

STATISTICS AND DATA SCIENCE - NEW STUDENT DOCUMENT

Welcome to MSc Statistics and Data Science! This document has been prepared to cover important information that isn't always easily accessible, but that incoming students should be aware of. Not all parts will be relevant to everyone.

1. YOUR ULCN ACCOUNT

Most online services the university offers are access via your ULCN account. This includes

- **Brightspace** - the online environment that most courses use to give you access to lecture notes/slides, homework assignments, and other course information
- **MyStudyMap** - the website used to enroll/unenroll in study activities, such as lectures, tutorials, and examinations
- **Account Services** - the website where you can update your address, personal information, etc.

You can read about your ULCN account [here](#), if you have not yet received the information for your account.

2. THE LU CARD

All Leiden University students and staff should have an LU-card, which acts as evidence that you're with the university. This card is used for:

- taking books from the library;
- printing and copying notes;
- accessing university buildings outside of normal hours, i.e. on weekends;
- accessing parking spots;
- and as your identification during examinations.

As such, you should obtain your LU card as soon as possible. You must have a Dutch address to request your LU-card. You can read more about how to get your LU-card [on this website](#).

3. FOLLOWING COURSES / COURSE REGISTRATION

3.1. Which courses do I have to follow? To graduate from this programme, you must have exactly 120 ECTS. An **ECTS**, or *European Credit Transfer and Accumulation System*, is one study credit that is normalised across universities in Europe.

A full list of mandatory courses and pre-approved electives is found in the [prospectus](#). Courses are divided into those in the **core programme**, and **pre-approved** electives. Core programme courses must be followed by everyone. The pre-approved electives are used to customise your programme to your interests.

In your first semester, you should follow all of the following courses:

- Statistics and probability;
- Statistics and data science in practice;
- Mathematics for Statisticians;
- Statistical computing with R, and
- Linear and generalised linear models.

- Linear algebra.

3.2. What is my course schedule? Once published, the course schedule, including the times and locations of your courses, will be found [here](#). If you log in with your ULCN Account, you can view the schedule, or select individual courses.

A full **semester** in this programme consists of 30 ECTS. Some courses go over the whole semester, i.e. from September to January or from February to June, while others only cover a **block**. A block is half of a semester. Block 1 is from September until October/November, Block 2 is from November to January, etc.

The 6 mandatory courses listed above constitute a full semester. Taking fewer than 30 ECTS in a semester may result in study delays, whereas taking more than 30 ECTS can be quite taxing in terms of time and energy!

3.3. How do I enroll in courses?

- (1) Log in to [MyStudyMap](#) with your ULCN account.
- (2) Click on MyStudyMap, and then on your Study Plan for the upcoming year.
- (3) You will now see a list of all the core courses and pre-approved electives in the programme that you still have to complete.
- (4) To enroll in a course, click on the box next to the course name. You'll see a list of the associated study activities, such as the lecture, tutorials, etc. Select all the activities you wish to participate in. In general, you should select all such activities.
- (5) Save your choices. Afterwards, you should be able to see your new timetable on the second tab.
- (6) Once you're enrolled in a course, you'll still have to confirm your participation in the examination! This is also done via MyStudyMap.

If you wish to enroll in a course not listed, i.e. an elective from another department, you must scroll to the bottom, fill in the Course Code (found in the syllabus), and then click on the course. Note that you should also submit a petition to follow such a course, as explained in the subsection below.

This process is illustrated in [this](#) video.

WARNING: You must enroll in courses 14 days before the start of the courses. It is **absolutely mandatory to enroll for examinations and confirm your participation in them 10 days before the examination via MyStudyMap - failing to do so will prevent you from taking the exam and hence passing the course.**

To unenroll from a course, simply remove the course via the same page. You should do so as soon as possible for retake examinations if you know you won't be writing the retake.

3.4. What are petitions and how do I submit them? You will have to submit a petition to the Board of Examiners in a number of circumstances:

- You wish to take a course outside of the pre-approved electives as an elective. Think of courses from other departments, like computer science. A common choice, for example, is [Sports Data Science](#). Courses from outside the programme must satisfy the following requirements:
 - They are at least a level 400 course (i.e. not a bachelors course).
 - They have some relationship to the programme (e.g. courses in statistics/data science or related courses in the life and behavioral sciences) .
 - You may use at most 12 ECTS (in general 2 full courses) of external electives to count towards the programme requirements.

The Board of Examiners has the ultimate say in whether a course is suitable to use towards the programme. The most common source of non-pre-approved electives is from [computer science](#), but [psychology](#) has many suitable electives as well. You may, in general, also apply to courses from other Dutch universities, assuming they meet the requirements.

- You wish to be exempt from a given course. This might happen, for example, if you've already studied mathematics and don't want to follow Mathematics for Statisticians, or Statistics and Probability. When applying for an exemption, you must explain in a document which course(s) you took that meet the requirements of the course you want to be exempt from.
- You wish to study abroad and use courses from abroad to count towards this programme.
- You would like to request an extra retake for a course, or a different form of examination, etc.

All petitions follow the same two steps:

- (1) First, you have to submit your petition through Usis. This process is explained on [this page](#), albeit for another programme. This is essential as it allows the Board of Examiners (BoE) to access your petition and make a decision, but if you can't find a suitable course to submit a petition under, you can choose more or less any course.
- (2) Second, you must fill out and submit [the online request form](#). This is where you can go into more depth about the course you want to take, etc. You can also upload any supporting documents if needed.

4. LIVING IN LEIDEN

4.1. Finding an apartment. Finding an apartment in Leiden is notoriously difficult due to an extreme lack of suitable apartments. As per the [university website](#), it is not encouraged to come to Leiden if you do not find a place to live before arriving.

As of the time of writing this document, the university apartments for fall 2023 are already full. This means that **you will have to find an apartment on your own.**

[Pararius](#) and [Funda](#) are the most used rental websites within the Netherlands, but these are less focused on student housing. The university has a rather [comprehensive list](#) of commercial housing agencies.

Another alternative is the Facebook group Leiden Housing. This is a group where you can find others looking for housing, and many people offering a room/sublet. One of the easiest options is to form a group of 3-4 people looking to rent a house, as finding a rental house can be easier than an individual room. This Facebook group is also nice as it lets you meet other students from abroad in the same situation. Even if you're opposed to Facebook, the housing situation can be dire enough to warrant making an account for this purpose alone.

Once you have found a room or an apartment for yourself, you must register with your local Dutch town hall shortly after arrival. The procedure differs slightly based on the town you are living in. All information can be found on [this page](#).

4.2. Getting around in Leiden.

- (1) **Bikes:** By far the most convenient way of getting around in Leiden is with a bike. The infrastructure is excellent, though it can be a bit overwhelming at first if you haven't used a bike in a while. While you can purchase your own bike, either new or second hand, many students opt to rent a bike. This comes with the added benefit of free maintenance.

The two most common rental agencies are **Swapfiets** (the word for bike is *fiets* in Dutch!), and **Easyfiets**.

- (2) **Busses:** It's completely possible to not use a bike during your stay if, for example, you find it intimidating. In this case, or during extreme weather, the local bus system is more than sufficient. While possible to buy loose tickets, it's easier to buy an **OV chipkaart** ('openbaar vervoer' is public transport). There are, broadly speaking, two types of OV cards:
 - An anonymous OV chipkaart. You can buy one of these in Schiphol airport upon arriving. The advantage is its accessibility, and if you don't want your personal information tied to a card.
 - A personal OV chipkaart. You can apply for one of these via the OV chipkaart website. The advantage is that you can apply for various discounted trips, i.e. reduced fares outside of peak hours, and you can tie it to your bank account so it automatically adds the needed money for any trip. You can also view your trip history if you need to be reimbursed for anything.
- (3) **Trains:** Trains exist between most all cities in the Netherlands, and a surprising number of smaller villages as well. Just like with busses, you can use an OV chipkaart to ride the trains. You can also purchase tickets separately, if desired.

5. PERSONAL DIFFICULTIES DURING YOUR STUDIES

This programme can sometimes be overwhelming, especially at the start. The large quantity of work, combined with a level of mathematical rigour that not everyone has been exposed to, can be a stressful experience. It is very common to feel overwhelmed, but know that you're not alone in feeling this way! Talk about it with your fellow students, mentor, study advisor, or your instructors. If need be, you can adjust your study plan to take fewer courses in the first semester.

5.1. Study counsellors. The study counsellors are there to assist you and offer advice related to

- questions about combining professional sport with your studies,
- studying with a disability,
- studying while pregnant/with children,
- study delays caused by personal circumstances,
- financial troubles/questions,
- and support in cases of submitting complaints.

You can book an appointment with a study counsellor via the webform [here](#).

The study counsellors are **not therapists**, but they can offer advice and if need be direct you to a student psychologist.

5.2. Extra time on examinations. The university offers some students extra time on examinations. This is sometimes due to studying with, for example, ADHD, or dyslexia, but there are many valid circumstances for which this is applicable.

The process for obtaining extra time on examinations is as follows:

- (1) First, book an appointment with a study counsellor. You'll have to explain your circumstances with them. If they agree that you'll benefit from extra time on examinations, they'll send you a letter.
- (2) Then, contact the study coordinator of the programme, via coordinator@stat.leidenuniv.nl and let her know you've received extra time. She'll prepare a card for you to take to your examinations, which you can show to the examiners to receive extra time.

- (3) When picking up your card, you'll need to bring your letter from the study counsellor, and a passport (to ensure that it's actually you!).

5.3. Study advisor. The study advisor, [Garnet Akeyr \(that's me\)](#), can help you make a study plan if you're experiencing study delays. Contact me if you, for example, you're feeling overwhelmed in your studies and are considering dropping a course, but you aren't sure which, or if you want to create a reduced course load study plan.

In general I can help with any issues related to the programme, or at least direct you to where you need to go.

5.4. The mentor programme. On your first day, you'll be assigned to a mentor, an upper-year student who has volunteered to be a direct point of contact for you for any issues related to the programme. They can help you figure out where to rent a bike, do your groceries, which electives they enjoyed, how to prepare for the examination for a given course, or just listen to you vent about a given assignment!

Having been through their first year in the programme, the mentors know how stressful things can be at the start. By attending the weekly mentor meetings with your group (including many planned activities, like a canal tour, or drinks at the end of the semester), you'll hopefully find yourself in a safe environment where you can be open about your experiences in the programme, learn some great tips, and meet others in the programme.

6. IMPORTANT CONTACT INFORMATION

The following is a list of who you can contact for what. If you're unsure, please just send an email to studyadvisor@stat.leidenuniv.nl, and if it's not something I can help with, I'll redirect you to where you need to go.

- Garnet Akeyr (study advisor), studyadvisor@stat.leidenuniv.nl.
Contact for: study questions, study delays, help with submitting a petition, creating a study plan, rules/requirements of programme, if you're unsure of who else to contact.
- Michelle Krens, Laura van Kempen, Chantal van den Berge (study coordinators), coordinator@stat.leidenuniv.nl.
Contact for: submitting a thesis/thesis requirements, obtaining a card for extra time on examinations.
- Mathematical Institute administration, mi-admin@science.leidenuniv.nl.
Contact for: grades not appearing in Usis, petitions not being processed in Usis. In general you should wait a few weeks after finishing a course before doing this, as processing all the grades can take a while.
- Science Student Administration, ssa@science.leidenuniv.nl.
Contact for: requesting a diploma, registering results of an external course (i.e. from a different university).
Also for requesting a (partial-) transcript, but then use the email transcript@science.leidenuniv.nl.
- Student Affairs Front Office, [via the webform, telephone, or directly visiting](#).
Contact for: all questions regarding admission that don't directly relate to either the status of your application or the specific requirements of the programme. This includes: uploading documents for your application, English language requirements, tuition, etc.
- Student counsellors, [via webform](#).
Contact for: questions about combining professional sport with your studies, studying with a disability, studying while pregnant/with children, study delays

caused by personal circumstances, financial troubles/questions, and support in cases of submitting complaints.

- Course instructors/TAs. Contact information usually found in the prospectus or else on Brightspace.

Contact for: study help for that particular course, questions about exam, etc.

- Your study mentor, to be assigned on the first day.

Contact for: anything related to the programme. Your mentor is an upper-year student who can advise on navigating the programme, which courses they found useful, etc. Depending on the question they may redirect you elsewhere.

7. CALCULUS SELF-STUDY COURSE IN AUGUST

In your first semester, the Mathematics for Statisticians and the Linear Algebra courses ensure that everyone is caught up to speed on calculus and linear algebra, but some students struggle with the pace. To help students get a head start, we're pleased to offer a newly developed optional self-study course in August. This course will cover a much more restricted amount of content to give you an intuitive and foundational understanding of calculus to better succeed in the master's. It will require spending roughly one day per week for four weeks to cover the content, and you will have an opportunity for a weekly meeting to go through the exercises and ask any questions you may have. If you're interested in this course, please fill in [this Google form](#).

8. OTHER TOPICS

Many of these topics were directly suggested by upper year students, and so should serve as a good indication of things many of them found useful/important!

8.1. Where can I find the rules/regulations of the programme? The rules and regulations of this programme are found in the [OER](#) (course and examination regulations), both the main document and the appendices. You don't have to know them by heart, but of particular interest might be the rules for graduating *cum laude* or *summa cum laude*. To graduate *cum laude*, you must

- finish all components with at least a 7.0;
- have a weighted average of at least 8.0 across all components;
- have a weighted average for the thesis of at least 8.0;
- complete your final examination (thesis defence) in three years, and
- take part in no more than 1 resit of an examination.

To graduate *summa cum laude*, you must

- finish all components with at least a 8.0;
- have a weighted average of at least 9.0 across all components;
- have a weighted average for the thesis of at least 9.0;
- complete your final examination (thesis defence) in two years, and
- take part in no more than 1 resit of an examination.

If you deregister for an examination in time, only the first exam you write will count as a first exam. For example, if you're sick for the first examination of a course but take the retake, it will not count as a retake if you deregistered from the first examination in time.

8.2. How can I prepare for the programme over the summer? We don't consider it necessary to prepare anything in advance. All the courses you take will, assuming you've met the requirements, cover the needed basics. Still, many people feel more comfortable reviewing certain topics in advance.

- If you haven't seen or used calculus in some time, it's helpful to review it beforehand. In this case, you should sign up for the self-study course in August!
- In your first semester, you'll only programme in the language R, with Python being introduced in the second semester. You can download [R Studio](#) in advance and play around with it, though the introductory course assumes no experience with it.
- Linear algebra forms an essential component of many mandatory courses in later semesters. You'll learn about it during a mandatory block 2 course, and it's important to make sure you have a good understanding of it. If you have the time and want to prepare in advance, you can review/learn the basics via [Khan academy](#).
- Python, another computer language, is covered for the first time in Block 3 and 4 (spring) during Essentials for Data Science. Make sure to keep up your Python skills after this course, as many upper year courses make extensive use of Python, especially in computer science.

8.3. Where can I study once I'm in Leiden? Aside from obvious locations such as within your house, or finding empty classrooms, you can also study within the university library. Certain parts of the library can be accessed by anyone with an LU card, but other areas must be reserved in advance if they are marked with a blue sticker. You can read more about booking study spaces [here](#).