to you?

We organize regular networking events for various target groups, inviting alumni or other role models to speak on a specific topic. This gives you the opportunity to get to know your fellow students in a relaxed environment, away from your coursework, while enjoying a few cookies.

At least once a semester, we organize a company visit where we get a glimpse into the working world of women in IT fields that you might not even think of when considering your future career.

We also organize a mentoring program (see below) and feminist movie nights, are active in interdisciplinary gender equality work, organize Girls' Day at the institute, and much more. For more information, check out our website or join our mailing list. ;-)

New people are always welcome, so feel free to write to us if you'd like to join!

Mentoring Program of GIDIS

The computer science equality working group organizes a mentoring program for students from structurally disadvantaged groups. In the first round, which starts this winter semester, the focus is on supporting female and gender-diverse students.

Our goal is to provide support at the start of studies and in career planning, to create role models, to provide opportunities to learn from the experiences of others, to support professional and personal development, and to promote networking within the institute. The program is planned as 1-to-1 mentoring, with mentors and mentees meeting for several one-on-one sessions during the course of the program. In addition, there will be several joint meetings with all mentees and mentors, where we will receive topic-specific input from qualified speakers. A program cycle begins with an onboarding session and ends with a joint evening in a relaxed atmosphere. The program runs for 9 months. If you are interested, simply visit our website, where you will also find a registration form.

Links

Gidis mailing list: https://tinyurl.com/gidis-ml

Gidis discord channel: https://tinyurl.com/gidis-discord

Gidis instagram: https://tinyurl.com/gidis-insta **Equalendar:** https://tinyurl.com/equalendar-en

AStA department for equality: https://tinyurl.com/asta-gender-equality

Reporting and counseling centers: https://tinyurl.com/reporting-and-counseling

¹cisgender (cis): a person is cisgender if the gender assigned to them at birth corresponds to their own gender identity

The Institute of Computer Science

If you study the master Computer Science or Cyber Security, then apart from the lecture hall building the Institute of Computer Science is the building in which most of your study events will take place. In addition to seminar rooms it contains the offices of professors, PhD students, the (technical) administration for computer science and much more. The Institute of Computer Science is organized in six departments. Each of them is led by a professor and has a rough research focus. Within each department there are smaller research groups, each again led by a professor and more specialized on a particular part of the field (see table below).

If you are studying in the Master of Computer Science program, in order to start a Master Thesis you will have to find a supervisor from the research

group that is most closely related to your topic. It is good to familiarize yourself with the different research groups early on, so you can try to focus your choice of lectures, seminars and labs on the department that you are the most interested in.

Sometimes there is the chance to be hired as a student assistant (WHF, wissenschaftliche Hilfskraft) by a department of the institute, usually as tutor for exercise groups or as programmer. The payment is usually ~15 Euro per hour, which is not as much as for most other programmer jobs, in exchange your workplace is close by, and you gain practical experience related to your studies. Besides the employer will be more considerate about your studies, so you can adjust work hours to your lecture schedule.

Informatik I	Prof. Dr. Petra Mutzel	Computational Analytics
Computational Analytics	Prof. Dr. Estella Suarez	High Performace Computing
Informatik II	Prof. Dr. Reinhard Klein	Computergraphics
Visual Computing	Prof. Dr. Matthias B. Hullin	Digital Material Appearance
	Prof. Dr. Thomas Schultz	Visualization and Medical Image Analysis
	Prof. Dr. Florian Bernard	Learning and Optimization for Visual Computing
	Juniorprofessorin Dr. Zorah Lähner	Geometrie in Machine Learning
Informatik III	Prof. Dr. Stefan Wrobel	ML AI Lab
Information Systems and Artificial	Prof. Dr. Jürgen Gall	Computer Vision
and Artificial Intelligence	Prof. Dr. Elena Demidova	Data Science & Intelligent Systems
gog	Prof. Dr. Christian Bauckhage	ML AI Lab
Informatik IV	Prof. Dr. Peter Martini	Communication Systems
Security and Networked Systems	Prof. Dr. Michael Meier	IT Security
Systems .	Prof. Dr. Matthew Smith	Behavioural Security
	Prof. Dr. Frank Kurth	Audio Signal Processing
	Prof. Dr. Christoph Strelen	Operating Systems & Stochastic Modelling
PrivDoz. Dr. Wolfgang Koch		Sensor Data & Information Fusion
	PrivDoz. Dr. Volker Steinhage	Intelligent Vision Systems
Informatik V Algorithms and	Prof. Dr. Heiko Röglin	Analysis of Algorithms Beyond the Worst Case & Cluster Analysis
Complexity	Prof. Dr. Anne Driemel	Prof. Dr. Anne Driemel Algorithmic Geometry
	Prof. Dr. Thomas Kesselheim	Algorithmic Game Theory & Optimization under Uncertainty
Informatik VI	Prof. Dr. Sven Behnke	Autonomous Intelligent Systems
Intelligente Systeme	Prof. Dr. Maren Bennewitz	Humanoid Robots
und Robotik	Juniorprofessor Dr. Herrmann Blum	Robot Perception and Learning
	Dr. Dieter Engbring	Didaktik der Informatik

Course of Study

In your masters degree you will have four different kinds of modules. Those modules are lectures, seminars, labs and your master thesis.

Lectures

Lectures usually take place in an auditorium. Smaller lectures may also be given in seminar rooms.

They usually work like this: The lecturer stands in the front and talks. The students mostly listen, but may (and should!) ask questions at any time. This is important, because if you can not follow what the lecturer is telling you, listening is rather pointless. Don't worry about embarrassing yourself: Chances are that if you don't understand it, there most probably are other students who don't understand it as well, but are too shy to ask.

The lectures also prepare you for the exercise sheets. Usually you have an exercise sheet in each lecture every week, though some lectures might have larger ones every other week or even fewer. They are accompanied by exercise groups, which also will usually be held weekly. Regular attendance in both the lectures and the exercises is highly recommended, though there are no mandatory attendance rules for either.

In most lectures you have to earn at least 50 % of the points of the exercises in order to be admitted to the exams. The exact conditions are published by the examination office before the beginning of the semester and can be found in the current module handbook. Many lectures also allow you to complete the exercises in groups of two or three students. Completing these exercises prepares you for the exam at the end of the semester, but it is not relevant to your grade; at most, they may give you bonus points in your exam. We usually do not hold midterm exams.

Seminars

Seminars will advance your knowledge of scientific work. The goal is to learn how to research a specific topic, how to then write it up in a paper and give a presentation. You must have at least one seminar in your course emphasis area/main track (if you study Computer Science) or take the Seminar Cyber Security (if you study Cyber Security). In both cases you can have at most 10 credit points in seminars in total. In practice, this means that you can have at most two seminars worth four credit points each, totaling eight at most.

The seminars are offered in many areas of research. You should choose one that you find interesting and where you think that you could write a masters thesis about. Another part of the seminar may be reviewing and critiquing other students' papers, and usually you also listen to the other students' presentations, similar to a small conference.

Labs

Whereas the seminars teach you the theoretical aspects of scientific work, labs will teach you the practical part. Usually over the course of one semester, either alone or in a small group, you will try to implement a small project. This comprises researching related projects, deciding on what you want to do, planning the implementation, executing it and, finally, writing a paper as well as giving a presentation, similar to your seminar.

Due to implementing a project being more time-consuming than just theoretical research, each lab is worth nine credit points. You also have to have one lab in your main track (if you study computer science) or take the lab Cyber Security (if you study Cyber Security) and can at most have two labs, bringing you to a total of 18 credit points.

Master's Thesis

Usually in your last semester, you start working on your master's thesis. Together with the master's thesis you also take the module Master Seminar, which for all intends and purposes you may think of as just a part of the master's thesis. As the high number of 30 + 2 credit points suggest, the amount of work alone is enough to fill a whole semester. Having another lecture while working on your thesis may work for you, but you should really try to reduce the number of other modules besides your thesis as much as possible, so try to complete all other parts of your degree before the last semester.

During the course of your study, you will probably find out what field of research interests you the most and then select more modules from that area. Ideally that area is also what your seminar and lab focused on, as this can already put you into contact with supervisors for your thesis and can work as a great starting point for a thesis topic. In order to start a thesis, you have to find a supervisor for it. That supervisor (or if they are a PHD-student, the

professor they work for) will usually serve as your first examiner. The second examiner will usually be a professor or post-doc working in a related field. They will be your main contact, and working closely together with them will certainly make it easier and will probably result in a better grade.

After you have worked out the exact topic of your thesis, your supervisor will submit it to the examination office. The topic is usually accepted. The form to submit a topic also has the start date on it. This is the start date the examination office will refer to, so you can already start working on the thesis before you get the official green light.

The exact procedure of your thesis will vary due to your topic, the work group and your own choices. If you have questions, you should contact your supervisor. They all have done their own theses and usually are involved in active research, so they can tell you what they have experienced and how you should proceed.

After submitting your thesis and giving your final presentation, if you have completed all the needed modules, have 120 credit points and have passed your thesis, you are finished! You can now call yourself a Master of Science! Congratulations!

Reading all this, it may seem as if the goal, your degree, is so far out of reach. But you should not be afraid; every great change comes in small steps. And during your journey towards this goal, we will support and help you, should you ever have problems or questions!

Map: Campus Poppelsdorf



Course of Studies: Computer Sciences

As most of you are probably already familiar with, the M.Sc. Computer Science program is composed of modules you need to pass in order to get your degree. With each module, you will earn a certain amount of credit points. In order to earn your master's degree, you will have to earn 120 credit points. Usually small lectures are worth six credit points and large lectures are worth nine. Through each lab, you will be able to receive nine credit points, seminars are worth four credit points, and your master thesis is worth 30+2 credit points.

Each credit point should be equal to 30 hours of work. This varies with each student, but it should give you a rough estimate of the time each course should take up in your schedule. The module handbook specifies how much of this time is spent in attendance and how much time you spend on your own.

Each semester, you are encouraged to earn around 30 credit points; this way, you would earn 120 credit points in four semesters, which is the recommended time of study. Both the four semesters and the 30 credit points per semester are only recommendations. You can earn as much or little credit points as you want, but of course, earning fewer credit points than recommended will increase your study time.

Each module finishes with some form of exam. For lectures, this usually takes the form of a written or oral exam. Seminars and labs finish with a paper as well as a presentation, both of which are graded. The thesis also closes with a presentation that is worth 2 credit points; the other 30 credit points are awarded for your thesis.

Note that you are not limited to selecting exactly 120 credit points of modules. Only up to 120 credit points can count for your final grades and these modules must meet the criteria outlined below. If you have selected modules beyond 120 credit points you can send an application form to the examination office to have up to 15 credit points of additional modules be listed on your transcript, however those will not count towards your grade. Any further modules you may have selected will not appear on your transcript. Do note that once you have met the criteria for a completed masters degree your masters studies will end that semester, so you can't just go on picking new modules forever.

Tracks

Now you know: To get your masters degree, you will need to collect 120 credit points. Your thesis and corresponding seminar will grant you 32 CP, the mandatory lab and seminar will add 9 and 4 CP. This leaves 75 CP to be made in whichever courses you find interesting. But wait! There are some rules on how to choose. The course selection of the Computer Science program is divided in four tracks: the Algorithmics track, the Graphic, Vision and Audio track, the Information and Communication Management track and the Intelligent Systems track. Each track offers a variety of lectures, labs and seminars that fit the topic. During your degree, you will have to choose a main track. This is a choice you make for yourself and that you don't have to tell anyone else, but it shapes the requirements for modules you have to select to complete your study. At least one lab and one seminar as well as a minimum of 18 additional CP has to come from your main track. You also have to have at least 27 CP outside of your main track and in at least two of the other tracks you need to have at least 6 CP. The remaining 30 CP are free. You may also pick at most two labs and seminars as part of your masters. Note that your thesis does not have to be in your main track. You can take a look at some examples of courses of study on page 15.

How to Study

Here at the Institute of Computer Science, you don't have to sign up for lectures to attend them. You can simply attend the first lecture and get all necessary information there. The lecturer will tell you the modalities of the lecture, such as how to enroll in exercise groups, how to access the course materials and what you have to do in order to be admitted to the exam. You can find the lectures that are held each semester by looking into the course catalog in BASIS (p. 24).

For labs and seminars, you usually have to apply before the start of the semester. Every research group handles this a bit differently, so take a look at the BASIS entry to find out how to apply. If there's no entry in BASIS, don't be afraid to ask the research group.

Exam Application

To be able to take the exams at the end of the term, you will have to fulfill the requirements published by in the module handbook, and you have to ap-

ply for the exams on BASIS, our digital platform for course overview and exam application.

The applications are usually opened around midsemester. You have to register for each exercise that you intend to pass. At the same time, you can also register for the first exam of every module. You can apply for as many or as few exams as you like, and you can step down from an exam until one week before without any explanations needed. Due to the nature of labs and seminars, you can only step down from them until you are assigned a topic.

Every semester, two exams are offered for every module. If you pass the first one, you can use the second one for your improvement-exam (see below), but else, you do not have to take it. If you did not pass or did not attend the first one, you can go to the second one. You can also take just the second exam, though you still have to register for the exercises. If you forget that, you cannot take the exam as your admission cannot be entered into BASIS.

It is possible to get a disadvantage compensation for written exams (e.g. for dyslexia) in the form of a time extension. You can check with the examination office if you are eligible. If you fall sick and can't take an exam, you have to get a doctor's note saying that you are unable to take the exam and hand it in within three days to the examination office. With that, you will not lose an attempt for the exam.

You Shall (not) pass!?

You took your written exam, you have a great feeling about it, but then BASIS shows a grade you weren't expecting. Don't worry, there are things you can do. Whether you failed or pass, the first thing you should do is go to the post-exam review. There you can have a look at you exam, see where you went wrong and ask the tutors and lecturer about it. Sometimes you can even find an error in the correction and get the points that are due to you. Most of the time, the lecturer will organize a date for everyone, but if you can't make it, don't hesitate to ask for a different date. If the lecturer does not organize a central date and also does not want to schedule individually with you, you can always get you post-exam review at the examination office.

To attend a post-exam review you usually need your passport (or something comparable) and possibly also access to your digital student ID. In case you

are doing the post-exam review for another student you also have to bring written and signed conformation that you are to attend the post-exam-review for that student. If you plan to send someone in your stead it is also nice to send a mail to the lecturer beforehand informing them that someone will come instead of you. In case you aren't too secure in the material it is also usually possible to bring another person with you to the review to review the exam together.

Within a post-exam review it is always good to first check if the points have been added up properly. They usually are, however on the rare occasion that some (sub)exercise was missed you could have a significantly better grade than expected. After that you can check where points were deducted and if anything is unclear to you ask what you did wrong. If you are very close to getting the next best grade it can sometimes be worth it to discuss if you lost any points unjustly.

Failed Exam Alright, you know where you went wrong, but the exam is still failed. If you failed the first, you can take the second exam without applying again. And even if you fail that one too: Each exam can be taken 3 times until you terminally fail it. This means that you can take each exam 3 times. And *even if* you fail something 3 times, that doesn't mean the end of the program for you. It does mean you can't pass this course anymore, but as long as there are enough other courses to finish your degree, you can continue. Even labs and seminars can be taken up to three times before terminally failing.

Bad Grade You passed your exam with a grade that you aren't happy with and the post-exam review brought insight, but no missing points. No problem, you can fix that! For three of the courses you pass during your first three semesters, you may be able to apply for an improvement-exam. For this to be possible you must pass the exam in the first exam period that semester. You can then apply for the second exam in that same semester and will recieve the better of the two grades.

Note that you can only improve grades of written or oral exams. Labs, seminars and the thesis cannot be improved.

With this information, you should be able to get through your exams. A warning at the end: If you are caught cheating in an exam, you automatically fail it. Depending on the severity of you cheating, you might even be exmatriculated and have to pay a fine of up to $50\,000 \in$, so don't cheat.

Course of Studies: Examples

Since the Computer Science program doesn't have any mandatory courses and no specific order in which to take the elective courses, we present some example courses of study. They are mostly based on real courses of study from students that finished their masters (and as such are not always perfectly 120 CP), but as some modules no longer exist we had to patch things up a bit. These are by no means the "right" way to study, they should only illustrate what a degree here in Bonn could look like. Some of them aren't complete since the students are still working towards their degree.

To safe some space, we abbreviated the tracks: Algorithmics \rightarrow AL, Graphic, Vision and Audio \rightarrow GVA, Information an Communication Management \rightarrow ICM and Intelligent Systems \rightarrow IS.

Example 1: Algorithmics

Example 3: Computer Graphic and Audio

IS: Technical Neural Networks	6 CP	GVA: Computational Photography	6 CP
IS: Seminar AI Ethics	4 CP	IS: Technical Neural Nets	6 CP
IS: Foundations of Data Science	9 CP	IS: Artificial Life	6 CP
GVA: Foundations of Audio Signal Processing	6 CP	IS: Foundations of Data Science	9 CP
AL: Cryptography	9 CP	GVA: Advanced Topics in Computer Graphics 1	9 CP
IS: Artificial Life	6 CP	AL: Cryptography	9 CP
GVA: Computer Animation		GVA: Advanced Topics in Computer Graphics 2	9 CP
AL: Algorithmic Game Theory	9 CP	GVA: Deep Learning for Visual Recognition	6 CP
AL: Discrete and Computational Geometry	9 CP	GVA: Advanced Deep Learning for Graphics	6 CP
AL: Seminar Algorithmic Game Theory	4 CP	GVA: Lab Graphics	9 CP
AL: Algorithms and Uncertainty	9 CP	GVA: Seminar Graphics	4 CP
AL: Lab Advanced Algorithms	9 CP	GVA: Thesis	32 CP
AL: Thesis	32 CP		

Example 2: Algorithmics

Example 4: Computer Graphic and Audio

IS: Technical Neural Networks	6 CP	GVA: Computer Vision	9 CP
AL: Algorithms for Data Analysis	6 CP	AL: Discrete and Computational Geometry	9 CP
ICM: Mobile Communication	6 CP	GVA: Computational Photography	6 CP
AL: Combinatorial Optimization	9 CP	GVA: Deep learning for Visual Recognition	6 CP
ICM: Practical Challenges in Human Factors of	6 CP	IS: Artificial Life	6 CP
Security and Privacy		GVA: Advanced Topics in Computer Graphics I	9 CP
IS: Autonomous Mobile Systems	6 CP	IS: Foundations of Data Science	9 CP
AL: Binary Linear and Quadratic Optimization	9 CP	GVA: Video Analytics	6 CP
AL: Lab Combinatorial Algorithms	9 CP	GVA: Visual Data Analysis	9 CP
AL: Cryptography	9 CP	GVA: Advanced Topics in Computer Graphics II	9 CP
ICM: Applied Binary Exploitation	6 CP	ICM: Introduction to Sensor Data Fusion	6 CP
IS: Foundations of Data Science	9 CP	GVA: Lab Vision	9 CP
AL: HPC modern Architectures and Trends	6 CP	GVA: Seminar Vision	4 CP
AL: Seminar Computational Analytics	4 CP	GVA: Thesis	32 CP
AL: Thesis	32 CP		

Example 5: Intelligent Systems		Example 7: Information an	
AL: Cryptography	9 CP	Communication Management	
IS: Learning from Non-Standard Data	6 CP	5	6 CF
ICM: Mobile Communication	6 CP		
IS: Principles of Machine Learning		IS: Artificial Life	6 CF
IS: Advanced Learning Systems	6 CP	ICM: Mobile Communication	6 CI
GVA: Advanced Topics in Computer Graphics I	5 01		6 CF
ICM: IT Security		ICM: Malware Analysis	6 CF
ICM: Practical Challenges in Human Factors of Security and Privacy	6 CP	$\label{local_constraint} \mbox{\sc icm: Array Signal and Multi-channel Processing}$	6 CF
ICM: Side Channel Attacks	6 CP	ICM: Applied Binary Exploitation	6 CF
IS: Artificial Life		IS: Advanced Learning Systems	6 CF
IS: Humanoid Robotics		ICM: Lab IT Security	9 CF
GVA: Computational Photography		GVA: Advanced Topics in Computer Graphics I	9 CF
IS: Seminar Humanoid Robots		ICM: Seminar Selected Topics in IT Security	4 CF
IS: Lab Sensor Data Interpretation		GVA: Video Analytics	6 CF
IS: Technical Neural Nets	6 CP	IS: Cognitive Robotics	6 CF
ICM: Advanced Computer Forensics	6 CP	AL: Algorithms for Data Analysis	6 CF
IS: Thesis	32 CP	ICM: Thesis	32 CF

Example 6: Information an Communication Management

5	
ICM: Foundations of Audio Signal Processing	6 CP
IS: Principles of Machine Learning	6 CP
IS: Secure Software Engineering	6 CP
ICM: Applied Binary Exploitation	6 CP
ICM: IT-Security	6 CP
ICM: Mobile Communication	6 CP
ICM: Lab IT Security	9 CP
ICM: Seminar Selected Topics in IT Security	4 CP
AL: Cryptography	9 CP
ICM: Introduction to Sensor Data Fusion	6 CP
IS: Technical Neural Nets	6 CP
IS: Advanced Methods of Information Retrieval	6 CP
AL: Introduction to High Performance Computing	6 CP
IS: Side Channel Attacks	6 CP
ICM: Thesis	32 CP



The cardboard version of the "Stanford Bunny" of department II in front of the Institute's logo

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Course of Studies: Cyber Security

As most of you are probably already familiar with, the M.Sc. Cyber Security program is composed of modules you need to pass in order to get your degree. With each module, you will earn a certain amount of credit points. In order to earn your master's degree, you will have to earn 120 credit points. Usually small lectures are worth six credit points and large lectures are worth nine. Through each lab, you will be able to receive nine credit points, seminars are worth four credit points, and your master thesis is worth 30+2 credit points.

Each credit point should be equal to 30 hours of work. This varies with each student, but it should give you a rough estimate of the time each course should take up in your schedule. The module handbook specifies how much of this time is spent in attendance and how much time you spend on your own.

Each semester, you are encouraged to earn around 30 credit points; this way, you would earn 120 credit points in four semesters, which is the recommended time of study. Both the four semesters and the 30 credit points per semester are only recommendations. You can earn as much or little credit points as you want, but of course, earning fewer credit points than recommended will increase your study time. It happens quite frequently that students need more than four semesters to finish their degree, especially if you have a job alongside your studies.

Each module finishes with some form of exam. For lectures, this usually takes the form of a written or oral exam. Seminars and labs finish with a paper as well as a presentation, both of which are graded. The thesis also closes with a presentation that is worth 2 credit points; the other 30 credit points are awarded for your written thesis.

Note that you are not limited to selecting exactly 120 credit points of modules. Only up to 120 credit points can count for your final grades and these modules must meet the criteria outlined below. If you have selected modules beyond 120 credit points you can send an application form to the examination office to have up to 15 credit points of additional modules be listed on your transcript, however those will not count towards your grade. Any further modules you may have selected will not appear on your transcript. Do note that once you have met the criteria for a completed masters degree your masters studies will end that semester, so you can't just go on picking new modules forever.

Compulsory and Compulsory Elective Modules

Now you know: To get your masters degree, you will need to collect 120 credit points. These are split between the Compulsory and the Compulsory Elective modules, with the compulsory elective modules splitting up into multiple groups explained later. The compulsory modules are modules that must be selected to get the masters degree while the compulsory elective modules consist of pools of lectures that you need to select a certain number of credit points from.

Compulsory Modules

Currently the master Cyber Security has 4 (technically 5) compulsory modules that together make up 51 credit points. You must attend the lecture IT Security and complete one lab, one seminar and your masters thesis in cyber security. The masters thesis technically splits into two modules, the actual thesis for 30 credit points and the masters seminar accompanying the thesis for 2 credit points, however these two are always selected in tandem,

so we usually talk of them as one module. While you must select all of these modules to finish the master cyber security, they have no explicit internal dependencies and you may select them in any order you like. However we recommend selecting the lab and seminar before the masters thesis, as they are good ways to check out if a certain area of cyber security is the right one for your masters thesis.

Compulsory Elective Modules

The compulsory elective modules make up the other 69 credit points of your master. They are split into three types of compulsory elective modules. For all three types there are lists of modules that you can select from.

There are the subject-bound compulsory elective modules which are again split into the subject-bound compulsory elective modules cyber security (from now on called compulsory elective modules cyber security) and the subject-bound compulsory elective modules computer science (from now on called compulsory elective modules computer science). The compulsory elective modules

cyber security allow you to further specialize into different parts of cyber security while the compulsory elective modules computer science allow you to learn more about other parts of computer science, such as computer graphics or theoretical computer science. Most subject-bound compulsory elective modules are also modules that students of the master computer science can select and most modules that are part of the master computer science can be selected as compulsory elective modules. Do look out however, for example nearly all modules in the algorithmics track of the master computer science are inaccessible to students of the master cyber security. The full list of available compulsory elective modules can be found in the module handbook. The newest version is available via the website of the examination office which can be found under https://www.informatik. uni-bonn.de/en/studies/examination-office/ examination-office?set_language=en. The module handbook also contains some example courses of study.

The non-subject-bound compulsory elective modules allow you to select modules from outside of computer science, such as mathematics, psychology, economics, geography, photogammetry, physics/astronomy or chemistry. These modules must be from masters studies in the respective areas, you may not select bachelor modules. The examination board may publish lists of "approved" modules, however to the best of our knowledge so far no such list has been published. Outside of such a list the examination board can allow modules on a case-by-case basis if the modules are not too close to modules of the subject-bound compulsory elective modules. So if there is a module in a different masters study that really interests you, contact the examination board if its possible to select it as part of your master cyber security.

While the compulsory elective modules offer a great deal of freedom in specializing your master your selections are still bound by certain rules on how many credit points you can and must select in certain areas.

- Subject-bound compulsory elective modules (54-69 credit points)
 - Compulsory elective modules cyber security (at least 24 credit points)
 - compulsory elective modules computer science (at least 12 credit points)
 - * May contain at most one seminar and one lab

 Non-subject-bound compulsory elective modules (0-15 credit points)

You must select at least 54 credit points of subject bound compulsory elective modules. Of these at least 24 credit points must be compulsory elective modules cyber security and at least 12 credit points must be compulsory elective modules computer science. Within the compulsory elective modules computer science you may select up to one lab and up to one seminar. You may also select up to 15 credit points in the non-subject-bound compulsory elective modules, but you are not required to select any at all.

How to Study

Here at the Institute of Computer Science, you don't have to sign up for lectures to attend them. You can simply attend the first lecture and get all necessary information there. The lecturer will tell you the modalities of the lecture, such as how to enroll in exercise groups, how to access the course materials and what you have to do in order to be admitted to the exam. You can find the lectures that are held each semester by looking into the course catalog in BASIS (p. 24).

For labs and seminars, you usually have to apply before the start of the semester. Every research group handles this a bit differently, so take a look at the BASIS entry to find out how to apply. If there's no entry in BASIS, don't be afraid to ask the research group.

Exam Application

To be able to take the exams at the end of the term, you will have to fulfill the requirements published in the module handbook, and you have to apply for the exams on BASIS, our digital platform for course overview and exam application (see p. 24).

The applications are usually opened around midsemester. You have to register for each exercise that you intend to pass. At the same time, you can also register for the first exam of every module. You can apply for as many or as few exams as you like, and you can step down from an exam until one week before without any explanations needed. Due to the nature of labs and seminars, you can only step down from them until you are assigned a topic.

Every semester, two exams are offered for every module. If you pass the first one in a compulsory elective module, you can use the second one for your improvement-exam (see below), but else, you do not have to take it. If you did not pass or did not attend the first one, you can go to the second one. You can also take just the second exam, though you still have to register for the exercises. If you forget that, you cannot take the exam as your admission cannot be entered into BASIS.

It is possible to get a disadvantage compensation for written exams (e.g. for dyslexia), usually in the form of a time extension. You can check with the examination office if you are eligible. If you fall sick and can't take an exam, you have to get a doctor's note saying that you are unable to take the exam and hand it in to the examination office within three days. With that, you will not lose an attempt for the exam.

You Shall (not) pass!?

You took your written exam, you have a great feeling about it, but then BASIS shows a grade you weren't expecting. Don't worry, there are things you can do. Whether you failed or pass, the first thing you should do is go to the post-exam review. There you can have a look at your exam, see where you went wrong and ask the tutors and lecturer about it. Sometimes you can even find an error in the correction and get the points that are due to you. Most of the time, the lecturer will organize a date for everyone, but if you can't make it, don't hesitate to ask for a different date. If the lecturer does not organize a central date and also does not want to schedule individually with you, you can always get your post-exam review at the examination office.

To attend a post-exam review you usually need your passport (or something comparable) and possibly also access to your digital student ID. In case you are doing the post-exam review for another student you also have to bring written and signed conformation that you are to attend the post-exam-review for that student. If you plan to send someone in your stead it is also nice to send a mail to the lecturer beforehand informing them that someone will come instead of you. In case you aren't too secure in the material it is also usually possible to bring another person with you to the review to review the exam together.

Within a post-exam review it is always good to first check if the points have been added up properly. They usually are, however on the rare occasion that some (sub)exercise was missed you could have a significantly better grade than expected. After that you can check where points were deducted and if anything is unclear to you ask what you did wrong. If you are very close to getting the next best grade it can sometimes be worth it to discuss if you lost any points unjustly.

Failed Exam Alright, you know where you went wrong, but the exam is still failed. If you failed the first, you can take the second exam. And even if you fail that one too: Each exam can be taken 3 times until you terminally fail it. This means that you can take each exam 3 times.

If you fail an exam in a compulsory module 3 times you will be expelled from the master cyber security and will no longer be able to study a master of cyber security in Germany. The same happens if you fail your masters thesis twice. Don't worry, it is very rare that people get expelled. However if you are approaching your third attempt in any exam make sure you are prepared for it as best as you possibly can.

In contrast to this if you fail an exam in an elective compulsory module 3 times you have terminally failed that module and can not attempt the exam again. However if there are still enough other modules so that you can reach the credit point requirements for each section of the elective compulsory modules you can simply continue your studies with different lectures.

Bad Grade You passed your exam in an elective compulsory module with a grade that you aren't happy with and the post-exam review brought insight, but no missing points. No problem, you can fix that! For three of the courses you pass during your first three semesters, you may be able to apply for an improvement-exam. For this to be possible you must pass the exam in the first exam period that semester. You can then apply for the second exam in that same semester and will recieve the better of the two grades.

Note that you can only improve grades of written or oral exams. Labs, seminars and the thesis cannot be improved.

With this information, you should be able to get through your exams. A warning at the end: If you are caught cheating in an exam, you automatically fail it. Depending on the severity of your cheating, you might even be expelled and have to pay a fine of up to $50\,000 \in$, so don't cheat.

Master of Life Science Informatics

Note: The info in this article may be outdated. We currently do not have an LSI student active in the student body who could verify it for us. If you notice errors, please contact us at fs@fachschaft.info and we will fix it ASAP. Your help is much appreciated.

The M.Sc. Life Science Informatics is affiliated with the Bonn-Aachen International Center for Information Technology. Life Science Informatics is offered jointly by the University of Bonn and RWTH Aachen in cooperation with the Fraunhofer Institutes at Sankt Augustin near Bonn. The program combines the natural sciences with computer science and is taught in English.

Lectures

There is a catalog of compulsory subjects that must be completed. From a selection of elective subjects, it must also be possible to accumulate a certain number of credit points over the entire course of study. Unlike other degree programs, the university provides a timetable for each semester, which includes the suggested division of subjects.

1. Semester

Mathematics for Life Scientists*	3 CP
Computer Science for Life Scientists*	9 CP
Bioinformatics I	3 CP
Biological Databases	6 CP
Biology and Chemistry for Life Scientists*	7 CP
LSI Tutorial (lab, optional)	6 CP
Optional Courses from the Module Catalog	* CP

*For students with a degree in Computer Science, Mathematics for Life Scientists" and "Computer Science for Life Scientists" are optional subjects. For students with a degree in Life Sciences, "Biology and Chemistry for Life Scientists" is an optional subject. You may replace the modules optional for you with other modules from the module catalog.

The LSI Tutorial is a programming tutorial that is meant to help students with a background in natural sciences to improve their programming skills. It starts at a very basic level and accompanies the Computer Science Lecture.

2. Semester

Visual Computing in the Life Sciences	6 CP
Molecular Modeling and Drug Design	6 CP
Biomedical Data Science and AI	6 CP
Programming Lab I	8 CP
Scientific Presentation I	4 CP

3. Semester

Programming Lab II	8 CP
Chemoinformatics	7 CP
Optional Courses from the Module Catalog	17 CP

4. Semester

Master thesis	30 CP
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Another difference to other degrees lies in the administration of the course. Most lectures aren't available on e-campus and the registration for exams and lectures is done paper-based. Information is provided by the LSI exam office in time, so don't worry about that!

Due to the small group size, the mentoring is much more intensive than in degrees with 100 or 150 students!

The program's website provides a lot of information regarding the study course and administrative information as well (https://www.b-it-center.de/b-it-programmes/msc-in-life-science-informatics/description).



Entrance to B-IT Center at Friedrich-Hirzebruch-Allee 6 Copyright: Volker Lannert / Uni Bonn

Tools and IT-Services

Got a problem with the Uni-IT?

The IT-Helpdesk at HRZ provides help on topics such as Uni-ID (account), E-Mail, eduroam and VPN.

Opening hours: monday - friday, 8.00 - 18.00

Mail: info-hrz@uni-bonn.de Phone: 0228 / 73-2751

In Person: ground floor of HRZ, Wegelerstr.

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Two different accounts

All students get a general account from the university, the **Uni-ID**. It will be your login for all centralized services, like BASIS (see page 24) and eCampus (see below). With this account you can manage your studies in general.

Account activation

After enrollment, you can download your credentials in the application system. They will look a bit like this: "s23xabcd" and a random initial password. To activate this account you have to enter them at $GOsa^2$ (https://gosa.gosa.uni-bonn.de), where you will set your own password - after that, the initial password will no longer work. We recommend you also add a private mail adress for quick password reset in the future.

On top of that, you get a **CS account**, which is needed for VPN (see below) and computer pools (also called CIP-Pools, see next page).

To apply for one you have to follow the instructions here https://gsg.informatik.uni-bonn.de/doku.php?id=en:accounts:students:manage.

With this account you get access to a few services specific to computer science.

eCampus

The university hosts a central eLearning platform called eCampus, where lecturers can upload all relevant data for their courses, including slides, exercise sheets, etc. Often you will even hand in your finished exercises through uploads to the eCampus system.

Many CS lecturers prefer using their own homepage instead. You will then be able to either find a link to their page in the eCampus course or it will be provided during the first lecture. **Important**: For many of those sites, slide downloads will be password secured. Be sure to either take note of that password during the first lecture or get it from fellow students at the beginning of the semester.

Your E-Mail-adress

Your uni-account comes with an e-mail account. The adress is s23xabcd@uni-bonn.de with your uni-ID respectively. We suggest checking this inbox frequently, as you will receive official information from the uni there.

To read your mail in a browser go to https: //email.uni-bonn.de/. You can also add it to clients like Thunderbird or a smartphone app. For this, please make sure your client does not save login-data in a cloud (see https://www.hrz.uni-bonn.de/en/news/abruf-durch-unzulaessige-e-mail-clients-gesperrt?set_language=en for further info).

When setting up your client, in addition to your email-adress and password, you often have to add additional info for it to work (Advanced Setup). Below we have created an overview of frequently required fields for quick access.

A step-by-step guide for different OS and clients can be found here: https://www.hrz.uni-bonn.de/en/all-services/e-mail-calender-contacts/e-mail (only available when in uni wifi or via VPN).

	Eingangsserver	Ausgangsserver
Protocol:	IMAP	SMTP
Hostname:	email.uni-bonn.d	e
Port:	993	465
(field has different name on every OS)	SSL/TLS (Apple: S	SL)
Authetication:	Passwort normal /	Keine Passwortverschlüsselung

By the way: If you do not like your Uni-ID, you can set up to two aliases in $GOsa^2$. All e-mails to those aliases will be delivered to your inbox as well.

TVS - exercise assigning system

A lot of lecturers at CS use TVS, a system that helps assigning students to excercise groups. At https://tvs.cs.uni-bonn.de you can register using your matriculation number and then pick your preferences for the exercise timeslots (seperately for each course). The system will automatically create a distribution, meeting as many preferences as it can, while making sure you won't get the same time slot for two different courses. In some courses you might be able to form small groups in advance that share the same preferences and will be assigned together. This way you can assure you and your study group will be in the same exercise group.

Internet access: WLAN here, WLAN there

One of the most frequent questions is: How can I access the web on campus?

First you will of course need a WLAN (or Wi-Fi) connection. Depending on exact location, the networks have different names: bonnet, bonnet-stw, eduroam, eduroam-stw, eduroam-cs and eduroam-math are few of the common ones.

Some of these are open, unencrypted access points, which everyone is allowed to connect to. However, this does not automatically give you an internet connection. For that, you will need a VPN client. (see next section)

An exception to that are the eduroam networks. These are encrypted with WPA Enterprise. To connect to them you have to log in with your uni account, but do not need a VPN client. (see page 26)

VPN

At the uni Bonn you need VPN (Virtual Private Network) for two different things:

- · Accessing the internet via WLAN
- Accessing the universitys intranet from home

What makes it a bit confusing is that the uni and the CS institute are (again) using two different VPN systems. In most cases it should not matter which of the two you are using, unless trying to access information specifically for CS only. If you are having trouble with the VPN for web access we recommend trying the eduroam WLAN (see page 26) instead.

CS-VPN: The institute of computer science uses the open source system OpenVPN. To access the institute's intranet via OpenVPN, you require a profile, or certificate, which can be requested and downloaded via the b-it / IoCS User Management Interface. To authenticate, you will need to use your CS username and password. The GSG website offers step-by-step instructions for different OS here: https://gsg.informatik.uni-bonn.de/doku.php?id=de:vpn

Uni-VPN: The uni uses a system by Cisco, on which there are various opinions. Some students connect through it without any problems, while others experience frequent errors and suddenly lost connections. Another issue is that there is no Cisco client available for some systems.

The website of the HRZ (link box below) offers client downloads for Windows, Mac OS and Linux. There you will also find detailled tutorials for each OS. Once the client is installed, enter either https://unibn-vpn.uni-bonn.de if you want to access the intranet from home or https://unibn-wlan.uni-bonn.de if you want to use it for WLAN access.

SSH Tunnel

When you don't need a full VPN, but only want to access a few intranet services real quick, you might find SSH (Secure Shell) useful. SSH is a usually text-based tool with which you can execute command line expressions on an external server instead of your own computer.

For that, you will need your CS account. To set it up, we recommend the tutorials from the GSG: https://gsg.informatik.uni-bonn.de/doku.php?id=en:ssh

Books and journals online

The Institute has a subscription for the IEEE Copmuter Society Digital Library and ACM Digital Library, that can be retrieved online. This can be useful when you are required to read academic articles for seminars.

On top of that, the ULB library has a couple more subscriptions, as well as many books from the computer science field. They are often also available in digital form. Via the bonnus system, available at https://www.ulb.uni-bonn.de/, you can search by title, author and keywords and instantly see whether a book or article is available and get a link to the digital version or the location in the physical library. Note that for some of the digital media you have to be in the uni wifi or VPN. For access to the physical library you will need a library card, which

you can apply for on the website listed above and later add to your Uni-Bonn-App (see page 25).

Computer pools

The institute for computer science has a bunch of CIP-Pools. Accessible for students are two Windows pools and two Linux pools in the basement of the computer science building (see map, page 40). To log in to the computers there, use your CS account.

To enter the CIP-Pools you will need a code to type in at the door.

door code

Found out the code through asking or dark magic? Take notes here!

The pools also offer a scanner-printer-combo named feder, located in the BYOD-room. Every month, you get 50 pages of print credit added to your balance. If you don't use them all they stack for the next month, up to a maximum of 300 pages. You can print from all CIP-POOL-PCs, as well as (through a web interface) from your own laptop or tablet. As an alternative you can print at the libraries, paying with your mensa card.

Besides the pools at the CS building, the libraries offer some public computer workstations as well, you can log into those using your Uni-ID.

Weblinks

- 1 https://ecampus.uni-bonn.de
- https://tvs.cs.uni-bonn.de
- https://email.uni-bonn.de
- https://www.hrz.uni-bonn.de/en
- https://gsg.cs.uni-bonn.de/

Useful Tools

IDE There are a lot different IDEs and opinions on IDEs. There is no real right or wrong here and the choice highly depends on the programming language and project at hand. Nonetheless, here are a few recommendations:

For Python you might choose the Community Edition of *PyCharm* (www.jetbrains.com/idea/) by JetBrains (open source). JetBrains also offers a bunch of other IDEs for different programming languages.

If you are searching for a more lightweight solution, you should take a look at *Visual Studio Code* (code.visualstudio.com/) or the variant without Telemetry, *VsCodium* (github.com/VSCodium/vscodium). This editor offers a large library of extensions, which can be added as required and in this way provides support for almost every programming language.

LaTeX is a well known typesetting engine, an alternative to Microsoft Word or LibreOffice Writer. LaTeX is especially popular for writing academic documents, as it is very versatile and provides a good formula editing system. Most students will encounter it sooner or later, so it might be worthwhile checking it out, e.g. with urloverleaf.com. By the way: This magazine was also made using LaTeX.

GNU/Linux is used a lot at university, so it's good for Windows users to familiarize themselves with the system. A good start is the distribution Ubuntu, which is especially suitable for beginners. This is also the one used in the Linux pools. Those who want keep using mainly Windows or Mac can set up a Virtual Machine instead, e.g. with *Virtual Box* (www.virtualbox.org/). From time to time, CS and AStA host linux install partys where seasoned users help you with your setup and answer questions.

Git Git (e.g. via github, gitlab or gitea) is commonly used for working together on coding projects, including version control. For beginners we recommend ohmygit.org/ and the various "git cheatsheets" on the web.

BASIS – Planer for your studies

BASIS (https://www.basis.uni-bonn.de) is a website that is important for all students. It does not only include the course overview, but is also used to apply for exams and view the results. Let's take a closer look at it!

To log in to BASIS, you use your Uni-ID and the associated password. On page 21 we explain where you can find them and how you can activate them.

You might want to switch the language to english (if it isn't already) on the top left corner.

After succesfully logging in, you will see your personal dashboard. On the right, you can find a download of your **certificates of studies**, on the left some shortcuts to useful functions. You can fully navigate the side using the menu opened by the Hamburger button. We'll now mention the most important functionality.

My studies

Here you can register for lectures, tutorials and exams if needed and can take a look at your grades.

Study planner This function is chaotic and not yet matured. We recommend you take a look at the official module plan of the institute's website.

Term groups CS students don't need to worry about these.

Schedule Here you can see a time table of your enrollments. Because you don't need to register for lectures - only for exams and tutorials - you are better off making your own time table.

Show my enrollments This shows all your enrollments and registrations after you have taken them.

My Achievements After you have taken exams, you can find whether you have passed and your grades here, as well as your credits.

Register for examinations This function is the one and only official place where you register and deregister to/from exams. No other form of registration (emails, eCampus, talking to your professor) counts. Keep in mind the deadlines for exam registrations, you will be informed of them via email in time. You can deregister from exams until 7 days before the exam.

Study service If you ever need certificates, information about pending payments or your account as well as payment deadlines, this page shows all the relevant information. You can also change contact information here.

Course plan On overview of all courses offered this/coming semester that can be taken by you.

Studies offered

This shows all courses and lectures offered to you, as well as a way to show for courses uni-wide and links to module plans.

Application

If you want to change your studies, apply for double-studies, etc. this is the place to manage all of it. Some of the functionality is only visible during application periods.

Service

Personal settings Here you can change information for officials of the University to reach you under. If you move or change your phone number, make sure to change this information. Even though most communication is digital, some of it is not.

Requests Here you can find official requests such as exmatriculation, sabbaticals/vacations or changing your **name or legal gender identity**, for example by marriage or personal choice. This request is also possible **before** a change in your passport via the Selbstbestimmungsgesetz (law of self-determination), as long as you have a dgti-Ergänzungsausweis (supplemental identification card). It may be possible you'll have to change these informations again with the Study Services.

How to build your own schedule

Basis has a built-in function to construct a timetable, but we do not recommend you use it. Instead, before the beginning of the next semester, choose courses you would like to take through the module planner and register for tutorials during the first week of lectures (this is internal to the lecture and not done via basis). After you have gained a tutorial slot, you could correct your time table to get rid of doublings.

Master-Inform

You do not need to regiter to lectures to be able to attend them. So during the first week you could visit the first lectures of a lot of courses and then choose your favourites for the semester afterwards.

Keep in mind that being registered for a tutorial and handing in solutions to exercises does not mean that you are registered for the exam yet!

Questions regarding BASIS

If you have questions regarding BASIS, you can of course always ask us, the student body. In

many cases, we will however refer you to the technical support for BASIS at info-hrz@uni-bonn.de or the BASIS coordinator of Computer Science at pos@informatik.uni-bonn.de, so you can also contact them directly. There is also a page on the institute's website regarding frequently asked questions about exam registrations, make sure to read it thoroughly: https://www.informatik.uni-bonn.de/en/studies/examination-office/examination-office/

Uni Bonn App

The Uni Bonn App replaces a physical student ID and public transport ticket. More about the ticket on page 28.

How do I install the app?

You can find the app in the Play Store or in the Apple App Store by searching for Uni Bonn App or you can just scan one of these QR-codes:

Google Playstore



Apple App Store



How can I use the app?

Once you've downloaded the app and opened it, you have to use the hamburger menu (three lines) in the top left corner and choose the option Loginin the sidebar. There you log in with your unid (WITHOUT @uni-bonn.de) and password. After

successful login, you may want to set the language to english through the hamburger menu under Settings (Einstellungen).

Features

Home Here you will find many useful links, for example to the Studierendenwerk. On top, university news will be displayed here.

Canteen Here you can view the canteen (aka. mensa) menu for the coming week. For the canteen near the CS building, set the location to Mensa Poppelsdorf CAMPOat the top of the screen.

Library After creating a library card on the website of the ULB (https://www.ulb.uni-bonn.de/de/nutzung-und-ausleihe/ausweis-konto) you can log in with your library account here to add your digital library card to the app.

Wallet The wallet displays your public transport ticket, student ID and library card.

Known Bug: Sometimes the app may log you out randomly and tell you to reauthenticate. If that happens, just log in again as described above.

eduroam



eduroam

(Education Roaming) is an originally a European, now world-wide initiative. Eduroam gives staff and students of participating universities and organisations internet access via WLAN at all of these facilities, using their personal username and password or a personal X.509-user-certificate from a valid PKI.

Where can I use it?

You can connect to the eduroam WLAN access points at all participating facilities. Those usually have the network name (ESSID) "eduroam" or contain that word and a specification, like eduroam-cs at the CS building or eduroam-stw for those hosted by the student administration.

How does it work?

First, you should go to cat.eduroam.org. There, choose the university of Bonn as your organisation and download the confuguration relevant for your OS. This site also has some instructions, but we will also go over them on this page.

You will need your Uni-ID for this. Refer to page 21 to find and activate it.

Android From the PlayStore (or as .apk) install the app getEduroam (Android 8 and higher) or EduroamCAT (Android 7 nd lower). In the app, choose Universität Bonn, then enter your Uni-ID and password.

Apple Devices Download the configuration file and confirm. In settings, search for something called "Profiles" or "VPN and certificates". Install the eduroam certificate and enter your Uni-ID (with @uni-bonn.de at the end) and password *five times in a row*.

Windows Download the configuration tool and open it. Enter your Uni-ID and password. On first connection, Windows Security might prompt you to enter a user and password again, for that use your Windows user and password, not your Uni-ID.

Linux Download the eduroam python script. Open a Terminal and enter this commnand: \$ python3 PfadWoDasCATLiegt/eduroam-linux-Universitat_Bonn.py Enter your Uni-Id and password when prompted.

Caution! Some Linux systems throw an error, saying they are missing wpasupplicant. *Do not proceed* in this case or your password will be saved unencrypted! Instead, go to the IT-Helpdesk (see below), they have a different script with a workaround.

Alternative: Manual Setup If the above tools fail, you can set up eduroam manually. This is not a recommended method though.

For this, you need the matching CA certificate. You can download it here: https://pki.pca.dfn.de/eduroam-ca/pub/cacert/chain.pem

In your network manager just copy the parameters below. You might have to change eduroam to eduroam-cs (CS building), eduroam-stw (cafeteria) oder eduroam-math (maths center).

SSID	eduroam
Security	WPA2 Enterprise
EAP-Method	TTLS
Phase 2 Authent.	PAP
Certificate	chain.pem
Anonymous Identity	anonymous@uni-bonn.de
Identity	<uni-id>@uni-bonn.de</uni-id>
Password	matching your Uni-ID
Domain	rhrz.uni-bonn.de

What if it doesn't work?

In case that you are having trouble setting up your eduroam access, you can find more detailed instructions and useful tips on the HRZ website: https://www.hrz.uni-bonn.de/en/all-services/internet-network-access/wifi-eduroam-reinstallation

If it still does not work, come by the student body office or contact the IT-Helpdesk. The latter is open monday through friday 8 a.m. to 6 p.m. and can be called at 0228 73 2751, e-mailed at info-hrz@uni-bonn.de or you can go directly to Wegelerstraße 6.

For the eduroam-cs (CS building) you might need to download a different certificate. It's called GEANT OV RSA CA 4 and can be downloaded on the website of the GSG.

sciebo - the campus cloud



University Cloud Storage

Sciebo (from SCIEnce and BOx) is a non-commercial cloud storage service (similar to Dropbox or Google Drive) for research, studying and teaching. It is operated by universities and receives funds from the NRWagovernment, with an operators guarantee that there is no commercial interests. With locations in NRW exclusively, sciebo is subject to the strict German directives on data protection and data security.

Every student and staff member of the participating universities receives 30 GB storage space. You can share your data with other sciebo users or via a link with external people.

Create a sciebo account

To create a sciebo account, go to sciebo.de and register by picking "Universität Bonn" as your organisation, log in with your uni-ID (s12xabcd, see page 21) and matching password once. Then choose a sciebo password. This can (and should) differ from the one for your Uni-ID. From now on you can log into sciebo with that new password, using <your Uni-ID>@uni-bonn.de as your username.

The account has to be renewed once a year. You will receive an e-mail asking you to confirm you still study at Uni Bonn.

Using sciebo

There are multiple ways to use sciebo:

Webinterface The easiest way to use sciebo is via your browser. Sciebo offers a web interface, which can be found at uni-bonn.sciebo.de. Just log in with the account you just created.

sciebo via a client Sciebo can be used for example through the nextcloud-Client for Windows, MacOS and Linux. You can find downloads at sciebo. de or using your favourite package manager. In addition to that, sciebo can be mapped as a network drive via WebDAV.

Sharing files or folders with others

If you are using sciebo in a browser you can go to fileview and click on the symbol . There's two options: Either you share the file with a specific Uni-ID (the other person must have a sciebo account) or via a link. In the latter case the other person does not need a sciebo account, everyone with the link will be able to access the file(s). Don't worry though, you can put a password and/or expiry date on the link.

Editing documents in browser

When using sciebo in browser you can edit documents, presentations or spreadsheets from Microsoft Office or Libre Office directly in browser. In theory you can also work simultaneously with other users in this way, but the features are rather minimalistic. For projects where you need to work in real-time with you fellow students on a file we recommend using products specialized for that instead, the sciebo editor is just not technologically mature enough yet.

Weblinks

- https://sciebo.de/en/index.html
- 1 https://www.sciebo.de/en/help/
- https://www.sciebo.de/en/help/ index.html
- https://uni-bonn.sciebo.de/

Student Transit Ticket

Important Notes

To use your semester ticket, you need the Uni Bonn App and your valid photo ID card or passport! If you don't carry both, your ticket is invalid. It's a personalised ticket.

The Uni Bonn App also contains your transit ticket for Germany. It is valid in the whole country and much cheaper than if you would buy one by yourself, due to all students receiving one. It still makes up most of your social dues. Even if you do not intend to use it, you have to pay for it, but in case you have trouble paying for it or due to special circumstances, you may be eligible for a refund.

Weblinks

www.asta-bonn.de/Studiticket

What can I do with it?

In general, you can use all trains, trams, subways and busses in Germany. Exempt are longdistance trains of the categories ICE (InterCity-Express), IC (InterCity), EC (EuroCity), FLX (Flix-Train) or Thalys, for example. You also may not use the first class, not even by paying an additional fee.

What is the mobility guarantee ("Mobilitätsgarantie")?

In public transit in NRW you have the mobility guarantee. This means that, if you are at your starting station and over the course of 20 minutes starting at the planned departure time nothing can get you to your planned destination (the next hop, so only direct connections count), you can either get the costs of a taxi or of a long-distance train refunded. You have to pay in advance and can then hand in an application for the refund within two weeks. The applications must contain a receipt, so keep that in mind. Additional information as well as the forms are available here (in German): https: //www.mobil.nrw/service/mobigarantie.html.

Nextbike

You might have noticed the blue bicycles with a QR-code on them. These are rental bikes from Nextbike! The University of Bonn has a contract with them: If you register in the App with or deposit your ...@uni-bonn.de mail (and verify it) you get 30min per day (distributable over multiple sessions) in Bonn for free. After that you pay 1€per 30min (up to 8€per day).

Careful: You have to return the bikes in the preassigned areas, else you will be charged a 20€+ service fee. More information can be found on their homepage https://www.nextbike.de/bonn/en/.

Riding Busses as a Computer Scientist 101

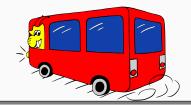
Most of your lectures and exercises will take place on the Campus Poppelsdorf.

At the station "Kaufmannstr.", lines 604 to 607 stop, at the station "Am Botanischen Garten" lines 601, 602 and 603 stop. All seven lines are main lines that run every 20 minutes (later every 30 minutes). Into the city, they all go via the central station (Bonn Hauptbahnhof/Bonn Hbf); out of the city, they split up.

At the station "Nußallee" you can take line 632, that also stops at both other stations. This (like all bus lines in Bonn that start with 63.) is a tangential line that does not stop at the central station. It only runs every half hour, but it connects the Campus Poppelsdorf with the Campus Endenich.

To spare you from having to walk to the bus stop, only to learn that the next bus doesn't show for 10 minutes, the screens if front of the student body office show which buses will arrive next and

After 00:00 (12 a.m.), night busses run till 2 a.m. on weekdays or the whole night on weekends and public holidays; the N2 at the station "Kaufmannstr." and N5 at "Am Botanischen Garten".



Administration

First Steps

A great place to start is the AStA website. It provides you with a lot of useful information, such as the AStA-BAföG brochure, a scholarship guide, and, if you are financially strapped, short loans.

If you have any questions, you can contact the AStA via e-mail, phone or social media. They also do consultations in person in their container offices next to the cafeteria. The current opening hours of e.g. the social department or international students departments are announced on the website as well.

For international students, there is also the International Office of Uni Bonn, whih provides counseling related to studies and stay in Bonn.

BAföG

Everyone who thinks they might be entitled to receive educational support under the Federal Training Assistance Act, or BAföG for short, should submit an application to the BAföG office as soon as possible. BAföG is a financial support from the government for students, of which, however, half must be paid back after the completion of studies. If you are from the EU or from Norway, Iceland, Switzerland or Liechtenstein, you can always apply for BAföG. If you are from some other country, there are very special regulations regarding BAföG entitlement. Therefore, it is best to ask the Studierendenwerk directly! If you are not sure, you should simply ask and just apply. Better to be safe than sorry. If you are entitled to BAföG, you should in theory receive money starting from the month of application, but it usually takes time to process an application. But once accepted, you will get your money retroactively.

So: Submit an informal application or Form 1 of the application forms in time, and the application will be considered to have been submitted. The forms are available at the AStA, as well as at the BAföG office. An informal application could look like this: "I hereby submit an application for educational funding as of dd.mm.yy. I will submit the required documents within the next two months. I was born on ... I have been/will be studying since/as of ... at the University of Bonn in the Department of Computer Science. Please send me the required documents immediately."

Payments are usually made at the end of each month for the next. The amount you receive is 50 percent an interest-free loan, the other half

you get as a grant. The maximum duration of the grant is based on the expected period of study (4 semesters/2 years with our Master's programs), although there are exceptions to this rule. These can include, for example, study visits abroad or committee activities such as student council work. The continuation of payments after the fourth semester is linked to performance records and other requirements. It is therefore worthwhile to get informed.

For further questions, you can contact the BAföG office or the BAföG advice service of the AStA. There is also a BAföG calculator on the internet, which you can use to calculate how much you might receive: https://www.bafoeg-rechner.de/Rechner/

If you receive BAföG, you can also relieve yourself financially by applying for exemption from broadcasting fees.

Scholarships

If you demonstrate above-average performance, you can apply for a scholarship. A scholarship means financial and idealistic support as well as being part of a network.

The Federal Ministry of Education and Research promotes 13 scholarships for the gifted. Each scholarship is different: different backgrounds (political, religious, independent), different goals, different requirements. But financially, they all offer the same thing: As a scholarship holder, you receive a monthly tuition allowance of 300 euros, and, if you are eligible for BAföG, the BAföG rate on top of that. In addition, there is a wide range of seminars, events and other activities on various topics, which are definitely worthwhile and, if you were to pay for them yourself, would cost a lot of money. These vary between scholarships, so be sure to compare and see which suits you best.

To get a scholarship, you have to apply and participate in a selection meeting. Here you score points mainly with your achievements, but also with voluntary and political commitment. Even if you think you won't get it - try anyway, it's worth it.

Residence Permit

If you are not from the EU, you must apply for a residence permit after your arrival in Germany. This should be done as soon as possible, but in any case within the period of validity of your visa, so that you do not run the risk of suddenly being in Germany il-

legally. You can apply for a residence permit at the foreigners' office in the city where you live.

At many foreigners' offices, it is necessary to book an appointment online. Attention: It is possible that an interpreter has to be brought along for the personal appointment. If you do not speak German, you could take a German-speaking fellow student with you, for example.

Registration in Bonn

As soon as you have found a room, a visit to one of the citizens' registration offices is mandatory. You should have registered or re-registered there no later than two weeks after moving in. Here you also have to decide whether you want to register your main residence or secondary residence in Bonn. In most cases, the place of study is considered the main residence by the Residents' Registration Office, since students usually spend more time there than, for example, with their parents (if they live in Germany). However, if your main residence is not too far away from Bonn and you state that you spend the weekends and semester breaks there, you should not have any problems with the registration of Bonn as a secondary residence. But beware: In Bonn there is now a tax on secondary residences, so research the costs in advance.

Welcome gifts

If you don't care where you are registered, you will be rewarded by the city if you choose Bonn as your main residence with a book of vouchers for e.g. theatres, museums and the swimming pool. These are only valid in your first year though. In addition, there is the possibility for students who are financed by BAföG to apply for the so-called Bonn identity card. This also offers some benefits. Applications can be made at the Social Welfare Office in Beuel, in the old Duisdorf Town Hall and in the Bad Godesberg Town Hall. For some students, however, registering their primary residence in Bonn can lead to the loss of a child allowance for their parents, depending on their income. So it is best to ask around before you make a final decision. By the way, when registering your residence, you can specify that your data may not be passed on to political parties (for example, if you do not want to receive mail from a party you do not like).

Health Insurance

To study in Germany, you must have health insurance. Note that in Germany there are pub-

lic and private health insurance companies. Examples of public health insurance companies are AOK, BARMER, DAK, HEK, KKH and IKK, but there are many more. Membership can often be applied for online. If you are from the EU, you can get an EHIC European Health Insurance Card from your health insurance company in your home country, with which you can register with a German health insurance company, which will then provide an insurance certificate for the university. Make sure that your health insurance covers all treatment costs in Germany; a health insurance with a limitation of the treatment costs or the obligation to pay benefits will not be recognized in Germany. With all the different regulations, it is normal to be confused at first. Don't worry and when in doubt, just ask your insurance company!

Language Courses

The Language Center of the University offers language courses in German for foreign students. Registration is done online. If you want to take part you have to be quick: Especially the spots in beginners' courses are usually booked up very quickly.

Let's go!

If you want to or have to work while studying, you should read up on things like social security obligations or the maximum income limit for continuing to receive child benefits (see AStA's social info).

So good luck in the jungle of regulations, and don't panic there are a lot of people and places that will be happy to help you.

Weblinks

- https://asta-bonn.de/en
- https://www.studierendenwerk-bonn. de/en/financing/
- https://www.uni-bonn.de/en/ studying/international-students
- https://www.uni-bonn.
 de/en/university/
 organisation-and-institutions/
 university-administration/
 international-office

Accomodation in Bonn

For most people, the phrase searching for a room may initially sound daunting, but there is no need to panic; there are several ways to find a comfortable and affordable room.

You want to live in a dorm room?

Firstly, you can apply for a place in one of the 29 student residences currently run by the Studierendenwerk, which offer a total of almost 4,000 places. However, it is best to find out as much as you can about the respective halls of residence, as the apartments and their facilities vary greatly: for example, there are apartments with their own kitchen and bathroom or rooms where you have to share both with other students. Double rooms and apartments are not necessarily what you might expect: here, you share the kitchen or kitchen and bathroom with only one other student. The location is also important. Tannenbusch or Bad Godesberg are not recommended for everyone, as these districts are said to have higher crime rates.

All student residences in Bonn are now connected directly to the university network and thus also to the Internet via fiber optic cables. This allows users to surf at speeds of 1,000 megabits per second for both uploads and downloads. It is important to note that only LAN is available in the residences and that you must purchase your own router if you want to use Wi-Fi.



Foto: Studierendenwerk Bonn

Information about the individual residences and the application documents can be found on the Student Services website (see below).

After submitting your application, you will hopefully receive an apartment offer soon (realistically, this can take 4-6 months). Your lease is usually limited to three years, but can be easily extended for another year at the student union. Those who are involved in the student council or other university politics will receive an additional six-month contract extension for each semester in office. The

respective chairpersons will issue you with a certificate for this. The same applies if you take on a mentoring role in a dormitory, but for this you must be elected at the general meeting.

Offers from the city, university and AStA

Zimmer frei?! (Room available?!) is a joint campaign by student councils, universities, the federal city of Bonn, the Rhein-Sieg district, and a number of partner institutions that have joined forces to create student housing.

Here you may find apartment listings that are not yet available on the relevant portals. The listings can be filtered by apartment / shared apartment / short-term accommodation, price, and size.



Foto: Studierendenwerk Bonn

The free housing market

Experience shows that the situation on the housing market becomes significantly more difficult shortly before the start of the semester. That's why you should start looking for accommodation as early as possible. If you end up paying rent a month early, it's peanuts compared to what you might otherwise pay for a more expensive room rented at the last minute. However, as the start of lectures approaches, it may be worth taking a small or expensive room first, rather than having none at all. It is important not to lose heart: finding accommodation can be very difficult and sometimes take weeks or months, or even up to a year, depending on your individual budget and preferences. But if you keep at it, you will definitely find the right place sooner or later!

For anyone who wants to try their luck on the open housing market, here are a few places to start:

On Mondays, Wednesdays, and Fridays, check the classifieds in the General-Anzeiger, the Bonner Anzeigenblatt (Wednesdays and Saturdays), WG-Gesucht, the Schnüss with WG offers, and, of course, the countless bulletin boards in the cafeterias, cafés, and institutes. eBay Kleinanzeigen also has a section for rental requests and offers. The Studierendenwerk also offers a free room referral service. You can either call them (see address section) or browse through the folders available there to find suitable rooms or apartments. It can also be helpful to tell acquaintances and friends that you are looking for a room / apartment. Sometimes rooms / apartments are rented without being advertised, or contacts can give you an advantage in getting shortlisted. Foreign students who are likely to study in Germany for a longer period of time are best advised to contact the International Office.



Foto: Studierendenwerk Bonn

Some things to watch out for: In Germany, renting with furniture or even a kitchen is not the default. If you do not want to bring your own, look for the keyword "möbliert" (furnished). One common trick here is the kitchen. A lot of the time, there is a kitchen owned by the person renting before you that you can have at a usually overpriced rate. The idea is that among multiple applicants, the person willing to pay for that gets the appartment. Always assess the kitchen quality carefully and ask if you may rent without taking the kitchen.

Weblinks

- https://www.wg-gesucht.de/en/
- https://www.studierendenwerk-bonn. de/en/accommodation/
- https://housinganywhere.com/?utm_ source=StudentenWG

Bars and culinary delights

Now that we have brought you closer to everything you need to know about studying, there is another list for you. This one is special, though because it only deals with your physical well-being.

No matter whether you have a nice meal with your partner, partying through the night or going through the pubs with friends, here you will find the most important pubs, clubs and culinary places in Bonn.

By and large, most of the spots focus on two areas: the "old town" (Altstadt) and the city center.

"Old Town" (Altstadt)

Bonn's old town shines with its charm through old, small streets, old, small houses and of course old, small pubs. The best way to find something suitable here: Just try it out! The pubs are all so close to

each other that nothing stands in the way of stumbling happily from pub to pub.

A good way to start exploring is by begin a tour at the intersection Maxstraße-Breite Straße. Right at the corner lies the **Kult Kiosk** that offers a nice place to meet up. You can then continue to work your way through either along Maxstraße or Breite Straße and you will find a bunch of bars to the left and right. The following is a small selection that by no means claims to be complete and does not have to be perfect for everyone - but it does offer a good overview of the old town.

The **Babel** is a small pub on Breite Straße, deep in the heart of the old town. Typical for pubs they offer Kölsch, Pils, wheat beer and a football table. Similar pubs near to this one are the **Embassy**, which offers spicy Mexikaner shots as well as Tequila, and the **Steinbeck**, a good place to try out different Whiskeys and Rums.

The **Pinte** is, like the Babel, a small pub. In addition to the usual stuff there are different polish beers and Schnapps here. Not generously spacious, but pretty cozy.

The **Flynn's Inn** is a small Irish pub on Wolfstrasse. In addition to Irish beer (Guinness and co.) there is a *huge* selection of Whiskeys from Ireland, Scotland and England.

Another notable Irish pub is the **Dubliner**. This pubs specialty are regular events like live-music. Also, very popular are karaoke nights on saturdays and sundays. One of its highlights is the **Doppelmittwoch** (double wednesdays) with pub quiz as well as karaoke until very late at night.

One popular venue for international students is the **BillaBonn** which offers good beer, cheap cocktails, many tables as well as a lot of space infront of the pub. At the same intersection lies the **Tresor**, offering Metal/Hardrock/Alternative music as well as caribbean cocktails at **Coco Mango**.

For all music fans, instead of going to the **Tresor**, the nearby **Musiktruhe** and **Stachel** could be a good place to visit. While the Musiktruhe shines with CD-Rock, Darts and Pool, the Stachel offers basement charme, sitting on bricks, listening to loud music and ordering extremely cheap drink specials. Old school!

The **Frittebud** is the best place to go for food in the old town (and generally a very good one for all of Bonn). They offer burgers (also vegetarian), Currywurst, different salads and of course french fries. Right next to it lies the more left-leaning/alternative **Bla** which has regular events ranging from Live Punk to Stand-up comedy.

City Center

As soon as you step out of the small, narrow streets of the old town, the locations also get bigger, more ornate and - how could it be otherwise - more expensive. However, the prices in Bonn are consistently relatively mild, especially compared to huge party strongholds like Cologne.

The **Tacos** is a Mexican cocktail bar near Berthavon-Suttner-Platz. Accordingly, there is Mexican food - burritos, tacos, nachos, quesadillas - and cocktails. You should be careful between 10pm and 11pm - there is neither the happy hour that takes place all day before, where all cocktails only cost half, nor the jumbo hour that starts afterwards, from which the big cocktails cost half.

There is also an Irish pub in the city center, the **James Joyce**. It is centrally located near the Kaufhof and has the usual Irish pub repertoire. Much like the Dubliner, the James Joyce is also known for its very long opening hours.

Pendel and Cartoon are two shops on Friedensplatz that offer *everything*. The menu and drinks menu is so large that it is difficult to highlight individual items, and the quality is consistently good. Only thing is that the waiting time for the waiters to come by can be a bit longer every now and then.

Another notable venue at Friedensplatz is the **Sudhaus**. It offers traditional local rhineland cuisine as well as a weekly modern menu. The portions are quite large, the price moderate and there are always changing vegetarian options.

Also near the Friendesplatz is the **Bönnsch** - a classic brewery that brews its own beer: the eponymous Bönnsch. The brewing method is similar to a Kölsch, but the taste is clearly distinct - it's without a doubt worth trying. The food is also typical rhineland brewery stuff, but vegetarians can also find something here.

The place to go if you're hungry at night, when the Frittebud has long since closed, **Calador**. By now it has two branches, one at the central station and one at Friedensplatz, it offers cheap and fast pizza. If you are a pizza snob though: don't come here. Calador pizza kills hunger and prevents hangover, that's about it.

If you'd like a proper pizza or other Italian food, the **Tusculo** offers a wide and, above all, delicious selection. The Tusculo also has several locations, the largest is the Tusculo Münsterblick near the eponymous minster.

Of course, there are also great opportunities to go out beside these two hot -spots, and as I said, the best way is to simply get active here and try out for yourself what you like and where. This list should get you started anyway.

Clubs

Bonn's club scene is, politely said, quite meek and unbelievably shrinked even further during the Covid pandemic. The already mentioned **Dubliner** offers a nice atmosphere often late into the night. If you like latin-dances, the **tanzbar** at Oxfordstraße is your place to visit. Actual clubs like the **Carpe noctem** (short **Carpe**) plays a wide range of music and often has free welcome shots as well as drink specials. The popular club duo around here is the **N8schicht** and **N8lounge**, whose floors are connected to each other with a door. Especially the proximity to Frittebud and the wide range of genres make this worth a visit.

If you're looking for the real deal nightlife, you sadly must go to Cologne.

Joners' insider tips

If you're looking for good food during daytime and the Mensa is already closed or offers one of its infamous and devoid of spices curry variations, here is a short list of personal recommendations. Some of these are quite near the computer science institute, so give them a try:

Chinese: Tak Kee (Hong Kong), LeDu (Sichuan, only place for good hot pot!), Dim Sum (Canton).

Indian: Mogul, Namaste, Royal India.

Vietnamese: Hoi An, Cay Tre.

Korean: Eller-Asia Shop (Only lunch!) **Mexican:** Café Especial, Tacos, Sausalitos.

Burgers: Atawich, Bonnanza. **Italian:** Tuscolo, Nennillo. **Polish:** Restauracja Polonia.

Döner: Agora bei Schatzi, Sefa, Serhat. **German brewery cuisine**: Salvator, Bönnsch.

Free time

Experience culture

As a student of the University of Bonn you automatically have the **Kulturticket** of the AStA. With it you can go to theatres and musicals for only 3€, to many of Bonn's museums for free and for 2,50€to events of the Literaturhaus. Just show your student card at the box office! https://asta-bonn.de/de/referate/referat-fuer-kultur-und-studentische-initiativen/

In addition to these groups, there are of course many more. You can find a full list at the ASta homepage.

https://asta-bonn.de/de/service/studentische-gruppen

The spectrum of student groups is quite big, ranging from cultural topics through society and politics, as well es social engagement.

Create culture

There are a bunch of self-governed cultural groups at uni Bonn and a lot of them will be happy to welcome you as their member. How about, for example making music with the university orchestra, jazz choir or the big band, or playing theatre with the Bonn University Shakespeare Company? For rhetoric artists, the university also has its own debating club!

https://www.uni-bonn.de/de/universitaet/ unileben/forum-musik/ensembles https://busc. de/ https://debattierclub-bonn.de/

Being outside

Bonn offers many opportunities to be out in nature. Whether you like spending a relaxing afternoon in the Hofgarten, jogging through the Rhine meadows in the morning or taking a hike up to the Drachenfels.

https://hikingsocietybonn.wordpress.com/ https://www.radius.uni-bonn.de/

Univerity Sports

The university sport offers students both the Halle5 gym and a wide range of courses in and around Bonn. Whether athletics, team sports, martial arts or dance, here you'll find over 90 different sports at low student rates.

https://www.sport.uni-bonn.de/

kulturticket-1

Weird Germany

Weird idioms and words

"Kannst du das Fenster auf Kippe stellen?" Tilt Windows. In Germany, you can put your Window on "kipp". "Kipp" means tilt in colloquial German and is quite widely spread throughout the country.

"I have a shooting this weekend." Don't run calling 110. (911's German cousin) It's not what you think! A shoot for film or photo is called a shooting.

Handy It's not what you think! It's just a cell-phone/smartphone. Germans tend to forget that this word is German.

Mobbing It's not particularly a crowd of people, the mafia or an angry crowd. This is the German word for bullying.

Mail Don't go running to the next post-office when you are asked to send something by mail. Germans seem to have found E-Mail to be too long of a word and just say mail.

To toast or not to toast? If someone offers you a toast, it doesn't have to mean that your bread was toasted. White bread that is usually used to make a toast is also called toast when not toasted. In Addition if a German wants bread it's very likely they don't want white bread because they have humongous varieties of breads.

Tab water In Germany, you can drink the tab water and save money. It has a good to very good quality all throughout the country. Even most sold bottled water is just tab water from a specific region.

Waste sorting Germans take recycling seriously. Here are some basic guidelines: we have four main garbage bins

- the blue bins ("Papiermüll") for clean paper
- the yellow bins ("Plastikmüll") for plastic, metal and packaging with the green recycling dot
- the green bins ("Biomüll") for anything vegetable, egg shells, flowers. But no meat or fish and no cooked food
- the grey bins ("Restmüll") for the rest of the household waste.

You can get more details here: https://www.bonnorange.de/en/service/private-individuals/waste-bins-and-the-like/overview.

"Wie geht es dir?" If you ask a German "Wie geht es dir?" (How are you?), it's likely they tell you how they are really. For us it's not just a phrase.

Pfand Most plastic and glas bottles are returnable bottles. You pay 8, 15 or 25 Cents for them, which you get back when you return at a special machine at the grocery store. It does not have to be the same store you bought them at, any store should work.



While out and about

How to tip: Well, there is no set percentage for this in Germany. While 10% is the nice usual, but you are not obliged to pay this. Waiters wages don't depend on tips here, they are just a way of showing appreciation for good service.

When out with Germans, it is usual that everyone will pay their own drinks and food. A waiter will usually ask whether you want to split the bill or not ("Zusammen oder getrennt?") and will give you individual bills. Sometimes even on dates. Be clear on your invite so there is no misunderstanding.

RefillIn Germany, you won't get a free refill for your drinks. The sold tab water is also not really tab, but bottled water and not on the house.

Why is your bartender scribbling on your beermat?: When a barkeeper has a full house in a pub, they sometimes draw lines on beermats to keep count on how many drinks you have already had. They usually also keep track with a computer program, but better safe than sorry.

Cheers: You are out drinking with your German friends. You get your drinks and want to clink glasses saying cheers, but your companions seem to stare at you? Well, Germans consider it to be

bad luck not to look into each other's eyes when clinking glasses. Germans find this weird too, but do it nevertheless - sometimes staring extra directly for ironic effect.

Going by public transportation: In most cases you don't have to show you ticket upon entering, only when inspectors or the driver ask for it. In small towns or during less busy hours, like at night, you might be expected to show it upon entering though. Rule of Thumb: if the (bus)driver opens only the front door, have your ticket ready. (more info: p. 28)

Bonus Round - The Rhineland Special

People in the Rhineland become "Jeck" (weird, crazy) for a few weeks every year. This is due to the "Karneval" (carnival). The so declared fifth season starts on November 11th at 11 past 11 o'clock (on 11.11. at 11:11). That's when you will see your first "Jecks" running around. The real big celebration starts on "Weiberfastnacht" (Women's Shrove-

tide) which is usually the Thursday, and peaks on "Rosenmontag" (Rose Monday), the Monday before Ash Wednesday.

Be aware that you may be greeted with "Alaaf", asked for a "Bützchen/Bützje" meaning kisses (which you can decline), encounter highly intoxicated people in weird costumes and parades called "Karnevalszüge" where people throw candy and small flower bundles (called "StrüSSche") to the masses. If you don't want to partake, go on vacation, stay inside or just watch the masses from the sideline for fun. There will usually be information available online and in newspapers on when and where the parades and big events are going on, so you can easily find or avoid them, but there will also be stray groups in streets and pubs.

Whether you like Karneval or not, this is the best time to find cheap costumes and strange decorative items in stores all around you and - most importantly - try the seasonal baked goods (e.g. "Berliner" with various fillings).

Dictionary

Your courses are held in English, and usually all offices can communicate in English as well. Still, you will encounter information that is only available in German, whether that may be due to someone forgetting to translate it, not having the knowledge or ressources to do that or because they might not even think about it. Therefore, it still might be useful to know a little bit of German.

Language Courses

The university offers a few language courses for international students, but they are, like all language courses, much sought after. If you are able to get into one of these courses, you will be able to get the A1 certificate for German by completing the course and the exam at the end. The admission time for these courses however usually is well before the beginning of the semester, therefore you can not sign up for it in your first semester.

If you cannot get into one of these courses, the university also has a partnership with Rosetta Stone. You can get free access to this language learning platform by registering with your university email using the steps explained here: https://hbza0-c1.sprachen-online.eu/form

Ä, Ö, Ü, and ß

You have probably noticed one of the four letters above. The first three are called umlauts (from German Umlaut), the last is called Eszett (SZ) or scharfes S. If you do not have these on your keyboard, you can transcribe them, using the following rules:

 $\ddot{A} \rightarrow Ae$ $\ddot{a} \rightarrow ae$ $\ddot{O} \rightarrow Oe$ $\ddot{O} \rightarrow Oe$ $\ddot{U} \rightarrow Ue$ $\ddot{U} \rightarrow Ue$ $\ddot{U} \rightarrow Ue$ $\ddot{U} \rightarrow Ue$

This may lead to ambiguities (especially around $\mathfrak B$ and ss), but usually it is clear from the context. There also exists a capital $\mathfrak B$, though it is only used for completely capitalised text as the $\mathfrak B$ never starts a word.

Master-Inform

Small dictionary of university words

If you ever have trouble understanding something, you can ask us. However, we thought it might be useful to provide you with a few words that you will encounter during your time at the university.

Additionally, we provide our own glossary (with common abbreviations to German university words), which is available here: https://www.fachschaft.info/en/studienbeginn/hochschulwoerterbuch/

Dictionary

AStA Allgemeiner Studierendenausschuss (general student's committee) 4.

BASIS Bonner aktuelles Studieninformationssystem, the course catalog and student management system of the University of Bonn 24.

CIP-Pool Computer Pools 21.

computer science Informatik.

course catalog Vorlesungsverzeichnis 24.

credit point Leistungspunkt 13.

doctor's note Attest (für Prüfungsunfähigkeit) 13.

ECTS European Credit Transfer System 11, 13 20.

examination office Prüfungsamt 13.

FSR Fachschaftsrat (student coucil) 4.

FSV Fachschaftsvertretung (student assocation representatives) 4.

GSG Gemeinsame Systemgruppe (shared system group), the technical administration of the institute of computer science 21.

HRZ Hochschulrechenzentrum (university computing centre), the technical administration of the university 21.

improvement exam Verbesserungsversuch 13.

lecturer Dozent (male), Dozentin (female), Dozenten/Dozierende (pl. all).

library Bibliothek.

MNL Abteilungsbibliothek für Medizin, Naturwissenschaften und Landbau der Universitätsund Landesbibliothek Bonn (department library for medicine, science and agriculture of the university and state library Bonn), the department of the library that is on Campus Poppelsdorf and holds most of the books for computer science.

NRW Nordrhein-Westfalen (Northrhine-Westphalia), the state the university is inside. Germany is split into 16 states which have some autonomy, NRW is the largest by population.

post-exam review Klausureinsicht 13.

registrars office Studierendensekretariat.

SP Studierendenparlament (student parliament)

student body Fachschaft 4.

ULB Universitäts- und Landesbibliothek Bonn (university and state library Bonn), the main library of the university.

VRS Verkehrsverbund Rhein-Sieg (transit network Rhine-Sieg), the local transit authority around Bonn 28.

WG Wohngemeinschaft (flat share) 31.

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Bettina Esser

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We want your help! If you find errors or missing information, or if you have any suggestions on how to improve this magazine, we would be very happy to receive your email to inform@fachschaft.info!

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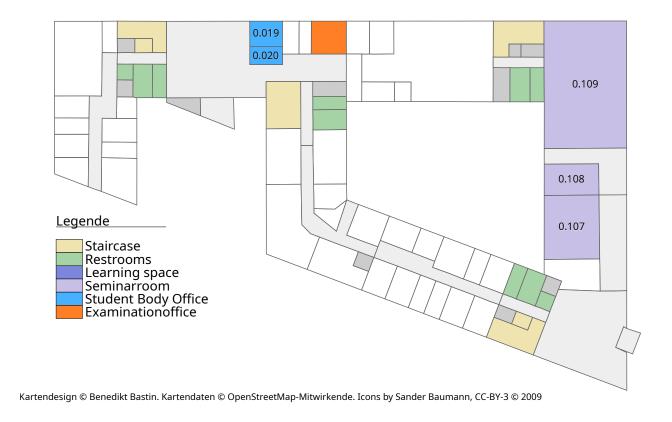
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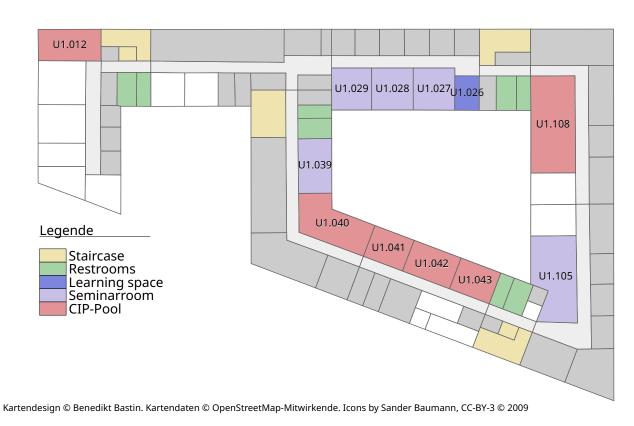












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