

Welcome to Hydro Science & Engineering

Everything you always wanted to know about the master course HSE at TU Dresden



Compiled by the HSE-Team

Dear students,

this brochure should help to answer the most common and the most important questions that might cross your mind related to HSE and to studying in Dresden.

With the help of already existing material, we (with the help of former HSE tutors Nancy Olivia Schulze & Janek Zähringer) put together selected helpful information to get acquainted with TU Dresden and with specifics of your study course. Please note that this brochure uses material of, but does not replace the information provided by TU Dresden in general. The contents are also subject to change! For updates, check the internet for TU Dresden's International Office and for the digital version of this brochure.

We hope you become soon familiar with the new environment and wish you the very best for your time in Dresden!

Have a good start!

HSE Team

Christian Bernhofer, Scientific Coordinator Sabine Hahn-Bernhofer (DAAD EPOS) Judith Pöschmann (EMJMD)

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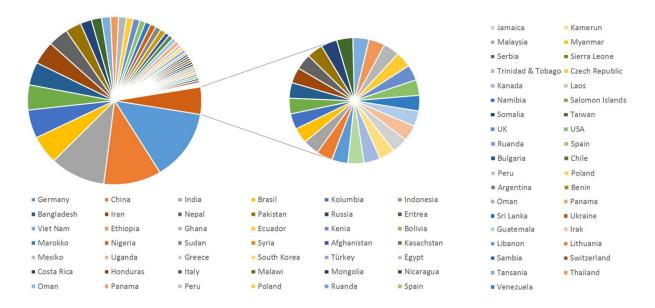
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A note from the coordinator: HSE in a Nutshell

Water is a vital resource. Sweet water is also a renewable resource, but limited and extremely unevenly distributed over the globe and over time, when you consider regions with a rainy season or regions relying on fossil groundwater. Therefore, humans started to manage water resources a long time ago. This management was the basis of early civilizations at Mesopotamia, along the Nile, Indus or Yellow River. Today about 70% of the global water consumption is due to agriculture. Climate change, population increase and urbanization lead to fast-growing demands of water, making its proper management to arrive at "water security" in an "extreme world" both complex and tricky. Smart solutions of these complex water challenges require an integrated knowledge of the water system, as well as an understanding for the international needs and potential regional conflicts related to water. Therefore, capacity development at all levels of International and Integrated Water Management is needed. A need, which caused the introduction of a new study course at TU Dresden already in 2004.

Hydro Science and Engineering (HSE) is a full-time international two-year master course at TU Dresden. It combines all fields of water management from engineering, natural and environmental sciences. The study course offers a unique opportunity to study "International Water Management" in Dresden, where Water Sciences and Hydro Engineering have a long tradition (e.g., the first large modern wastewater plant from 1912). HSE is complimentary to the traditional water related studies in Dresden (like Water Management/Wasserwirtschaft or Hydrology/Hydrologie). It is a consecutive master after studying a wide range of bachelor studies (e.g., Hydro Sciences/Hydrowissenschaften, Civil Engineering, Environmental Engineering or similar programs at TU Dresden and other universities). HSE was first offered in 2004. After more than 15 years, there are around 800 (incl. 250 Erasmus Mundus students) graduates from HSE from all over the world.



Graduates per country; intakes 2004-2019, total number in summer 2019 was 476; additionally, EM Flood Risk Management (about 150 students since 2012) and EM GroundwatCh students (about 100 students since 2016) join for one semester and eventually for their master thesis

The study program is organized as shown in the table below. **All students must achieve 120 credits** (cr) or "Leistungspunkte" (LP). The coursework is organized in modules of 5 or 10cr. Each module finishes with some verification (typically exams) and these exams are graded between 1 (very good) and 5 (not sufficient). Additional grades include 1.3, 1.7, 2.0, 2.3, up to 3.7 and 4.0, which is the minimum achievement to pass. **You have three chances to pass each exam.** The second retake is the final chance to pass. Therefore, whenever necessary: study very seriously, especially for the first retake!

The master course starts with a semester of "**basic modules**", providing the necessary background to enable students to choose their personal "**study profile**" from the "**advanced modules**" in the second and third semester. The master thesis has a standard duration of 5 months. The aim is to finish in time at the end of the second year in September.

Structure of Hydro Science and Engineering (HSE) at TU Dresden	
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Semester	Mandatory Modules	Electives	Sum of credits
First Semester (Basic Courses)	10 cr	10 cr (Science list), 10 cr (Engineering list)	30 cr
Second & Third Semester (Advanced Courses)	10 cr	50 cr from a total of 100 cr offered	60 cr
Fourth Semester	30 cr	Master thesis	30 cr

The two groups of electives in the first semester aim to compliment your previous studies, therefore you should pick subjects new to you. It is highly recommended to **study modules you did not cover in your Bachelor study already**. Therefore, typically students with a previous degree in Engineering will take modules of subjects new to them from the Science list and modules of subjects from the Engineering list they want to get more familiar with. This is vice versa for students with a Bachelor degree in (Environmental or Natural) Science. For example, a civil engineer might pick Ecology, an environmental engineer Hydromechanics and a student with a Bachelor in Science, Hydraulics and Soils). Please acknowledge that the **advanced courses require some basic understanding of the subject**.

While students are completely free to combine electives in the 2nd and 3rd semester, **study profiles** may serve as guidelines for your personal selections: Four study profiles are listed as examples. But you are welcomed to put together your own profile, suiting your needs and the needs of your envisaged professional career. Therefore, they are **not a formal part** of the study regulations.

You may check whether one of the currently suggested four or five profiles suits you specifically well.

- Urban Water,
- Integrated Water Management and Climate Change,
- Flood Risk Management,
- Groundwater and Groundwater Management or
- Water, Soil & Waste under Global Change (with a potential cooperation with UNU Flores Institute in Dresden.

These profiles are not defined in the study documents and can be changed according to your needs.

The only mandatory module in the 2nd and 3rd semester is your "**Study Project**" (10r), a first research or research application-oriented project, aiming at self-organization and teamwork as well as presentation and reporting skills. Which, in turn, proves to be a good training for the master thesis. The same holds for the internships, available according to capacity in the many water-related institutions in Saxony or around Berlin or Munich.

HSE was accredited three times, last time in 2019 until 2027. This is seen as quality label assuring the European standard of university education. A typical university master is research oriented, as a consequence you will be awarded a Master of Science. In water sciences, this is often applied research, dedicated to very basic needs of people and the environment.

The most important acknowledgment of HSE is taking part in the DAAD EPOS Program (see box). DAAD is the messenger or ambassador of Germany based education and contributes largely to the visibility of HSE in the

developing and emerging countries. DAAD supports HSE students from developing and emerging counties with scholarships since 2006. With about 8 scholarships for each intake, about 120 scholarships have been awarded (equivalent to a total of around 3 million Euro).



Deutscher Akademischer Austauschdienst German Academic Exchange Service

Stipends are available through the German Academic Exchange Service DAAD EPOS (*Entwicklungsbezogene Postgraduiertenstudiengänge*) programme. In the framework of DAAD EPOS, students receive individual stipends for a development related postgraduate study at German universities. TU Dresden has successfully applied to include HSE in the DAAD EPOS programme first in 2005 and again in 2016.

DAAD EPOS stipends require a relevant Bachelor study in a developing or emerging country and a minimum working experience of two years outside university. You have to apply until October 15 to start studies the following year. Up to eight stipends commonly are available for around 100 applicants. Nevertheless, the large network of DAAD is very important for the visibility of HSE! We assume the number of students coming to Dresden to be twice as high due to the associated advertisement and quality approval by the DAAD.

The European Union also supports international programmes based in several countries of the EU. Here, HSE is a partner in two Erasmus Mundus master courses, Flood Risk Master and GroundwatCh, which were developed in a cooperation between several European institutions known for their specific strength in water engineering and science. Both are embedded in HSE and the students are regular members of this study programme for one semester, but might return for their master theses.





Global Change • Hydroinformatics • Planning

Flood Risk Master (coordinated by Prof. B. Bhattacharya, IHE, Delft) starts in Dresden with a combination of modules from the 1st and 3rd semester of HSE. The 2nd semester is in Delft, while the 3rd is split between Barcelona and Ljubljana. In 2021 the 10th batch of EM FRM started.



GroundwatCH Groundwater / Global Change

EM GroundwatCh (coordinated by Dr. T. Stigter, IHE, Delft) starts in Lisbon, continues in Delft and joins HSE for the 3rd semester at TU Dresden. In 2021 the 7th batch of the EM GroundwatCh started. In GroundwatCh, there is a joint two-week Field class, organized by IHE, with contributions from all three institutions.

Even in a well-developed programme, **there is room for improvement**. What subjects or skills are missing in HSE? What could be an additional elective or could be an activity outside of the curriculum? Possible options are: (i) German and other languages foreign to most of the students, (ii) scientific writing as an important pre-requisite for a career in research, (iii) technical skills like GIS or script programming and (iv) workshops to learn how to cope with practical challenges of insufficient infrastructure in water supply or wastewater removal. Here, the WASH (Water Sanitation and Hygiene) workshop, sponsored by DAAD and organised by *arche noVa e. V.* jointly with TU Dresden is a good example. Some courses are available for a limited number of students. So, **watch out and ask** for these additional opportunities!

In any case, there will be two tutors (fellow students from the previous intake) to support you in many aspects of daily life, like finding an accommodation or a learning group. Please attend the Welcome Events and try to stay connected! A Student Coordinator and a Scientific Coordinator are associated with HSE. Academically, there are Exam & Study Regulations as well as the Examination Board and the Examination Office at the Study Bureau of the School of Civil & Environmental Engineering.



Joint international field class with IHE Delft and IST Lisbon in Digne-les-Baines (France): Demonstration of atmospheric and soil measurements at the Meteo Tower (May 2018). ©Bernhofer

The final step is the **master thesis**. Each professor or a similarly qualified person from TU Dresden contributing a module to HSE is entitled to supervise a master thesis. Therefore, you have a variety of extremely relevant topics to choose from! With the Master of Science Degree of TU Dresden, you become a member of a large alumni group associated to TU Dresden, recently selected again as one of Germany's Universities of Excellency. When finished with your HSE degree at TU Dresden, you have many regional and global options: Applying your newly accomplished skills in your home country, supporting sustainable development, e.g., in international organisations or continuing your research-oriented studies with a PhD at any place of the world. Altogether, you have the chance to become an "agent of change" for a better and more integrated management of water resources.

At last, a personal suggestion, before you start to dive into academic and research-oriented studies: **Get involved with the other students** from HSE, from other courses in the Faculty of Environmental Sciences and, if you happen to be from outside of Europe, get familiar with the "German" or "European culture" surrounding you! The exchange between cultures, the mutual understanding of each other's background is an important additional benefit of your studies. HSE can help you with several modules, which are also part of non-international programmes as well as by your study representatives within the Academic Councils as well as by the Student Coordinator of HSE. Finally, TU Dresden offers a variety of support through different institutions as well as through your Dean of Studies; the Head of the Examination Board and by the administration (Study Bureau, Examination Office and Study Counsellor).

A good start and the best possible success in your studies in Dresden!

Christian Bernhofer Scientific Coordinator of HSE

Your course of Hydro Science and Engineering

Programme Structure

The master course starts each winter semester and is held in English. The regular period of completion is 4 semesters (24 months) including the Master Thesis. Finally, TU Dresden awards the academic degree Master of Science (M.Sc.).

The study programme is organized as shown in Table 1. All students must achieve 120 credits (cr) or "Leistungspunkte" (LP). The coursework is organized in compulsory and optional modules of 5 or 10 cr. Each module may contain a number of lectures, exercises, seminars, workshops or excursions during the corresponding semester and ends with some kind of evaluation (typically exams) which is graded between 1 (very good) and 5 (not sufficient). Additional grades include 1.3, 1.7, 2.0, 2.3, up to 3.7 and 4.0, which is the minimum achievement to pass. You have three chances to pass the exam; the 2nd retake is the final chance. Therefore, whenever possible: study very seriously already for the 1st retake!

Master Hydro Science and Engineering - Modules and Schedule							
COURSES							TERM
BASIC	Stastistics*	Climatology and Hydrology*	Group 1: Soils, Ecolo	Group 1: Soils, Ecology, Hydrochemistry Group 2: Hydromechanics, Hydraulic Engineering, Geodesy			1
	Optional Module	Optional Module	Optional Module	Optional Modu		l Module	2
4DVAN CED	Study Proj	ect IWRM*	Optional Module Optional Module		l Module	3	
4	Master Thesis and Colloquium*				4		
CREDITS	5	5	5	5	5	5	CREDITS
	Choose 2 out of 3 * Mandatory module	s					

Graphical representation of the structure of Hydro Science and Engineering (HSE) at TU Dresden (in principle, students from GroundwatCh und FRM join for one semester)

The study programme consists of two study phases and a Master Thesis in the 4th semester.

Phase I - Basic Modules

The *basic modules* in your **1**st **semester** are designed to be <u>complementary</u> to your existing knowledge and will put emphasis on a fundamental understanding of hydro sciences as well as engineering.

The first 10 cr are mandatory and must include "Statistics" and "Climatology/Hydrology". The remaining 20 cr can be chosen from the following table as such, as you must choose two out of each group, giving a total of **four elective modules** for this semester.

Elective Modules of the first semester: Choose 2 modules out of each group, in total 4

Group 1	Hydromechanics (5 cr)	Hydraulic Engineering (5 cr)	Geodesy (5 cr)
Group 2	Ecology (5 cr)	Hydrochemistry (5 cr)	Soils (5 cr)

We strongly recommend to pick subjects new to you (e.g., a student with a civil engineer bachelor might pick Ecology or a student with a bachelor in environmental engineering Hydromechanics), since advanced modules typically require **basic understanding suitable for a master course**.

Phase II - Advanced Modules

During the 2nd and 3rd semester you should achieve a minimum of 60 cr including 10 cr for your study project. 50 cr come from a list of about 100 cr of electives (see table below).

Electives

Elective Modules of the 2nd and 3rd semester (select a minimum of 50 cr out of 100 cr)

Module Names	Summer Term (2 nd semester)	Winter Term (3 rd semester)
Integrated Water Resources Management (IWRM)	5 cr	
International Water Issues	5 cr	
Circular Economy	5 cr	
Watershed Management I & II	5 cr	5 cr
Urban Water Management	5 cr	
Modelling of Wastewater Systems		5 cr
Flood Risk Management I & II	10 cr	10 cr
Climate Change	5 cr	
Aquatic Ecology and Ecotoxicology		5 cr
Soil Water		5 cr
Ground Water		5 cr
Hydro Dynamics		5 cr
Drinking Water Supply (Treatment Plant Design)		5 cr
Climate Systems & Climate Modelling		5 cr
Internship	(5 cr)	(5 cr)

Though you are completely free to combine these modules according to your preferences, it is recommended to choose according to the skills you need and according to your own interest. The profiles should facilitate gaining comprehensive skills in a certain research field or application.

Flood Risk Management

Module	2nd Semester	3rd Semester	Other electives	Competencies
Flood Risk Management	10cr	10cr		
Watershed Management	5cr	5cr	15cr	FRM from sources through pathways
Hydro Dynamics		5cr		to consequences

Urban Water

Module	2 nd Semester	3 rd Semester	Other electives	Competencies
Urban Water Management	5 cr			
Modelling of Wastewater Systems		5 cr		urban water
Aquatic Ecology and Ecotoxicology		5 cr	25 cr	management and urban water
Water Quality and Water Treatment	2 cr	3 cr		system design
Drinking Water Supply		5 cr		

Integrated Water Management and Climate Change

Module	2 nd Semester	3 rd Semester	Other electives	Competencies
Integrated Water Resources Management	5cr	5cr		
International Water Issues	5cr			IWRM as a framework to
Climate Change	5cr		20cr	manage water
Climate Systems & Climate Modelling		5cr		systems under climate change
Communication & Conflict Management		5cr		

Groundwater and Groundwater Management (or Water, Soil & Waste) under Global Change

Module	2 nd Semester	3 rd Semester	Other electives	Competencies
Ground Water		5cr		
Soil Water		5cr		Groundwater as a
Drinking Water Supply		5cr	25cr	resource for human supply (water &
Climate Change	5cr			food)
Circular Economy	5cr			

Other combinations might focus on "water in an extreme world" or "water management with a focus on the global south". Nevertheless, none of these combinations is mandatory! **Having a multitude of choices is a strength of HSE at TU Dresden.** Your own combination of electives shapes your master! Finally, you are welcome to attend voluntarily additional modules for additional competence and for a better overall grade.

Additional Modules:

You can always choose to participate in additional modules however, do not underestimate the work load during and especially at the end of the semester.

Mandatory Study Project

The study project is a research-oriented project that allows you to train and understand various aspects of water management projects in a supervised group of typically two or three students. It is a mandatory module, which is offered in the summer and winter semester. With around **300 hours of work per student** it is one of the biggest modules of your study program. We strongly encourage you to use this module to prepare your scientific writing skills, learn good scientific conduct and self-organization as well as the oral and written presentation of results. In order to strengthen your group work and project management skills. Each topic/group is supervised by an experienced researcher or university teacher.

How can I find a topic? At the beginning of the corresponding semester, you can choose a topic of interest from a typically long list of offered topics. A wide range of topics is available each semester. It is also possible to develop your own topic and find the appropriate supervisor and colleagues to form a group. It is usually a good advice to choose a group of people that have a similar strong motivation and may be different but matching skills.

Your supervisors are there to guide you through the process. However, in the end it is your job as a group to do the work. We recommend to document your work from the very beginning and to ask for advice, when necessary.

Modules

As explained before you are allowed to take several **elective modules** during the study period. In order to choose properly, make sure to check their frequency, since most modules are only offered once a year, either in summer or winter semester.

Before the semester start there will be a scheduled announced containing the time and names of modules that will be held during the semester. Normally, no two electives are placed at the same time in order to guarantee a free choice from the list of electives. However, make sure that your choices match with each other.

Time Tables for

Winter Term: https://tu-dresden.de/bu/umwelt/hydro/studium/stundenplaene_ws

Summer Term: https://tu-dresden.de/bu/umwelt/hydro/studium/stundenplaene_ss

Module Exams

Modules are assessed by different forms of examinations according to §5 of the "Prüfungsordnung" (examination regulations), such as:

- 1. Written examinations (§6): this type asks several questions that can be answered in key words, via calculations, longer text or similar. Usually, only limited aids are permitted, if at all. Duration of such examinations is mostly 90 minutes up to a maximum of 240 minutes. It is important to answer questions on the point and give the reply that was asked for and not add superfluous information from what you have studied. Assessments that include multiple-choice methods are prohibited.
- 2. Seminar papers, term papers and other corresponding written work (§7 + §9): students have to work on specific research questions or assignments on the basis of literature and other working material in a limited period of time. Among others, this determines the students' ability to show basic techniques of scientific work.
- 3. Project work (§8): students should demonstrate their ability to work in a team, developing and implementing approaches and concepts as well as presenting complex tasks and ideas.
- 4. Presentations (§10): students should demonstrate their competence in preparing and presenting specific tasks and results according to their assignment.

Repetition of Module Exams

According to the Examination Regulations (compare to corresponding section), you are allowed a maximum of **three attempts** for each exam. After failing the second repetition you won't be able to write this or any other exam with the same content again. In case this applies for compulsory modules, you have to drop out of your study course. Therefore, it is quite obvious that you should immediately contact your tutors if you should foresee serious problems with a certain exam. They offer to help you to develop a learning plan in order to prepare for your final try properly. Do not be ashamed and do not panic, but get help as soon as possible!

Module Compendium

If you want to get more detailed information about certain modules, you can always take a look into the **module compendium**, to see the outline of the necessary exams, responsible professors, etc.

You can find it here:

https://tu-dresden.de/bu/umwelt/hydro/studium/studienangebot/master_hse/hse#section-2-2

The document contains:

What?	Explanation
Contents/qualification aim	What will you learn?
Module character	What type(s) of lecture? It can be lecture, seminar, practical training, lab work, excursions or workshops. Lectures are usually every week (how many hours), but especially practical trainings are usually blocked for certain times. A teaching unit usually takes 90 minutes accounting for 2 hours per week per semester (2 SWS).
Prerequisite of attendance	Is there any module that you need to take before?
Applicability	Is it a mandatory module for HSE?
Prerequisite to achieve credit points	Type(s) of module assessment. Usually it is an examination, but it can also be other and multiple forms such as oral presentation or a report
Credit points and grades	
Frequency of the module	Winter or Summer Term?
Work load	How many hours should you reserve for the module, including lecture attendance time, time for assessments as well as examination preparations
Duration of the module	How many semesters?

Acknowledgement of modules from previous study courses or from your mobility semester

It is generally possible to include modules and their corresponding grades from your earlier studies or your mobility semester(s) into your HSE-studies. However, acknowledgement needs to be requested by the student and must fulfil certain criteria:

1. Modules that have been taken in a German university during the same Master course can be acknowledged without further formal requirements.

- 2. Please note that you cannot apply for the exams you have taken in a Bachelor's program. Only **modules from other master programs** can be considered as equivalent to the modules of this program by the Examination Board, independently of the content.
- 3. All other modules have to be in accordance to the "specific aims of your study course" (Lisbon Treaty) and need to be recognized formally by the Examination board.
- 4. In complicated cases or if a mobility semester is planned, you can formally ask the Examination Board about the recognition. Additionally, coordinators/advisors for ERASMUS and other exchange programs will be able to assist and advice in the recognition of modules and can show potential difficulties.
- 5. Modules that have grades that cannot be transferred into the German grading system, can be acknowledged with a "passed" only and will not be taken into account for the final grade.
- 6. To apply for recognition of formerly completed modules you should use this document: https://tudresden.de/bu/umwelt/hydro/ressourcen/dateien/fachrichtung/dateien/formulare_pa/Antrag-auf-Anerkennung-von-Studienleistungen.doc

Additional remark: Sometimes it might be wise to repeat a module at TU Dresden, even if you had studied the subject already during a different Master Program. Due to the differences in working and research activities between universities, countries and research groups, you might discover new aspects of the topic during the module as well as you will get in closer contact with the members of the working groups. This might help, e.g., if you should plan to write a master thesis about this topic.

Master Thesis

Your Master Thesis will be the key evaluation of your whole studies and you should plan and conduct it with sufficient effort! It is supposed to be accomplished in the **4**th (final) semester. You will have **21 weeks** to write the thesis **upon registration**. Be aware that German students of "Wasserwirtschaft", "Hydrologie", etc. have 5 months instead. Sometimes your supervisors might not be aware of this. For Erasmus Mundus it is expected that you finish at the end of August of the corresponding year.

The evaluation will assess the written thesis as well as the oral presentation and defence of your results after submission (compare examination regulation).

Please note that all guidance in this section serves as orientation. Priority applies to agreements with your supervisor(s) as well as the regulations for examination and specific procedures required from the examination office.

Find FAQs for the Master Thesis from our examination office via:

https://tu-dresden.de/bu/umwelt/hydro/studium/pruefungsamt/allgemeine-hinweise?set_language=en

Choice of Topic

We recommend to start the organization of your master thesis early enough, potentially already at the beginning of your 3rd semester. Additionally, if you plan to do your thesis with external partners (a company, another university or a non-university research institution) or abroad it takes extra time to prepare everything! Identify your research interests and what kind of thesis you want to do (laboratory, modelling, analysis ...). Invest sufficient time and energy to find out about suitable research groups and potential supervisors.

A well-established external partner of the Hydro Science Department of TU Dresden is the "Umweltforschungszentrum" in Leipzig/Halle/Magdeburg (www.ufz.de), but there are plenty of research institutes with a huge variety of topics all over Germany and most of them accept master students for one of their research projects. Remember that you always need at least one supervisor at TU Dresden, so if you find an interesting topic at another institution, think about who of the professors at TU Dresden might match best with your chosen topic and contact him/her about this.

Once you have identified the topics/research areas of interest, contact the potential supervisor, which can be a professor, Post-Doc or Ph.D. student who are active in the field or even offered the topic. Avoid making appointments with nothing more on your agenda than "I need a topic for my master thesis!" rather know at least your field of interest. Please also do an honest self-assessment if you are able to learn new skills required for the topic in the relatively short period of the thesis or if the amount of time would be to big.

Take the topic choice seriously! A thesis can be highly demanding and a lot of students suffer from a bad topic choice during the process.

Registration of Thesis

The task description of the final thesis must be **submitted** <u>by the supervisor</u> to the examination office. If all requirements are fulfilled, the topic is officially handed out by the examination office (must be taken from there) and the work can start. The registration requires a successful completion of **60 cr** with all marks available at the Examination Office. We know that sometimes this can cause problems, when exam corrections take longer than expected.

The task description needs to contain the **starting date** and the **date of submission**.

Research part and written thesis

Your written composition is an essential part of your thesis. Please schedule enough time for it (usually a **minimum of 6 weeks** is necessary to ensure an appropriate representation with regard to content and style). Your master thesis is **a scientific report** and as such needs a proper description in a structured and comprehensible way together and at the same time **fulfilling formal standards** (check with your supervisor), such as spelling, punctuation and references (influences your grade!). More than 100 pages are hardly justifiable and should be avoided. Also, thesis less than 30 pages including brilliant ideas are rather scarce. Usually you need **around 70 to 80 pages** to be able to put all important information and ideas on paper. Please ask your supervisor for a template!

Keep a logical consistent structure and include all necessary elements, such as:

- 1. Header and Directories: The first chapters are the formal introduction to your thesis main text and include the cover page, statement of authorship, definition of task, abstract with keywords, Theses, Directories such as: Table of contents, Lists of figures, tables, formula as well as symbols and abbreviations.
- 2. Thesis Body: This is the main part of your work.

Introduction/Motivation: The thesis begins with an introduction, in which the relevance of your subject as well as the motivation should be clearly illustrated. It ends with an overview of the research questions and the thesis' structure.

Literature Review/Background: This chapter serves two purposes: 1) explanation of all relevant terms and aspects that are necessary to understand your thesis without reading additional literature. This is especially important for readers who have only a general background. 2) Put your thesis in an overall context through other works/approaches/solutions on the topic and show the relevance of your ideas!

Info: Literature Review

- You need to obtain relevant literature that is related to your research objective, support your findings and generally helps to evaluate your results.
- There are **multiple sources of literature** to use, such as journals, proceedings, databases (via slub->dbod), e-books, reports, or internet search engines can help to easily access this information.
- Be aware of using general internet resources (e.g., pseudo-scientifically, non-verified numbers and statements). **Critically and carefully examine quality and source reliability**!
- Use different methods to study huge quantities of sources, such as skimming, in-depth-reading and excerption.
- All references have to be traceable! Take plagiarism seriously! Each adoption of foreign ideas has to be marked and your own contribution must remain clear throughout the whole work!
- **Exclusively use original sources** (this for example excludes Wikipedia entries) and provide the time of access for internet sources.
- Please consult with your supervisor already at the beginning on which **citation style** he/she wants you to use and what further specific requirements he might have.

Materials and Methods: Describe sufficiently detailed things that you did and that you used. The reader should be able to understand how your results have been achieved. Also, you should explain why you favoured your methods/materials over another if necessary.

Results and Discussion: This chapter can be divided into two if appropriate. First, present your results in tables or diagrams and describe them. Only afterwards interpret and discuss them. It will help you to structure this section.

Outlook and Summary: Summarize what has been done and mention the essential findings without going into much detail or discussion. As an outlook you present what more could/would have been done if there had been more time. Also, potential assumptions/generalizations can be drawn here. Please note that introduction and conclusion should also make sense when reading it without the chapters in between!

- **3.** References: All and only cited literature has to be listed in the required citation style. Best is to use a literature manager such as Zotero or Mendeley (for WORD-Users) or JabRef (for TeX-Users).
- 4. Appendix: All tables, figures or other supplementary data and material (detailed descriptions, definitions, extensive examples, algorithms, large tables, repetitive diagrams, etc.) has to be placed here, however, only, if referred to in the main body. Non-printable material (such as measurement data, models, etc.) should be submitted solely with your digital thesis version. Please consider also to move the whole appendix to the digital version, especially in case your appendix is very large. It should be, however, discussed with your supervisor obviously!

Defence (Oral Presentation and Discussion)

The thesis is to be defended in a public colloquium. It is required to have your written thesis submitted in print to the examination office a certain time beforehand in order to enable your supervisor and thesis committee to assess it properly. Consult with your supervisor on content and time/place of this defence, since it is an important evaluation part of your thesis. Please do not underestimate the time necessary for preparing a nice presentation! Good slides are fundamental for a successful presentation and there are several guidelines on how to do it in an appropriate and **appealing presentation**. For some institutes and additional poster of your results needs to be prepared. Ask your supervisor on layout requirements according to TU Dresden's Corporate Design.

The defence starts with a presentation of your work of around 25 minutes and is follow by a discussion in which you will be confronted with questions related to your topic. The overall performance of both parts will be graded.

Master Certificate:

After finishing your master thesis (submitted written thesis and defence), you have to apply for your master certificate. At the same time, you have to decide whether you want to include possible surplus modules in your certificate. Normally the university needs **4 weeks** after this to hand out the certificate. For the application, fill out the following document: https://tu-

dresden.de/bu/umwelt/hydro/ressourcen/dateien/fachrichtung/dateien/Application_Bachelor_Master_Certificat e_20190129.pdf?lang=en

As a TUD graduate you can get additionally **two certified copies of your master certificate**. Take advantage of this offer, since you might need them for applications coming up and getting certified copies in hindsight can become quite expensive. You can find information about this under the following link: https://tu-dresden.de/studium/im-studium/beratung-und-service/amtliche-beglaubigungen

Extension of Thesis

An extension needs to be permitted by the examination committee and you have to file an extension request in consultation with your supervisor (!!!) **at least 4 weeks before the official submission date**, giving reasonable reasons and explanations. In case problems are caused by conflicts between you and your supervisor, please contact your tutors first. Very often, problems can be sorted out by mediation! Do not change the topic or leave the working group as an initial response.

Especially scholarship holders and students from exchange programs as well as Erasmus Mundus students are usually obliged to finish their thesis by the end of the 4th semester. Scholarship extensions are rather difficult to achieve, so if you see any problem coming up that might require extensions of study and scholarship periods, please contact your tutors!

Additional Remarks

Good Scientific Practice

Technische Universität Dresden has issued guidelines to ensure that are mandatory for all employees engaged in scientific research, young researchers as well as all students. Pleases ask your supervisor for guidance in order to work according to the university and general scientific standards!

https://tu-dresden.de/tu-dresden/qualitaetsmanagement/gute-wissenschaftliche-praxis-an-der-tu-dresden/index?set_language=en

Supervisors

Your supervisor(s) have the responsibility to guide you through the whole process, however, the work is your responsibility alone! Please apply/implement/use methods/strategies that you already know rather independently according to the supervisor's requirements. A regular consultation with your supervisor is essential in order to update him/her continuously about the process and stage of your work or if you encounter problems. Especially the structure and procedure are to be coordinated in order to prevent misunderstanding or any incorrect interpretation of the tasks that you have been given.

Please prepare your questions specific and thought-through if possible, in order to use the time of your supervisor appropriately. Avoid repetitive questions and demands if possible!

Please contact your supervisor early enough in case of unexpected problems or things that might require an extension of the submission date. He/She will know whom to contact and what to do exactly.

Resources for Help

The Writing Centre of TU Dresden offers workshops and seminars as well as helpful resources on the following topics (exemplary):

- Orientation and Planning
- Reading and compiling academic texts and sources, Citations
- Work and Time Management
- Contact with supervisor
- Checklists

https://tu-dresden.de/karriere/weiterbildung/zentrum-fuer-weiterbildung/schreibzentrum

https://tu-dresden.de/karriere/weiterbildung/zentrum-fuer-weiterbildung/schreibzentrum/material#section-1

Additional there is also a specific Writing Counselling for Students, offered in cooperation with the SLUB (library):

https://tu-dresden.de/karriere/weiterbildung/zentrum-fuer-weiterbildung/schreibzentrum/fuer-studierende/schreibberatung

For more information, use search engines to find helpful documentations, reports or tutorials in the internet.

Erasmus Mundus Master Courses

Students of Flood Risk Management and Groundwater and Global Change have a different study structure than HSE, as such as that they spend their first three semesters at various universities.

Flood Risk Master (FRM, Coordinator: B. Bhattacharya, IHE Delft)

Study Structure

The program starts with the first semester at TU Dresden, enrolled in HSE. In the second semester, students join IHE Delft's Hydroinformatics program with special focus on modelling and decision support systems. After a month of internships or holidays, students take more specialized modules at UPC Barcelona (Spain) and finally conduct their final part of the third semester at University of Ljubljana. The thesis phase can be carried out at one of the participating universities as well as together with an industrial or research partner. Before Corona, various (international) field trips were organized.

Year 1									Year 2															
9	10	11	12	1	2	3	3 4 5 6 7				8	9	10	11	12	1	2	3	4	5	6	7	8	9
		30	cr		30 cr						20 cr 10 cr			30 cr										
Semester 1 Semester 2						Break		s	emes	ster 3	Semester 4						Graduation							
TU Dresden IHE Delft						ak	Ba	UPC arcelc			IL Ijana	M.9			at or rial p		the 4 ers	lor	ation					

Course structure of Erasmus Mundus Master Flood Risk Management

Mandatory and Elective Modules for FRM

Students of FRM follow a quite strict curriculum during their first semester at TU Dresden. The following modules are mandatory:

- Climatology & Hydrology (5 cr)
- Flood Risk Management II (10 cr)

The elective modules are similar to those of the normal first semester HSE curriculum (compare section on "Basic Modules"). Students have to choose two modules from the "Science" respectively "Engineering" list.

It is thus required to take 35 cr for the Winter Semester, but the lowest grade of the 4 optional modules (compare according section) will be not counted into the final grade, making a total of 30 cr.

Groundwater and Global Change (GroundwatCh, Coordinator: T. Stigter, IHE Delft)

Study Structure

The study programme starts at Instituto Superior Técnico (Lisbon, Portugal), the largest and most prestigious school of engineering in Portugal, with focus on the Environmental Engineering perspective. The second semester will be conducted at IHE Delft (the Netherlands), the largest international graduate Water Education Institute in the world. After a month of internships or holidays, students continue their study at TU Dresden, enrolled in HSE during their third semester. The third semester combines expertise of climate and hydrology with a combination of engineering, geo and natural sciences.

One highlight are various field trips, including one with participation of TU Dresden in France.

Course structure of Erasmus Mundus Master GroundwatCh

Year 1									Year 2															
9	10	11	12	1	2	3	3 4 5 6 7					9	10	11	12	1	2	3	4	5	6	7	8	9
	•	30	30 cr 30 cr							30 cr					30 cr					0				
Semester 1 Semester 2						Break		Semester 3					Semester 4						Graduation					
IST Lisbon IHE Delft						elft		×		-	TU Dre	esden	l		-		nesis dustr				ntion			

Mandatory and Elective Modules for GroundwatCh

Students of GroundwatCh need to take three mandatory modules from the third semester HSE, including the very important Study Project IWRM:

- Climate Systems and Climate Modelling (5 cr)
- Study Project IWRM (on Groundwater and Adaptation) (10 cr)
- Soil Water Management (5 cr)

The remaining required credits of a minimum of **10 cr** can be chosen from a wide range of elective modules within the departments of Hydro Science and Civil Engineering as well as on request in special cases from other departments at TU Dresden as well.

Consultation

Contact persons for Hydro Science and Engineering

The following lists reflect the current year, many positions change regularly.

Contact persons specifically for HSE

Scientific Coordinator	Prof. Dr. Christian Bernhofer
Examination Board	Head: Prof. Dr. Peter Krebs, see internet for all members
Eligibility Commission	Prof. Dr. Christian Bernhofer Prof. Dr. Jürgen Stamm Dr. Sabine Hahn-Bernhofer
HSE, FRM & GroundwatCh	Prof. Dr. Christian Bernhofer, DiplHydrol. Judith Pöschmann
Coordination of Scholarships (DAAD):	Dr. Sabine Hahn-Bernhofer
HSE Tutors (supported by DAAD)	Florian Bucher Veronika Schmid

Contact persons for all Hydro Sciences students including HSE

Dean of Student Affairs	Prof. Dr. Stefan Stolte
Coordination and Student's Advisory	Dr. Christina Görner Dr. Susann Kutzner
Examination Office (Student Bureau)	Elisabeth Simon

Contact persons from the Department of Hydro Sciences as part of the Faculty of Environmental Sciences

Spokesperson, Department of Hydro Sciences	Prof. Dr. Niels Schütze
Dean, Department of Hydro Sciences	Prof. Dr. Hans-Gerd Maas

Student Councils

StuRa represents the interests of all students and additionally offers several services and counselling. You can check www.stura.tu-dresden.de or you just go there (next to HSZ).

Students' council of the faculty of hydro sciences is there for many questions concerning your studies and organize some activities at the start of the semester as well http://hydwis.de/index.php?page=start&lang=EN.

You are welcome to participate in the legal student representation at TU Dresden

TU Dresden

International Office is responsible for all things related to international applicants and students. They offer general advice regarding enrolment, re-registration, semester fees, counselling, and other opportunities from the beginning of your studies to graduation. Please check on their website via the respective headings and do not hesitate to contact them in case of need. https://tu-dresden.de/studium/vor-dem-studium/internationales

Please also check this website for an overview of what TU Dresden offers for international students: https://tudresden.de/tu-dresden/ressourcen/dateien/zentrale-studienberatung/infothek/angebote-internationalestudierende-en?lang=en

Ausländerbehörde ("Immigration Authorities"), City of Dresden

The Ausländerbehörde is highly important for every (mostly non-European) student that cannot study/stay in Germany without possessing a visa. They provide residence permits for the duration of your study and help you to get a job-seeking visa after completing your studies. Please take all appointments seriously and be pro-active for getting consultation from them.

Important: Please do not consider other students' "experiences" and "how to's" as valid for your own case when it comes to residence/immigration matters. All cases are very individual and not everything might apply for everyone. Instead, strictly follow the instruction of the authorities, submit documents on time and provide honest information.

Studentenwerk

In addition to the provision of canteens and housing, the Studentenwerk offers a range of services that are also suitable for international students.

- Social Counselling (https://swdd.eu/ssb) for temporary difficulties during your studies through no fault of your own
- Psychosocial Counselling Center (PSB) (https://www.studentenwerkdresden.de/english/soziales/psychosoziale-beratung.html)
- Legal Advice (https://www.studentenwerk-dresden.de/english/soziales/rechtsberatung.html) regarding your studies, housing or work situation
- Studying with child (https://kinder.studentenwerk-dresden.de/en/) in case you have a family while studying. TU Dresden offers students with child special services, including day care (https://www.studentenwerk-dresden.de/english/soziales/kita.html) or temporary child care (https://www.studentenwerk-dresden.de/english/soziales/campusnest.html)

Health Care

In Germany, hospitals are for emergencies, very urgent cases and special treatments. Usually, you will see a general practitioner ("Allgemeinmediziner", "Hausarzt") during their opening hours with an appointment, but they usually also have special times for urgent cases without appointment. For Emergency numbers see https://dresden-concept.de/wp-content/uploads/2020/04/Emergency-numbers.pdf. In case of emergency go to the emergency room of your nearest hospital or in worst case call an ambulance at **112**.

The website of the association of statutory health insurance physicians (Kassenärztliche Vereinigung Sachsen) has a search engine that lists all the registered Doctors in Saxony (German). If you scroll down), you can filter doctors who speak foreign languages ("Zusatzinformationen"): https://asu.kvs-sachsen.de/arztsuche/pages/search.jsf. The TU Dresden Welcome Center can also provide a list of English-speaking doctors (\rightarrow ask for it welcome.center@tu-dresden.de).

FAQ: How to...

... organize my studies?

1. Where can I find important academic dates, like holidays or semester/exam periods?

https://tu-dresden.de/studium/im-studium/studienorganisation/studienjahresablauf

2. How much time should I plan for self-study?

According to the study regulation each credit counts for 30 hours of work. From our experience you should plan a minimum of around double of the lecture time depending on your personal abilities and subject.

3. Can I study Hydro Science and Engineering via distance learning?

No, this course is an attendance course and there is no opportunity for distance learning. However, Corona has changed this a little.

4. How can I arrange appointments with supervisors and professors?

Ask them directly if you attend a module of him/her or write an email. If they have an assistant, it might be easier to contact her/him since they are often easier available than the professors.

5. What if I have a problem with a professor/supervisor?

If the issue cannot be solved with the person, please contact your tutor, the FSR or the StuRa (in this order) early enough!!!

6. May I take exams during a semester of leave?

According to the Sächsisches Hochschulfreiheitsgesetz (~Saxon University Regulations) you may take exams and study assessments if you are on leave.

7. What should I study for the examinations?

Generally, the exams are completely based on the topics of the module and not on additional information. Professors usually provide scripts, handouts or their presentations' slides. Meet with fellow students to discuss topics you did not understand. If you still do not feel well enough prepared, contact your tutors or other students of higher semesters and ask which topics were important for the exam.

8. What if I am afraid of examinations?

TU Dresden offers an online-program against test anxiety that might help you to overcome fear in these situations: https://tu-dresden.de/mn/psychologie/ikpp/behavioralpsy/die-professur/opta

Additionally, please check the following homepage that includes help on managing your module work, time and self-management as well as counselling and all kinds of support services for students, especially if you encounter **times of crises/problems:** https://tu-dresden.de/studium/im-studium/beratung-und-service/zentrale-studienberatung/infothek?set_language=en

... understand all regulations?

There is a regulatory framework for successfully obtaining a master degree. The following information might help you to understand the formal demands of your study course.

Study seriously!

Though there might be few graded assessments during your semester, all modules usually end with exams that can be sometimes **very tough**! Many students mistakenly enjoy a relaxed semester and are surprised after all that they do not know enough from the lectures!

Therefore – do not miss lectures, form study groups and participate during the lectures whenever possible! The documents **"Studienordnung"** (Study Regulation) and **"Prüfungsordnung"** (Examination Regulations) provide the compilation of information. Be aware that only the German regulation versions are legally binding! However, translated versions contain exactly the same contents.

Please keep in mind that all of what is written in the Examination and Study Regulations is **legally binding to you as well as to the professors**. So, even exceptional cases (sickness, family issues, etc.) can only be considered by the university, when you act according to the regulations. Thus, if anything unexpected comes up, take a look there and contact your tutors as soon as possible. Thus, please read **it at least once during your studies**. In case you have questions about certain words or phrases you are welcome to ask your tutors anytime for explanation.

Documents can be accessed via:

https://tu-dresden.de/bu/umwelt/hydro/studium/studienangebot/master_hse/hse#section-2-3

Studienordnung

The **Study Regulations** define the general purpose and setup of the study program "Hydro Science and Engineering". It also contains the module description and a table of the study structure.

Prüfungsordnung

The **Examination Regulations** contain more detailed information about exams and tests. How they have to be written? What do I have to do when I get sick? How many times am I allowed to repeat an exam? Whatever you are unsure about, when you are organizing your master thesis, exams, internships, etc.

You should first take a look into the study and the examination regulations before taking one step into the wrong direction.

... study abroad?

During your study at TU Dresden you are usually already studying abroad. However, if that is not enough for you and you would like to get some more experience, TU Dresden offers different opportunities.

ERASMUS⁺ - Programme

Erasmus+ is a scholarship program of the European Union to exchange students inside the EU. You can contact Prof. Dornack or find more information (in German!) here:

https://tu-dresden.de/bu/umwelt/hydro/studium/internationales/document-2016-02-24-7865497875/document_view?set_language=de

More offers to study abroad

The international office of TU Dresden offers further opportunities to study abroad during your studies in Dresden. Please consult them directly via their homepage.

https://tu-dresden.de/studium/im-studium/auslandsaufenthalt#

Offers of the German Academic exchange service (DAAD)

The DAAD awards scholarship in various programs for students, graduates, PhD Students and scientists. Furthermore, there are special calls for example for final exams, summer language courses, summer schools and travelling allowances.

... do an internship?

If looking for an internship, there is a list of institutions where previous HSE students have done their internships. Please note that these are just suggestions and you still need to file a normal application, managed and organized by yourself. You can take consultation by the career centre of TU Dresden (https://tu-dresden.de/karriere/berufseinstieg?set_language=en) or ask experienced students/your tutor.

List: https://tu-dresden.de/bu/umwelt/hydro/ressourcen/dateien/studium/studiendokumente/master/mhse26-internship-institutions?lang=en

... work during my studies?

In case you need or want to work, there are several options. However, check FIRST with your visa and/or scholarship regulations under which conditions you are allowed to work. Listed below are the general regulations for students in Germany (conditions as of Februrary 2020):

- a) **450€ Job**: You are allowed a maximum of 450€ per month, however, no taxes and social security contributions need to be paid from the salary
- b) **Working student** (German: Werkstudent): You are allowed a maximum of 19h/ week and you can get your taxes returned at the end of every year in case you file an income tax declaration in Germany (German: Einkommensteuererklärung)
- c) **Short term employment**: You are allowed to work 70 days per year (German nationals, foreigners may differ) but maximum 18 days in a row and earn max 12€/h. as with the working student, you'd have to file for taxes in order to get back what you had to pre pay.

Usually, your future employer decides which form of employment he wants to offer. In order to be able to work you will need a Tax-ID (Steuer-ID) and Social Security number (Sozialversicherungsnummer), your employer can assist you with this.

Jobs in Academia:

Professors and Faculties do offer some student/ research assistant positions, but **normally** they aren't available to first semester students. In case you do receive a position, be aware that the paperwork for setting up the contract can take **up to 8 weeks**. Student positions are mostly offered in connection with research topics or within projects. In order to get a job as a student researcher, be pro-active and ask professors/potential supervisors directly!

Jobs in Non academia:

Almost all employment opportunities outside university require a certain level of German (minimum B1-B2). At the same time, you will be able to improve your German skills, which can be beneficial and in most cases mandatory in case you would like to find a job in Germany after graduation. Usually, it also helps to adapt to German environment and make some German friends.

Student jobs can be found through STAV Student work opportunities (studentische Arbeitsvermittlung), the are located behind the HSZ and you can check for jobs online https://stav-dresden.de/

Also, if looking for a non-academic job check black boards in university and keep your eye open while at the grocery store, they might be hiring someone to restock shelves, cashers etc. Some fellow students have found work asking at restaurants (from their home countries).

If you want to learn how to do job applications the "German way" or need help with proper job applications use the services of the TU Career Service (https://tu-dresden.de/karriere/berufseinstieg?set_language=en). They offer a variety of service that you are allowed to use for the whole duration of your studies at TU Dresden.

Appendix 1: Arrival checklist for international students

(Source: Akademisches Auslandsamt/International Office)

Health insurance:

Every student at a German university (younger than 31) must present a valid statutory health insurance (list: https://www.krankenkassen.de, examples: AOK, TK, IKK, BARMER, DAK, KKH) for enrolment, or for European students a European Health Insurance Card (EHIC).

If you have a private health insurance (through an exchange program/scholarship or for another reason), you choose to get a so-called "exemption" (*Befreiung von der Versicherungspflicht*) from a statutory insurance agency. With this exemption you state that you wish not to be insured by a statutory health insurance in Germany! This exemption cannot be withdrawn for the whole duration of your studies (potentially incl. PhD studies in Germany). Please carefully consider your options and check exactly which medical costs your private insurance will cover!

Registration at Resident's Office of the city of Dresden/Bürgerbüro

When you arrive in Dresden you have to register **in person** at one of Dresden Residents' Registration Offices (German: Einwohnermeldeamt) **within 14 days after acquiring a flat or student dormitory room**.

You need: your passport/ID, rental agreement, Wohnungsgeberbestätigung (signed by your landlord)

If registering in Dresden for the first time, we recommend that you visit the following registration office: Zentrale Meldestelle Altstadt (Central Registration Office), Theaterstraße 11 (near Postplatz)

You don't need an appointment, but can register for an appointment online via the city of Dresden (https://termine.dresden.de/netappoint/index.php?company=stadtdresden-bb&cur_cause=0). Bring all required documents!

Please note that you need to deregister from the city of Dresden, in case you move away from Germany during your studies or after your graduation!

Semester fee:

All students must pay a semester fee. This is required also of non-degree students (e.g., ERASMUS) and students doing a double degree. This fee is no tuition fee, but a contribution for the services of the Studentenwerk (student services) and the StudierendenRat (student council) and for your public transportation ticket for one semester.

The fee can be paid via bank transfer only and needs to be paid each semester (please check the corresponding website for the current amount)! New students will get the transfer information with their admission letter. Erasmus Mundus students (GroundwatCh and FRM) should only pay if requested by the programme coordinator!

Registration with the Immigration Matters Department (Ausländerbehörde)

Foreign students from non-EU countries (third countries) are required to apply to the Immigration Matters Department for a residence permit within 3 months after their arrival in the Federal Republic of Germany and NO later than 7 weeks before expiration of the current visa. Erasmus Mundus students might have special rules!

Address: Theaterstraße 13 (close to Postplatz)/ service point: www.dresden.de (city & council \rightarrow foreigners in Dresden)

Foreign students from EU-member countries do not need to apply to the Immigration Matters Department for a residence permit.

Enrolment at the TU Dresden International Office

Please check your acceptance letter for <u>dates</u>, <u>opening hours</u>, and the <u>list of documents</u> to bring for enrolment. After having completed all formalities (points a to c, done **before** the enrolment), you will receive your student ID card at the International Office as part of an information event.

Erasmus Mundus students (GW/FRM) will receive additional information!

Opening a bank account

You can open a bank account at a bank or the Sparkasse (national saving bank).

You will need: Passport/ID, Confirmation of registration, Admission/enrolment letter of TU Dresden

Semester ticket/Transportation

You will get your student ID during your enrolment and it is valid as a ticket for the entire semester (October to March, respectively April to September) and allows you to use the public transport of the whole Dresden Public Transport (city of Dresden) and most of Saxony for free (note: not usable for fast trains like IC/ICE!).

However: The semester ticket is only valid from October 1st (winter semester) or April 1st (summer semester). In case you arrive before the start of your studies, you will need to buy tickets (and stamp before use!!) for using the public transportation

The public transportation company for Dresden is: DVB: https://www.dvb.de/en-gb/

Accident and liability insurance

Students at TU Dresden are already insured against accidents during activities related to their studies. This coverage also includes participation in university sports.

However, the university is not liable for injuries to persons or property that *you* may cause. Purchasing private liability insurance is, therefore, highly recommended

Please be aware of additional information from the international office

https://tu-dresden.de/studium/vor_dem_studium/internationales

Appendix 2: Potential Questions..

.. concerning University:

1. What is the good behavioural conduct at our university and in the German society?

Students of all gender, nationality, cultural background as well as with handicap are welcome to study at our university with equal rights and duties. We do not appreciate inappropriate behaviour towards women (sexual harassment of any level, gender discrimination) or minorities. Racism of any kind is not tolerable as well. If you experience and/or witness unacceptable behaviour of students as well as staff, please either contact an official or in cases of criminal/illegal behaviour, the police. Check the section on harassment for contact information.

2. Public Transportation

You are allowed to use your semester ticket for all transportation types except of taxis and fast trains (ICE/IC) within Dresden as well as connections with regional trains and S-Bahns for whole Saxony (ticket is valid for the period of the corresponding semester, October to March, respectively April to September).

3. Internet on Campus

WLAN is available at the Campus and in the libraries. You need your student ZIH login and password or any EDUROAM Log-in. In case of question, please contact the service of the ZIH (Center for Information Services and High Performance Computing, https://tu-dresden.de/zih). You can also access the services of TU Dresden off campus via VPN (https://tu-dresden.de/zih/dienste/service-katalog/arbeitsumgebung/zugang_datennetz/vpn).

4. Library

The University library is called "Sächsische Landesbibliothek – Staats- und Universitätsbibliothek (SLUB)" (Zellescher Weg 18). Information about the library, special offers and all of its locations can be found on https://www.slub-dresden.de/en.

5. Where can I eat at university? Cafeterias/Canteens

There are several cafeterias/canteens on the Campus (https://www.studentenwerkdresden.de/english/mensen/), offering a great range of food at reasonable prices. Cashless payments are possible with the MensaCard called Emeal, available at the cash desks during their opening hours. For obtaining it you will need to present your passport, Emeal certificate (handed out during enrolment) and a small deposit. You will get more information on it during the enrolment/campus tour.

6. Sports

The university's sport centre (USZ) offers a wide range of sports. The course offers (https://tudresden.de/usz/sportangebote/sportangebote-a-z) for the term will be published online starting from around the end of March resp. September. It's a good chance to also get to know other (German) students. Starting from the first week of university you register online for the course of your choice, exact timings for registration for the individual courses are indicated next to the descriptions. Courses get booked very quickly and it is first come, first serve!

7. Learning foreign languages (German see next sections)

While studying at the TU Dresden you have the opportunity to learn various languages (taught in German). Please note that participation in free language courses is limited and also the courses are booked out really quickly! Each of you will have a budget of 4 SWS (course hours per week) that you can voluntarily spend on learning German or another language of your choice. The credits are no counted for your Master!

Link with further information: http://sprachausbildung.tu-dresden.de/ (information are available from mid of March/September for the corresponding semester)

.. concerning living in Germany

1. Is there anything I need to be aware of while living with other people?

If you live in a student dormitory or a shared flat with other people it's good to talk about and define rules concerning: cleaning (especially the common areas like kitchen, bath), noise (get-togethers or even parties on the weekend are common but flat mates should not be disturbed by it), or toilette rules (e.g., sitting down or standing while urinating)

2. How can I learn German?

The best way to study a language is to dive into German society. If you prefer to enrol in a language course additionally: Similar to before mentioned "foreign languages" learning you can use this budget to learn "German as a foreign language". All information can be found here: https://www.sprachausbildung.tu-

dresden.de/sprachen/deutsch_als_fremdsprache/.

You can also learn German in schools like Berlitz Language Center, Goethe-Institut, Deutsche Sprachschule Dresden, Inlingua Language School, Kästner-Kolleg, VHS Dresden, Euroschulen Dresden and others, however they charge

you for it! Alternatively, there are also digital options such as: http://www.dw.com/en/learn-german/s-2469, https://www.vhs-lernportal.de/wws/9.php#/wws/apps.php or https://www.goethe.de/prj/dfd/de/home.cfm.

3. How can I get integrated in the German society? How can I make German friends?

Be pro-active and do not give up easily! Germans are generally more reserved than and possibly not as polite as you might be used to. However, it does not necessarily mean a devaluation.

Germans are usually very obligatory. You should keep appointments or agreements, even in private life! Late or no-shows, spontaneous cancellations or general unreliability are not appreciated. Also, even though it may be difficult for you, it is good to communicate your expectations and thoughts in a clear manner.

Most importantly! Meet Germans where they are! Avoid activities labelled "international" or similar, rather consciously join groups and activities that German actually participate in, for example (student) associations (sport, cultural, religious, political...) or voluntary commitment. Even if it sounds difficult, in the end it is not that difficult at all.

.. concerning finances/housing/jobs

1. What shall I do if I encounter financial crisis?

You can contact the "Consultation Services of the Studentenwerk Dresden" (Social Counselling: https://www.studentenwerk-dresden.de/english/soziales/sozialberatung.html). They give independent and objective advice on social or financial problems during your student life. If they cannot help you directly, they will know where you can find help.

The Studentenwerk also offers legal advice for free: https://www.studentenwerkdresden.de/english/soziales/rechtsberatung.html

If you have any legal questions regarding your studies, your housing or work situation, this is the place to go.

2. How can I find a cheap accommodation?

Please check the website of the Studentenwerk for student dormitories: https://www.studentenwerkdresden.de/english/wohnen/wohnheimkatalog/

There are some private dormitories for students that you can find via search engines.

Why not?

Why not try to find a language and cultural partner with the "Buddy Program"? Check https://www.aegeedresden.org/the-buddyprogram/ for more If you want to look for an apartment yourself, you can also check these websites (and others):

- WG-Gesucht: http://www.wg-gesucht.de/en/ [a nice request sometimes increases chances]
- Immobilienscout (German website): https://www.immobilienscout24.de/
- Immonet (German website): https://www.immonet.de/

Please note that it is possible that the apartments may not have the complete furniture, so you should check this before. Another point is, that rents (except for the ones of "Studentenwerk") are often exclusive of heating and electricity, internet, obligatory radio tax, so you need to keep that in mind and better ask directly for it.

3. What if I (am about to) lose my accommodation?

Never ignore mail or calls from your landlord. Normally, you have a 3-month cancellation period, so does your landlord. If you are late with payments, do not follow the rules or similar, it can result in an immediate termination of your contract. As soon as you know that you will have issues with your housing situation, immediately take action and ask for help early enough.

4. Do I have to pay the German TV fee (GEZ)?

Yes, you do! It needs to be paid per flat, so please share with your flat mates.

5. Am I allowed to work outside university?

Yes, you are allowed to work outside the university both during and after your studies. However, there exist restrictions in the amount of hours/money (s. below).

6. How much time are you allowed to work during your studies?

If you work at the TU Dresden, you are allowed to work a maximum of 19 hours per week to ensure that you focus on your studies. If you work outside the university, it is a maximum of 20 hours per week during the lecture period and more in the lecture free one (special regulations may apply depending on your visa, residence permit or scholarship). Additionally, there is a maximum amount you are allowed to earn on average per month.

For further information check:

- https://www.studis-online.de/StudInfo/Studienfinanzierung/jobben.php (German)
- https://www.study-in-germany.de/en/plan-your-stay/working-while-studying/
- 7. Are scholarship holders allowed to find a job in Germany after their studies?

All graduates from German university are allowed to apply for a job-seeking visa that allows you to stay in Germany for up to 18 months after finishing your studies in order to find a job in Germany. There might apply special additional rules depending on the type of scholarship, however, from German side you are encouraged to find a job.

.. concerning culture and leisure

1. The FSR Hydrosciences

.. offers tours, BBQs, board game nights and the occasional faculty party specifically for students of hydrosciences.

2. The Cultural Office

.. wants to give a representative overview of the cultural, political, artistic, historic and especially of modern life in Germany. They emphasize on the meeting of foreign and German students and organize a broad culture and leisure program, including trips to cities like Berlin, Hamburg or Munich and also to the surroundings of Dresden. Additionally, visits to museums, concerts and festivals are offered as well as cultural tandems. Furthermore, they financially support cultural projects organized by students. Current information about the program can be found at: https://tu-dresden.de/studium/rund-ums-studium/kulturbuero?set_language=en

- 3. The International and Cultural Program from Studentenwerk
- https://www.studentenwerk-dresden.de/english/internat/fif-find-international-friends.html: family and international friends program
- https://www.studentenwerk-dresden.de/english/internat/international-coffee-hour.html: international coffee hour
- https://www.studentenwerk-dresden.de/english/kultur/: information on cultural activities, artistic groups, ...
- Hiking: https://pm.studentenwerk-dresden.de/en/dear-hikers/
- Arts: https://www.studentenwerk-dresden.de/english/kultur/stuwertinum.html (German)
- 4. ERASMUS-Initiative...

... organizes many parties and other events during the semester. Check the homepage for more information: http://esn-dresden.de

5. Students' Associations (recognized by StuRa) and Clubs

A good possibility to meet other students is to join a students' association (https://www.stura.tudresden.de/hochschulgruppen, information in German). Don't be shy to join their meetings!

There are also a lot of student clubs (mostly in the dorms) where you can go and meet people: https://www.studentenwerk-dresden.de/english/kultur/studentenclubs.htmls

.. concerning other issues

1. What should I do in case of sexual, racial or other harassment/discrimination?

Germany and generally the EU is supposed to be a democratic civil society that promotes pluralism and human rights while opposing right-wing extremism, racism, sexism, anti-Semitism and any other form of discrimination.

However, in the unlikely event of being a victim of any kind of (systematic, one-time or consistent) racial or similar harassment, please consult with the following, if you need professional support:

- a) Saxony Anti-Discrimination Office Advice Centre: Get advice or report any kind of discrimination (e.g., racism, disability, gender, world view, appearance), also you can report it for another person: https://www.adb-sachsen.de/en#adbLocations-dresden)
- b) https://www.raa-sachsen.de/support/english via their hotline for foreigners and migrants (English, German, (Arabic)) or via e-mail (opferberatung.dresden@raa-sachsen.de)
- c) TU Dresden support: https://tu-dresden.de/tu-dresden/universitaetskultur/antidiskriminierung. This page gives you an overview on how to deal with any form of (sexualized) harassment, discrimination and violence. Please do not hesitate to take steps and get help. Also, please support your colleagues in case they need help and do not know what to do.

Very important: In case of criminal cases or in situations that may endanger your physical integrity, call the police (110) or emergency services and do not hesitate to file a complaint (with the help of above mentioned for example or tutors).

Important: In case you are facing discrimination/harassment that could be important for us to know (in order for us to either assist you or know how to potentially avoid a situation like this for other students), it would be helpful if you let us know. Be sure that we will treat all information confidentially!

2. What should I do in case of pregnancy?

Consult with a practitioner of gynaecology (German: Frauenarzt) if everything is fine for you and your baby. Information on how to continue your studies with a child can be found via: https://tu-dresden.de/tudresden/universitaetskultur/diversitaet-inklusion/familienfreundlichkeit/beratungs-und-serviceangebote-

1/beratungs-und-serviceangebote. If you have a course in a lab you have to inform the professor immediately since in some labs you are not allowed to work when you are pregnant, for your own and the safety of your child.

Do not hesitate to talk to the tutor/coordinator/study counsellor if you want/need to.

3. What if I cannot mentally cope with my study/life situation?

The Studentenwerk Dresden offer a "Psychosocial Counselling Center (PSB)"

https://www.studentenwerk-dresden.de/english/soziales/psychosoziale-beratung.html.

In case of an emergency situation you can also always see a psychiatric institution of Dresden.

Additionally, find an overview of all kinds of counselling services here:

- https://tu-dresden.de/studium/rund-ums-studium/hilfe-und-beratung?set_language=en
- https://www.dresden.de/de/leben/gesundheit/beratung/seelische-gesundheit/psychosozialerkrisendienst.php (offer timely appointments)

Again, do not hesitate to approach the tutor/coordinator/study counsellor for help.

Mitglied von



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Questions, Recommendations, or Feedback concerning the brochure?

Judith.Poeschmann@tu dresden.de



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