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Master's Programme in Transdisciplinary Studies of Climate, Environment, and Energy

Student Handbook - Study Track 6: Climate Change Science

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Glossary

Admission to the Programme: The formal process by which a student is officially accepted into the Programme after meeting the required academic qualifications, submitting necessary documents, and fulfilling any additional criteria set by the institutions involved. Admission is confirmed through an official notification from the university with the issuing of an Acceptance Letter.

Programme board: The main decision-making body for the Programme.

Cohort: The group of students admitted and enrolled in the Programme in one intake. The cohort 2026 applies to all students admitted and enrolled in the programme starting in 2026.

Curriculum: The elements that make up a degree programme, including the structure, the content to be covered, intended learning outcomes, teaching, examination and assessment methods.

Degree: The academic qualification awarded by a university upon successful completion of the Programme. The degree certifies that the student has met all academic requirements, including coursework, research, final assessments and is officially recognised as having attained a specific level of expertise in their field of study defined by the intended learning outcomes of the Programme.

Degree Type: The type of master's degree (Master of Arts, Master of Science, International Master etc.) and the level of qualification it confers.

Diploma: The document/parchment presented to the student after successful completion of the programme according to the practices and regulations of the awarding university/-ies.

Diploma Supplement: The document that accompanies the diploma and provides the details of the academic programme and academic achievements.

European Credit Transfer and Accumulation System (ECTS): A standardised system used in European higher education to measure and compare students' workload and learning outcomes. One ECTS credit typically corresponds to 25–30 hours of study.

Issuing partner university: The university that issues the diploma.

Joint Degree: A single degree jointly awarded by universities to a student upon successful completion of a joint programme.

Multiple Degree: Separate degrees awarded by higher education institutions offering the joint programme attesting the successful completion of this programme.

Participation cost: The financial charges levied on students for their enrolment in the Programme.

Partner university: The university that awards a degree, as applicable with reference to the relevant format of awarded degree (joint, double or multiple).

Transcript of records: The official record or breakdown of a student's progress and achievements.

1 The programme

The master's programme in Transdisciplinary Studies of Climate, Environment, and Energy (TRACEE) is a collaborative initiative designed within the CIVIS Alliance. This innovative master's programme aims to equip students with transdisciplinary expertise to address the complex challenges of our time, focusing on climate, environment, and energy. It features an integrated curriculum co-created by scholars from CIVIS member universities that promote diverse academic perspectives across Europe and Africa. The vision, target group of students and intended learning outcomes are presented hereafter.

1.1 Vision

The vision which forms the foundation for this programme is for students with a solid disciplinary background in natural sciences, social sciences, law, or humanities to become transdisciplinary graduates capable of tackling the world's most pressing challenges—climate change, energy transitions, and environmental crises.

1.2 Target group of students

This programme is intended for students who are seeking (a) a career working at a local, regional, national, European or even global level on the ongoing societal transformation (e.g., as expressed by the European Green Deal), or (b) a future in transdisciplinary research focusing on climate, environment and/or energy.

1.3 Intended learning outcomes of the programme

The intended learning outcomes of the programme are listed below. They are complemented by additional learning goals in each study track, which are presented in the respective annex for each study track.

Knowledge and understanding

- Demonstrate knowledge and understanding in Transdisciplinary Environmental Science, including both broad knowledge of the field and a considerable degree of specialised knowledge applied in the field of each study track and its transdisciplinary applications.
- Demonstrate insight into current research and development work within the specialised field of the study track and its transdisciplinary applications.
- Demonstrate methodological knowledge from the humanities, law, social sciences, and natural sciences applied to and relevant for Transdisciplinary Environmental Science.
- Demonstrate knowledge to use systems thinking as a framework for analysing climate, environment, and energy issues from perspectives of natural sciences, social sciences, law, and humanities, and transdisciplinarity.

Competence and skills

- Demonstrate the ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations from perspectives of natural sciences, social sciences, law, and humanities, even with limited information.
- Demonstrate the ability to critically, independently, and creatively identify and formulate questions, to plan and carry out qualified tasks within given time frames using appropriately chosen methods, thereby contributing to the development of knowledge, and to evaluate one's own work.
- Demonstrate the ability to clearly present and discuss, both orally and in writing, conclusions and the knowledge and arguments underlying them in dialogue with various groups, in both national and international contexts.

- Demonstrate the skills required to participate in research and development work, or to work independently in other professional areas.

Judgement and approach

- Demonstrate the ability to make assessments in Transdisciplinary Environmental Science informed by relevant interdisciplinary, societal and ethical issues and to demonstrate awareness of ethical aspects of research and development work.
- Demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.
- Demonstrate the ability to identify the personal need for further knowledge and take responsibility for their ongoing learning.

2 Programme structure overview

The TRACEE Master is delivered through the collaboration of 11 universities within the CIVIS Alliance where the credits of the master's programme are distributed according to the student's selected study path and integrated mobility.

2.1 Partner Universities

The programme results from a collaborative design within the CIVIS Alliance including the partners below and their respective acronym that will be used hereafter in the student handbook:

- Aix-Marseille Université (AMU), France
- National and Kapodistrian University of Athens (NKUA), Greece
- Université libre de Bruxelles (ULB), Belgium
- University of Bucharest (UB), Romania
- University of Glasgow (UofG), Scotland
- Université de Lausanne (UNIL), Switzerland
- Universidad Autónoma de Madrid (UAM), Spain
- Sapienza – Università di Roma (SUR), Italy
- Paris-Lodron-Universität Salzburg (PLUS), Austria
- Stockholm University (SU), Sweden
- Eberhard Karls Universität Tübingen (UT), Germany

The CIVIS Alliance has six associate partners from African countries, these are: Makerere University in Uganda, Eduardo Mondlane University in Mozambique, Université Hassan II de Casablanca in Morocco, University of Sfax in Tunisia, Université Cheikh Anta Diop de Dakar in Senegal, and University of the Witwatersrand in South Africa. The six African partners may be involved in parts of the delivery of certain courses of the TRACEE master.

2.2 Distribution of the credits of the programme

The programme spans two academic years, structured into four semesters, each worth 30 credits, for a total of 120 credits in the European Credit Transfer and Accumulation System (ECTS).

The credits (ECTS) are distributed as follows:

- **The First Semester:** A Common Core (30 ECTS): The first semester is common to all students across the programme and takes place at Stockholm University. It consists of one mandatory course, co-created and co-delivered by teachers and scholars from across the CIVIS Alliance in Europe and Africa.
- **The Second and Third Semesters:** The Study Track (60 ECTS): After the first semester, students follow one of nine study tracks. Mobility paths are predefined for each study

track, specifying the partner universities where students will study during these semesters.

- **The Fourth Semester:** The master's thesis project (30 ECTS): The final semester is dedicated to a mandatory independent master's thesis project in transdisciplinary studies of climate, environment and energy. It is carried out at one of the CIVIS universities offering the selected study track.
- **The transdisciplinary stream:** The stream runs through the entire Programme. It is extra-curricular, meaning that credits are not awarded for participating in the stream. The stream aims at enhancing students' understanding of transdisciplinarity, maintains the coherence of the Programme and keeps the cohort of students connected throughout the entire duration of the programme, and provides preparation and support for the master's thesis project.

2.3 Mobility paths

Students select a specific study track upon application to the Programme and are required to complete their studies and to complete at least two mobilities to countries other than the student's country of residence at enrolment. Thus, mobility is an integral part of the Programme.

The table below illustrates the structure of the programme, including the specific mobility paths for each of the nine study tracks.

* For students selecting the study track 3 or 4 (ST3 and ST4), including Stockholm University (SU) in the study track, the country for Semester 4 (registration to the master's thesis project) must represent a second mobility in relation to the country of residence of the student at enrolment stage.

- Students in ST3 or ST4 residing in Sweden at the time of the application should be admitted to the University of Bucharest (UB) in Semester 4.
- Students in ST3 residing in Spain at the time of the application should be admitted to the University of Bucharest (UB) in Semester 4.
- Students in ST4 residing in Germany at the time of the application should be admitted to the University of Bucharest (UB) in Semester 4.
- Students in ST3 residing elsewhere in the world (outside Sweden or Spain) can register either at Stockholm University (SU), the Autonomous University of Madrid (UAM) or the University of Bucharest (UB) in Semester 4.
- Students in ST4 residing elsewhere in the world (outside Sweden or Germany) can register either at Stockholm University (SU), the Eberhard Karls University of Tübingen (UT) or the University of Bucharest (UB) in Semester 4.

Study tracks	Semester 1	Semester 2	Semester 3	Semester 4
ST1: Environmental Humanities and Law	SU	PLUS	UB	SU or PLUS or UB
ST2: Environmental Social Sciences		UofG	UB	SU or UofG or UB
ST3: Energy and Matter		UAM	SU	SU* or UB
ST4: Environmental Chemistry and Toxicology		SU	UT	SU* or UT* or UB
ST5: Environmental Geoscience		UofG	AMU	SU or UofG or AMU
ST6: Climate Change Science		NKUA	UT	SU or NKUA or UT
ST7: Environmental Risk and Mitigation		UNIL	SUR	SU or UNIL or SUR
ST8: Transdisciplinary Approaches to Climate Change		PLUS	ULB	ULB
ST9: Global Change Biology		SUR	AMU	SU or SUR or AMU
	Common Core	Study Track		Master's thesis project
	Transdisciplinary stream			

* For ST3, students residing in Sweden or Spain at enrolment should be admitted to UB for Semester 4. Other students may be allocated to SU or UB, subject to the thesis allocation procedure and final approval.

3 Programme content overview

The programme content overview provides a description for each semester and the transdisciplinary stream that runs through the entire programme. Complementary information for each study track is available in the respective annexes.

3.1 The first semester – The common core

The programme begins with a common semester for the programme. It consists of one single mandatory 30 ECTS course, Climate, Environment, and Energy – a Transdisciplinary Perspective. The course will be hosted by the Department of Environmental Science at Stockholm University. It is co-created and co-taught by educators from across the CIVIS Alliance in Europe and Africa. This course consists of five modules. The first module (Systems Thinking) uses the concept of systems to set the stage for interdisciplinary learning. The second, third and fourth modules examine climate, environment and energy from natural science, social science and humanities perspectives. The fifth module (Creating Knowledge Through Transdisciplinary Methods) introduces transdisciplinary learning. The learning goals for each of these parts are as follows:

Part 1. Systems Thinking, 3 ECTS

- Discuss systems thinking and its history, central system concepts, as well as types of systems and their properties.

Part 2. Climate, Environment, and Energy - A Natural Science Perspective, 9 ECTS

- Describe energy and matter and their transfer within the Earth's system, as well as solutions for future energy supply.
- Describe global biogeochemical cycles, ecosystem services, and biodiversity, as well as the risks they face due to global environmental changes.
- Explain the climate system, drivers and feedback mechanisms, as well as Earth's past, present, and future climate.

Part 3. Climate, Environment, and Energy - A Social Science Perspective, 9 ECTS

- Describe past, present, and future economics, politics, and policies on energy systems, environment, and climate change.
- Discuss the international, European, and national legal framework for climate, environmental, and energy policies and the transition.
- Discuss knowledge, behaviour and action in relation to climate change, as well as the role of communication and education in addressing environmental and climate challenges.

Part 4. Climate, Environment, and Energy - A Humanities Perspective, 6 ECTS

- Discuss historical, literary, aesthetic, and philosophical aspects of environmental thinking and address concerns about climate and the environment.
- Analyse sociocultural paradigms and rhetorical strategies in climate and environmental communication.

Part 5. Creating Knowledge Through Transdisciplinary Methods, 3 ECTS

- Describe methods for involving society in different cultural contexts for knowledge generation and case studies of transdisciplinary research.

3.2 The second and third semester – The Study Track

The second and third semester are the disciplinary or transdisciplinary study tracks selected by the students, reflecting their different backgrounds.

Study track	Semester 2	Semester 3
ST1: Environmental Humanities and Law	PLUS	UB
ST2: Environmental Social Sciences	UofG	UB
ST3: Energy and Matter	UAM	SU
ST4: Environmental Chemistry and Toxicology	SU	UT
ST5: Environmental Geoscience	UofG	AMU
ST6: Climate Change Science	NKUA	UT
ST7: Environmental Risk and Mitigation	UNIL	SUR
ST8: Transdisciplinary Approaches to Climate Change	PLUS	ULB
ST9: Global Change Biology	SUR	AMU

3.2.1 Study Track 1: Environmental Humanities and Law

The study track Environmental Humanities and Law provides students with in-depth knowledge of the disciplines involved in the development of profound, lasting, and sustainable solutions to climate change, energy transition and environmental problems. Students will study various disciplines that inform the development, adoption, and implementation of mitigation and adaptation measures to climate change, energy transition, and environmental issues that meet the political, economic, legal, societal, ethical and communication challenges and must be taken into account for developing lasting and sustainable solutions. At the end of the study track, students will have obtained knowledge on the perspectives from different disciplines that facilitate dialogue with and understanding of the positions of the different stakeholders. Students will have acquired skills to develop and implement solutions to the problems that climate change, energy transition, and environmental degradation pose to societies.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 1.

3.2.2 Study Track 2: Environmental Social Sciences

The study track Environmental Social Sciences provide an in-depth understanding of the intricacies of the socio-ecological transformations, many of which are related to climate change, in a globalised world. Students will acquire the theoretical approach to socio and physical science research, together with a series of specific skills to tackle the environmental and societal challenges of sustainable development in the Anthropocene. The students will have the great opportunity to develop practical experiences in the compulsory placement course, working in governmental bodies, activist and community sectors. The research-led teaching that both Universities offer will prepare the students to confidently use the sociological lens to understand and investigate climate change and socio-ecological transformations and to envision sustainable and effective solutions for local, regional and global communities.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 2.

3.2.3 Study Track 3: Energy and Matter

The study track Energy and Matter equips students with advanced expertise in sustainable energy storage, conversion, and chemistry applications essential for renewable energy systems. Through modules energy conversion, storage and sustainable chemistry, students develop the technical and theoretical skills needed to innovate within the fields of energy storage, clean energy production, and environmentally focused chemistry. This track aims to prepare students for innovative roles in renewable energy systems by equipping them with both the technical skills and practical experience necessary to address energy challenges across various sectors.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 3.

3.2.4 Study Track 4: Environmental Chemistry and Toxicology

The study track Environmental Chemistry and Toxicology is focusing on the evaluation and solution of problems in the environment related to chemicals. Apart from theoretical studies, this study track also involves laboratory training in both chemistry and toxicology as well as field work where students will be trained in relevant sampling techniques. The Study Track aims for a comprehensive understanding of the linkages between physical, chemical, and biological process mechanisms. Students from various science backgrounds will learn to qualitatively and quantitatively address complex processes in soils, water and air as well as in organisms. In addition, students will address the ethical, legal, and regulatory frameworks governing environmental protection, chemical safety, and toxicology and to evaluate environmental risks based on multi-disciplinary approaches.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 4.

3.2.5 Study Track 5: Environmental Geoscience

The study track Environmental Geoscience combines the study of the fundamentals and applied aspects of geoscience to develop skills required to implement sustainable environmental solutions to global challenges. Using a variety of pedagogical approaches, all driven by the most up-to-date research in the field of environmental sustainability, the programme will provide students with a command of the relevant scientific knowledge, digital tools and innovative technologies to empower them to develop solutions to environmental

challenges. The students will have the opportunity to tailor their studies to their specific needs and aspiration, including an in-depth knowledge of techniques used to investigate, monitor and predict, using numerical modelling, environmental hazards and risks. This programme is particularly suitable for students that are interested the most up-to-date science and technology to solve geo-environmental problems for their future career and/or for further studies. It aims to develop the ability to understand and address environmental changes through a solid scientific foundation, adaptive strategies, transdisciplinary research, and technological skills, fostering a just transition and societal resilience.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 5.

3.2.6 Study Track 6: Climate Change Science

The study track Climate Change Science lets the student acquire a comprehensive understanding of the climate system, including past and present climate variability as well as ongoing climate change. They will gain focussed knowledge about how climate is studied using remote sensing atmospheric and climate science and geophysics, ecosystem responses and feedback, as well as vegetation and soils in the climate system. Extending beyond the natural sciences, students will learn about sustainability in its broader sense (including renewable energies), and about climate policies. Students will apply the multi-disciplinary skills they have learned about in the study track by conducting a research internship project in climate science.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 6.

3.2.7 Study Track 7: Environmental Risk and Mitigation

The study track in Environmental Risk and Mitigation provides a deep understanding of processes involved in Mountain and oceanic environments which are related to environmental hazard. Students will acquire advanced experience in field and laboratory methods and practice as well as theoretical approach to assess natural hazards, from the study of physical and chemical processes through to their management, via the quantification of their probability of occurrence in different conditions. The students will have the opportunity to develop theoretical understanding and practical experience in data acquisition, mapping analysis, modelling, monitoring methods, estimation of natural hazard and risk, its management warning systems development and evaluation of strategies for risk reduction.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 7.

3.2.8 Study Track 8: Transdisciplinary Approaches to Climate Change

The study track Transdisciplinary Approaches to Climate Change provides students with in-depth understanding of underlying scientific issues as well as societal needs to develop climate warming solutions. Students will be introduced to various disciplines that inform the development, adoption and implementation of solutions to the problems posed by climate change, energy transition and environmental issues, based on the transdisciplinary knowledge on climate, energy and environment obtained in the first semester.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 8.

3.2.9 Study Track 9: Global Change Biology

The study track in Global Change Biology equips students with a deep understanding of biodiversity, ecological interactions, and the impacts of global change on ecosystems. This track combines scientific theory with practical, field-based skills, preparing students to address complex environmental challenges using cutting-edge methods in biodiversity conservation and ecological analysis. The study track provides students with a well-rounded skill set in ecological research, statistical modelling, and project management, blending rigorous scientific training with hands-on experience.

The intended learning outcomes and the details of the curriculum are available in the annexe dedicated to the study track 9.

3.3 The fourth semester: The Master's thesis project

Each study track includes an obligatory 30 ECTS independent thesis in transdisciplinary studies of climate, environment and energy at a university within the CIVIS Alliance. This is offered as a single course or a combination of courses in accordance with university-specific regulations. Depending on the study track, the master's thesis project must be registered at a specific university within the Alliance, as described in the table below.

Students in each study track will be asked to indicate their preferred university for completing the fourth semester; however, placement at the preferred university cannot be guaranteed. The final decision will be made by the Programme Board.

Study track	Semester 4
ST1: Environmental Humanities and Law	SU or PLUS or UB
ST2: Environmental Social Sciences	SU or UofG or UB
ST3: Energy and Matter	SU* or UAM* or UB
ST4: Environmental Chemistry and Toxicology	SU or UT or UB
ST5: Environmental Geoscience	SU or UofG or AMU
ST6: Climate Change Science	SU or NKUA or UT
ST7: Environmental Risk and Mitigation	SU or UNIL or SUR
ST8: Transdisciplinary Approaches to Climate Change	ULB
ST9: Global Change Biology	SU or SUR or AMU

* see mobility paths

The student must have received all credits from the first semester (30 ECTS) and a total of 30 ECTS from semester two and three as a balanced requirement to be registered for a master's thesis project.

The learning goals for the thesis are as follows:

- Plan a transdisciplinary project
- Carry out, document, and complete a transdisciplinary project within the allotted time
- Demonstrate experimental, field-based, or theoretical skills
- Evaluate, analyse, and draw conclusions from obtained results
- Read and comprehend primary literature in natural, social, and human sciences related to climate, environment, and/or energy, and apply necessary theories to the project
- Conduct goal-related, transdisciplinary literature reviews
- Compile and write a scientific report corresponding to the project's scope
- Communicate the project's results in a popular scientific format

3.4 The transdisciplinary stream

The stream will engage students in learning about transdisciplinarity, including its definitions and methods, while also providing support and checkpoints for developing independent projects. It will be offered on site during the first semester in Stockholm, and thereafter online.

The main purpose will be to provide students with the knowledge, understanding and skills required to undertake a transdisciplinary thesis in semester 4. Secondary aims include maintaining connection and support networks within the student cohort and providing an overall coherence to the master's programme.

The stream will consist of remote monthly meetings, each lasting 1.5 hours. These sessions will include a combination of guest lectures, discussion panels, networking sessions and student presentations. Guest speakers will be invited from a range of fields and sectors, with the aim being to demonstrate the importance of transdisciplinary thinking in different environments.

The sessions will evolve throughout the programme, with a slightly different focus in each semester. In the first semester, concepts will be introduced and students exposed to a range of ideas from guest speakers. During the second and third semesters, students will begin to select topics for their thesis projects, and the sessions will focus more strongly on helping them to develop their own ideas, forge connections with useful contacts, and establish how they can demonstrate transdisciplinarity in their own project. In the final semester, sessions will be almost entirely student-led, allowing them the opportunity to support one another while carrying out their projects.

4 Application and Admission

Stockholm University is coordinating the application to the TRACEE programme including the platform used for admission and the transfers related to participation cost and financial aid. The selection of the students receiving financial aid and admitted to the programme is made within the consortium via the Application and Scholarship Selection Committee (ASSC).

4.1 Admission Requirements and selection

The programme is open to students with a bachelor's degree in any discipline. This sets the entry requirements for the programme itself and for obligatory courses within the programme. The entry requirements for some elective semesters are discipline specific.

4.1.1 General Eligibility Criteria

Bachelor's degree

Academic qualifications from an internationally recognised university equivalent to a bachelor's degree.

Students in their final year of bachelor's studies can meet the requirement if they follow the instructions from University Admissions.

Find out what you need to submit here:

<https://www.universityadmissions.se/en/apply-to-masters/provide-application-documents-masters/find-out-what-you-need-to-submit/>

English proficiency

English proficiency equivalent to level B2 on the CEFR scale (Common European Framework of Reference for Languages).

Requirements can be met with an English test, for example an overall IELTS score of 6.5 or a TOEFL score of 90. Depending on the country of previous studies, the requirement can be completed during upper secondary or university studies.

University Admissions have specific information for each country and the test score requirements: <https://www.universityadmissions.se/en/entry-requirements/english-language-requirements/>

4.1.2 Specific Eligibility Criteria

Admission requirements for each study track are as follows:

Study track	Entry requirement
ST1: Environmental Humanities and Law	A Bachelor's degree or equivalent in any discipline (general requirement).
ST2: Environmental Social Sciences	A Bachelor's degree within Social Sciences or equivalent
ST3: Energy and Matter	A Bachelor's degree within Natural Science, Engineering or equivalent including at least 30 ECTS in Chemistry and Spanish B2
ST4: Environmental Chemistry and Toxicology	A Bachelor's degree within Natural Science, Engineering or equivalent including at least 15 ECTS in Chemistry, 6 ECTS in Geology, and 15 ECTS in Mathematics or Statistics
ST5: Environmental Geoscience	A Bachelor's degree within Earth Sciences, Geography or Environmental Sciences or equivalent
ST6: Climate Change Science	A Bachelor's degree within Natural Science, Engineering or equivalent including at least 6 ECTS in Physics, 6 ECTS in Geology, 6 ECTS Mathematics or Statistics
ST7: Environmental Risk and Mitigation	A Bachelor's degree within Natural Science or equivalent
ST8: Transdisciplinary Approaches to Climate Change	A Bachelor's degree or equivalent within any discipline (general requirement)
ST9: Global Change Biology	A Bachelor's degree within Natural Science or equivalent

4.2 Application fee

An application fee must be paid for individuals who are not citizens of countries of EU/EEA or Switzerland. The application fee is 900 SEK (Swedish kronor) and is paid directly to University Admissions in Sweden to have the application processed. Students pay one application fee for each intake semester they submit an application for in this system. Meaning that it doesn't matter how many courses, study tracks or programmes the student applied for that intake. If an eligible student was not admitted and decide to apply once again for another intake, the application fee should be paid again.

More information on the application fee criteria is available on the [universityadmissions.se](https://www.universityadmissions.se) webpage.

<https://www.universityadmissions.se/en/fees-scholarships-residence-permit/who-is-required-to-pay-fees/>

4.3 Participation Cost, mobility grant and other funding

TRACEE has a single participation cost, paid per semester, which is independent of the chosen study track. The full programme participation cost is €9,000 for students from the EU/EEA/Switzerland and €18,000 for students from outside the EU/EEA/Switzerland. This corresponds to €2,250 per semester for EU/EEA/Switzerland students and €4,500 per semester for non-EU/EEA/Switzerland students.

The participation cost covers compulsory academic activities, tuition/registration at the partner universities, student services related to the programme, and insurance arranged for the programme. It does not cover living expenses, accommodation, travel, visa or residence-permit costs, food, or other personal expenses. However, some additional costs may apply, depending on the study track, host university, country, or planned activities. Students should therefore check the study-track-specific information and follow the instructions provided by the relevant partner university.

Stockholm University collects the participation cost on behalf of the TRACEE consortium and transfers the relevant parts to the partner universities. Questions about payment of the participation cost should be addressed to the TRACEE coordination at Stockholm University.

Students are responsible for covering the costs connected to programme mobility, including travel and living costs in each host country. Eligible students can apply for an Erasmus+ student mobility grant during the first semester. The Erasmus+ mobility grant is intended to contribute to additional costs during mobility abroad and does not cover the full cost of participation, housing, travel, or living expenses.

The TRACEE programme currently does not offer tuition waivers or fully funded scholarships. Students may be eligible to apply for Erasmus+ mobility support for mobility periods outside Sweden, normally during semesters 2 and 3, but this grant does not cover the full participation cost, housing, travel, or living expenses. Students should therefore plan their finances carefully and are encouraged to explore external scholarships and funding opportunities.

<https://www.su.se/english/education/how-to-apply/costs-fees-and-scholarships/scholarships>

4.4 Application period

Cohort-specific application dates are published on the official Stockholm University programme page. Applicants should check the current application period, document deadlines, and any payment deadlines that apply to their cohort.

4.5 Documents required for the application

The documents required for the application are:

- Transcript of records (in English)
- Diplomas or certificates of completed degrees.
- Curriculum Vitae
- Proof of English proficiency
- Scanned copy of ID or Passport
- Online application supplement (motivation letter)

4.6 Admission procedure

The admission procedure is managed by Stockholm University as the coordinating university for the master's programme in Transdisciplinary Studies in Climate, Energy and Environment.

Universityadmissions.se is the system that is used for admissions to higher education in Sweden and selected for the admission procedure of this programme. It is managed by the Swedish Council for Higher Education (UHR).

UHR manages the admissions process together with Stockholm University and is responsible for:

- The website Universityadmissions.se provided for the application
- Registering admissions documents submitted by students as part of their admissions application, such as transcripts and English test scores
- Reviewing applications to see that students meet general entry requirements
- Answering questions that students have about the admissions process
- Notifying students of their selection results in the courses and programmes they've applied for here at Universityadmissions.se

Students will be provided with the information and procedure to appeal decisions made regarding eligibility. The Higher Education Appeals Board (Överklagandenämnden) is the Swedish government agency that reviews appeals of specific types of decisions made by universities during the admissions process.

The evaluation criteria to rank the students is based on grades from the bachelor studies and the letter of motivation in the application with a proportion of 50:50.

The admission procedure is as follows:

Step	Step description	Responsibility
1: Regulation	Activate admission system/platform set evaluation criteria	Programme board
2: Application	Application through Universityadmissions.se	SU
3: General eligibility control	Document verification and validation, followed by first screening of general eligibility	SU
4: Specific eligibility control	Students passing the first step can be evaluated for specific eligibility	PU within a track
5: Ranking	Ranking of students according to evaluation criteria	PU within a track
6: Selection	Number of students per study track set and communicated to SU	The board after suggestion from ASSC
7: Payment	The selected students must proceed with participation cost payment followed by transfer to course crediting platform for registration	SU
8: Admission	Info to partners in each Study track and admission	SU

4.7 Student agreement

Before starting the programme, each student and the TRACEE consortium will need to sign a two-party Student Agreement. The Student Agreement is a contract between the student and the programme. It aims to regulate the terms and conditions of the participation of the student in the Programme.

4.8 Enrolment

Students shall be admitted and registered as programme students at all universities within a study track, from day one of the programme, when possible.

5 Residence permit and Insurance

5.1 Residence permit

Students are responsible for ensuring that they have the correct residence permit, visa, registration certificate, or other immigration documentation required for each country in which they study during the programme. The partner universities provide information and support, but all decisions are made by the relevant national authorities. Visa and residence-permit costs are not included in the participation cost.

Students from outside the EU/EEA who will study in Sweden for more than three months normally need a residence permit for studies in Sweden. The application should generally be submitted before travelling to Sweden and must be granted before entry, unless other rules apply. Students who are required to pay the participation cost must have paid the first instalment before applying for the residence permit.

To be granted a Swedish residence permit for studies, students must meet the Swedish Migration Agency's requirements, including final admission to full-time studies, a valid passport, sufficient financial maintenance, and relevant insurance documentation. Students should always check the current requirements directly with the Swedish Migration Agency before applying.

As TRACEE is a two-year programme starting at Stockholm University, non-EU/EEA students are encouraged to apply for a Swedish residence permit covering the full study period, where this is possible. The Swedish Migration Agency may grant a permit for up to two years for studies at Stockholm University, but the permit period is always decided by the Swedish Migration Agency and cannot be longer than the study period or the validity of the student's passport.

EU/EEA citizens who are registered students at a Swedish university do not need to apply for a Swedish residence permit. Swiss citizens follow separate rules and must apply for a residence permit if they plan to stay in Sweden for longer than three months, but they may begin studying after arrival while the application is being processed.

For mobility semesters outside Sweden, students must follow the instructions from the host university and the competent national authorities in the relevant country. Requirements may differ depending on citizenship, residence-permit status, destination country, length of stay, and the type of study activity. Students should therefore check the official information well in advance of each mobility period. For mobility semesters at partner universities outside Sweden, students must follow the instructions from the host university and the competent national authorities. Requirements may differ depending on the student's citizenship, residence-permit status, destination country, length of stay, and type of study activity, for example if the mobility includes an internship or work placement. Students should check the official information well in advance of each mobility period, as regulations, procedures, and costs may change.

<https://www.migrationsverket.se/en/you-want-to-apply/study/higher-education.html>

5.2 Insurance

You are insured throughout the Programme as described below:

Students from the EU/EEA/Switzerland are covered by the general student insurance that applies at Stockholm University during school hours and travel to and from the place of study. These students should also bring a valid European Health Insurance Card (EHIC), which gives access to medical care in Sweden at the same cost as Swedish residents. More information:

<https://www.su.se/english/education/student-health/insurance/insurance-for-eu-eea-swiss-nordic-citizens>

Fee-paying students from outside the EU/EEA/Switzerland are covered by FAS+ – The Swedish State's Insurance for Fee-Paying Students, provided by Kammarkollegiet. FAS+ is accepted by the Swedish Migration Agency as comprehensive health insurance and applies according to its terms and conditions. More information:

<https://www.kammarkollegiet.se/engelska/start/all-services/insurance/insurance-for-students-and-foreign-visitors/insurance-for-students-who-pay-tuition-fees-fas-and-fasplus/terms-and-conditions-fee-paying-students-fas-2021>

Semesters at PUs other than SU

All students are covered by Student OUT, provided by Kammarkollegiet and ordered by Stockholm University, during mobility periods at partner universities outside Sweden. Student OUT applies during studies or internships abroad, including travel between Sweden and the host country and the study period at the host university, according to its terms and conditions. More information:

<https://www.kammarkollegiet.se/engelska/start/all-services/insurance/insurance-for-students-and-foreign-visitors/insurance-during-education-abroad-student-out>

In addition to the insurance schemes described above, students may be required to obtain additional insurance coverage to meet host-university requirements or national regulations. The partner universities will inform students accordingly. Students should read the applicable terms and conditions before travelling, especially regarding coverage, restrictions and exclusions.

6 Examination

6.1 Examination and assessment

The students' academic performance is assessed according to the examination and assessment methods, criteria, and regulations of the university responsible for the course or part of the programme that is being assessed. More details can be found in each course syllabus of the respective university.

6.2 Grades

The grades received during the programme follow the local regulations at the university where the course is given. A comparison table is used for degree honours at some universities.

ECTS Grading Scale	AMU	NKUA	ULB	UB	UofG	UNIL	UAM	SUR	PLUS	SU	UT
A	20	9-10	20	10	22 (A1)	6.00	9.5	30+	1	A	1.0-1.3
	19		19		21 (A2)	5.75		30			
	18		18		20 (A3)	5.50		29			
	17		17		19 (A4)						
	16		16		18 (A5)	5.25					
B	15	8-8.9	15	9	17 (B1)	5.00	8	28	2	B	1.4-2.1
	14		14		16 (B2)	4.75		27			
C	13	7-7.9	13	8	15 (B3)	4.50	7	26	3	C	2.2-2.8
	12		12	7	14 (C1)			25			
D	11	6-6.9	11	6	13 (C2)	4.25	6	24	4	D	2.9-3.6
					12 (C3)			23			
E	10	5-5.9	10	5	11 (D1)	4.00	5	20-21	4	E	3.7-4.0
					10 (D2)			19-20			
					9 (D3)			18			
FX	9	0-4.9	9	4	8 (E1)	3 - 3.75	4	16-17	5	FX	4.1-5
	8		8		7 (E2)			14-15			
	7		7		6 (E3)			12-13			
F	6		6	3	5 (F1)	1 - 2.75	3	10-11		F	
	5		5		4 (F2)			8-9			
	4		4	2	3 (F3)		2	6-7			
	3		3		2 (G1)			3-5			
	0-2		0-2	1	1 (G2)		0-1	0-2			

* UNIL only assigns a grade zero when a student does not attend or in case of fraud, plagiarism, cheating or attempt to cheat. Zero cannot be counted in an average mark.

* SU does not assign a grade when a student either fails to show up or hands in a blank exam.

The definitions and honours of the ECTS standard grading table are:

ECTS standard grading scale Definitions and Honours

A	Excellent: Outstanding performance without errors
B	Very Good: Above the average standard but with minor errors
C	Good: Generally sound work with some errors
D	Satisfactory: Fair but with significant shortcomings
E	Adequate: Performance meets the minimum criteria
FX	Fail: some additional work required
F	Fail: much more work required

The course's grading criteria are handed out at the start of the courses in the official documentation of each involved university in the study track.

A passing final grade requires passing grades on all included parts of the course. The final grade of the course is determined by weighing the grades from all course parts, where each grade is weighed in relation to the scope of the course parts.

6.3 Retake an examination

Retake of examination follows the regulations of the university responsible for the course or part of the programme that is being assessed.

7 Academic Degree

Students will receive a degree from Stockholm University and from the universities involved in the respective study track. The process of issuing the diploma varies from university to university. Some universities will deliver a single degree certificate whereas others will deliver a joint degree certificate in the study track.

The details of the academic degree are detailed in the annex for each study track.

7.1 Transfer of credits

Before each university can issue a diploma, it needs to be ensured that all the credits of the curriculum are recorded at each university meaning that both the necessary courses and the transfer of credits are completed at each corresponding university.

The system of credits used in most of the CIVIS universities is the European Credit Transfer and Accumulation System (ECTS).

The University of Glasgow uses the Scottish Credit and Qualifications Framework (SCQF). The equivalence of credit points for the University of Glasgow with ECTS is done by multiplying the number of ECTS credits by two to convert to SCQF and by dividing the number of SCQF Credit Points by two to convert to ECTS.

Partner University	AMU	NKUA	ULB	UB	UofG	UNIL	UAM	SUR	PLUS	SU	UT
System	ECTS	ECTS	ECTS	ECTS	SCQF	ECTS	ECTS	ECTS	ECTS	ECTS	ECTS
Necessary credits for the degree	120	120	120	120	240	120	120	120	120	120	120

7.2 Academic degree

Students will receive a degree from Stockholm University and from the universities hosting a student within a study track. The process of issuing the diploma varies from university to university. Depending on the study track, universities will deliver multiple degrees, a joint degree, or a combination of both:

Study track name	Awarding universities	Degree type	Degree Title
ST1: Environmental Humanities and Law	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	PLUS	Joint	Master in Transdisciplinary Studies of Climate, Environment and Energy
	UB		
ST2: Environmental Social Sciences	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	UofG	Multiple	International Masters in Environmental Social Science
	UB	Multiple	Master in Cross-Disciplinary Perspectives on Socio-ecological Transformations
ST3: Energy and matter	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	UAM	Multiple	Master in Energy and Fuels for the Future (Local 60 ECTS)
	UB	Multiple	Master in Nature-centered Approach to Sustainability
ST4: Environmental Chemistry and Toxicology	SU	Joint	Master of Science in Transdisciplinary Environmental Science
	UT		Master of Science in Transdisciplinary Studies of Climate, Environment and Energy
	UB		
ST5: Environmental Geoscience	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	UofG	Multiple	International Masters in Environmental GeoScience
	AMU	Multiple	Master Sciences de la Terre et des planètes, environnement
ST6: Climate Change Science	SU	Joint	Master of Science in Transdisciplinary Environmental Science
	NKUA		Master of Science in Transdisciplinary Studies of Climate, Environment and Energy
	UT		
ST7: Environmental Risk and Mitigation	SU	multiple	Master of Science in Transdisciplinary Environmental Science
	UNIL	multiple	Master of Science (MSc) in Environmental Science
	SUR	multiple	Master of Science in Sciences and Teaching of Natural Systems
ST8: Transdisciplinary Approaches to Climate Change	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	PLUS	Joint	Master in Transdisciplinary Studies of Climate, Environment and Energy
	ULB		
ST9: Global Change Biology	SU	Multiple	Master of Science in Transdisciplinary Environmental Science
	SUR	Multiple	Master of Science in Sciences and Teaching of Natural Systems
	AMU	Multiple	Master Biodiversité, Écologie et Évolution

7.3 Degree certificate application

More information will be provided during the course of the programme.

7.4 End of programme conference

More information will be provided during the course of the programme.

8 Academic calendar

The first semester corresponds to the autumn semester at Stockholm university. It starts in late August/early September and continues until mid-January.

The second and third semester dates vary depending on the mobility path in each study track and are available in the corresponding annex of the student handbook.

The fourth and last semester is dedicated to the degree project and dates may vary depending on the selected path and place of registration.

9 Support and guidance during the programme

9.1 Pre arrival information

For you to be well prepared for your journey in the TRACEE master, you will receive information to support you and ensure everything is in order before the start of the programme. Additionally, before each semester begins within your study track, the host university will organise information sessions.

Stockholm University hosts a series of live webinars for newly admitted students. These webinars cover everything you need to know after receiving your admission results and before arriving in Sweden and starting the TRACEE master.

<https://www.su.se/english/education/a-smooth-start/pre-departure-information>

9.2 Arrival and welcome activities

The programme starts at Stockholm University where a series of welcome activities, including an arrival service, are organised at the beginning of the first semester. The activities are designed to assist you as a new student and introduce you to university life in Stockholm and also within the CIVIS Alliance. Attendance to these events is optional, but we highly recommend attending in order for you to familiarise yourself with the campus and the support available for students, as well as to make friends!

<https://www.su.se/english/education/a-smooth-start/welcome-activities>

Each programme cohort will be welcomed to TRACEE in form of a programme kick-off at Stockholm University. During the kick-off both academic and/or administrative staff from all partner universities will participate on site and/or online. The programme content, cohort-specific details, student services, study track details and the path through the programme as well as expected outcomes from the programme will be introduced and discussed. Importantly, we see the kick-off as a first opportunity to start welding all different academic and cultural backgrounds of the cohort, also introducing expertise within the consortium academic staff to the students. At the programme kick-off each student and the consortium will sign the individual student contracts.

Each mobility path will then include welcome activities for each of the receiving universities for the second and third semester detailed in the corresponding annex of the student handbook.

9.3 Study and career counselling

Starting the programme at Stockholm University, you will be introduced to the study and career counselling services that can provide help during the whole programme. Additionally, each host university within your study track will provide local support related to your studies.

You can connect with our study counsellors in several ways: in person, by telephone, or online. They offer individual guidance and support to help you make a well-informed decision about your studies and career.

<https://www.su.se/english/education/student-support/study-and-career-counselling>

9.4 Alumni

Information about all partner universities' alumni's careers will be published on the programme website in line with relevant data protection regulations.

Programme alumni will be encouraged and supported to establish a TRACEE Alumni Association, to build a stronger TRACEE identity. A first step is the creation of a LinkedIn group open to all students, alumni, teaching staff, visiting educators and associated partners. The objective of this new networking tool is to increase visibility of the programme and broaden alumni's career opportunities.

A strong sense of belonging to the programme, and a common programme identity are of great importance for the consortium – not only within each cohort, but also between cohorts, and between active students and alumni. The aim is to have each academic year's kick-off become a meeting place for all said groups, together with the academic and administrative staff working with the programme. The same adjoined meeting place will be the end-of-programme conference, concluding each cohort. External stakeholders, linked to the programme's educational activities, will also be invited to participate at such events, on site or online.

9.5 Language

As TRACEE student, you will find it easy to navigate daily life in English, as Europe has a high level of non-native English proficiency. However, immersing yourself in the local language of the partner university will deepen your understanding of different cultures, help you build social connections, and strengthen your CV if you plan to work internationally in the future.

As TRACEE student you are encouraged to develop your language skills and take the opportunity to learn and practice the languages that you will encounter during your mobilities within the programme. Therefore, you are welcome to the Language Learning Resource Centre (Språkstudion) at SU during your first semester, where Language Cafés are organised, as well as tandem language exchange programme, where you are matched with a language buddy to mutually practice each other's languages.

<https://www.su.se/english/divisions/sprakstudion-language-learning-resource-centre/about-sprakstudion/language-cafes>

<https://www.su.se/english/divisions/sprakstudion-language-learning-resource-centre/about-sprakstudion/find-a-language-buddy>

9.6 Writing

The Academic Writing Service provides free English-language support for writing and study skills. Services include talks, seminars, and individual guidance to help you improve your academic performance.

<https://www.su.se/english/education/student-support/academic-writing-service>

9.7 Bank

Depending on the study path, information on bank account might be specified in the corresponding annex of the study track. It is not required to open a bank account in each of the visited country during the mobility in your studies.

10 Support and guidance during the first semester

10.1 Housing

While there is no guaranteed housing, each host university typically provides guidance to help you find accommodation. Since the programme involves multiple mobilities, you will need to arrange housing in multiple locations.

10.2 Living expenses

Like in most cities, the cost of living in Stockholm largely depends on your individual lifestyle and habits. Students in Stockholm should budget at least 11,214 SEK per month to cover their living expenses. Accommodation will likely account for the largest portion of your monthly budget. The cost of rent varies depending on the location, size, and type of housing. For a detailed breakdown of what a typical monthly budget might look like, you can visit SU's page on living costs.

<https://www.su.se/english/education/new-in-sweden/living-costs>

10.3 Public transport

Navigating Stockholm with public transport is easy and convenient, thanks to its comprehensive and well-integrated system.

You can travel from Arlanda Airport to Stockholm city centre by Arlanda Express, commuter train (SL Pendeltåg), or Flygbussarna airport bus. Taxis are also available.

To reach Frescati campus by metro (Tunnelbana) from the central station, take the red line towards Mörby Centrum and get off at Universitetet (The University). You can also explore other routes and plan your journey using Stockholm Public Transport (SL) online resources.

10.4 Finding your way on campus

Stockholm University is home to multiple campuses, each offering a unique environment for study and exploration. The main campus, Frescati, is known for its beautiful natural surroundings, is just 20 minutes from the city centre. Nearby, the sustainable Albano campus, inaugurated in 2023, provides state-of-the-art facilities and fosters collaboration.

At Stockholm University's various campuses, there are designated resting rooms, known as "vilorum," available for students and staff. These rooms provide a quiet space for rest and are located in different buildings. In the Student House, there are also nursing rooms.

Additionally, contemplation rooms, known as "andrum", are open to all students and staff, regardless of religious affiliation or belief. These spaces offer a peaceful environment for reflection, meditation, or prayer.

The university's website provides detailed information on the locations, opening hours, usage guidelines, and contact details for these rooms.

<https://www.su.se/english/about-the-university/about-our-campus>

10.5 Stockholm University library

Located in Frescati, the University Library offers full access to books, journals, articles and databases, in printed and digital formats. The University Library's staff are experts in searching for information and managing references, and will gladly show you how to search, select and critically examine scientific resources. <https://www.su.se/stockholm-university-library/>

10.6 Student health

The student health webpage provides essential information about your health and study environment at Stockholm University. A supportive and well-functioning study environment is a priority at the university, encompassing everything from study spaces and teaching modes to unwritten rules of behaviour.

You can also explore resources to support your well-being, including student health services, which offer individual counselling, group sessions, workshops, and other activities to help you achieve your full academic and personal potential.

Additionally, you will find details about student insurance. Students are covered by different insurance policies depending on their status, so it is important to understand which category you belong to. Lastly, the page provides guidance on what to do if you become ill or face an emergency during your time at Stockholm University.

<https://www.su.se/english/education/student-health>

10.7 Special needs /Disability support

Stockholm University provides various types of study support for students with long-term disabilities, aiming to ensure that all students have the opportunity to study on equal terms.

The support is designed to facilitate your studies in a way that is reasonable, taking into account your specific disability, course requirements, and intended learning outcomes. Applications for disability study support are managed by the staff at Disability Services.

Students with a medically documented long-term disability—defined as a condition that has lasted or is expected to last at least six months—are eligible to apply for support.

You can find more information about the different types of disabilities and the application process on this page.

<https://www.su.se/english/education/student-support/studying-with-a-disability>

10.8 Student Union/Organisation

Stockholm University has three student unions—one large and two departmental—alongside Faculty Clubs and Student Union Associations.

The student unions represent students' interests, ensuring their voice is heard in education and university decisions. They also play a key role in social life, influencing areas like course planning, housing, and even coffee prices.

Faculty Clubs bring together students from the same or similar disciplines and organise activities such as student pubs, seminars, and career fairs. Student Union Associations are open to all students and cater to diverse interests, offering a wide range of extracurricular activities.

The Student Union membership gives you access to a wide variety of benefits and discounts on everything from course literature and lunch to public transportation and training.

You will find a full list of these organisations and details about memberships on the webpage of the student union.

<https://www.su.se/english/education/student-life/student-unions>

10.9 IT Services

Stockholm University provides a range of IT tools and services to assist students throughout their academic journey. On these pages, you'll find information on how to access wireless networks, IT support, printers, software licences, and other essential digital tools that you may need during your studies.

<https://www.su.se/english/education/it-for-students>

10.10 Swedish courses

The Department of Swedish Language and Multilingualism offers a range of Swedish courses specifically designed for international students.

<https://www.su.se/english/divisions/department-of-swedish-language-and-multilingualism/education/courses-and-programmes/swedish-for-international-students?eventopenforinternationalstudents>

11 The Study Track 6: Climate Change Science

The study track **Climate Change Science (ST6)** is an international research-oriented study track focusing on the evaluation and solution of environmental problems. The study track aims for a comprehensive understanding of the physical, chemical, and biological processes which shape the climate system. The focus is on physical processes in the atmosphere and in terrestrial settings, including selected components of e.g., the bio-, hydro-, pedo-, litho- and cryosphere. Students from various science backgrounds learn to qualitatively and quantitatively address complex processes in soils, water and air and to evaluate environmental risks **based on multi-disciplinary approaches**.

The **first semester** will be offered at **Stockholm University**. The **second semester** will take place at the **National and Kapodistrian University of Athens** with the focus on »Geoscience – The atmosphere and climate dimension«. The **third semester** is offered by the **University of Tübingen** with the focus on »Geoscience – The geosphere and climate dimension«. The master's thesis can then be completed at one of the three universities.

Study track	Semester 1	Semester 2	Semester 3	Semester 4
ST6: Climate Change Science	SU	NKUA	UT	SU or NKUA or UT
	Common Core	Study Track		Master Thesis
	Transdisciplinary stream			

The **study and examination language** of Study Track 6 is **English**.

SU is a renowned educational institution in Sweden, known for its excellent research and teaching. The Department of Earth Sciences plays a central role in the study of earth processes and environmental issues. Here, various disciplines such as geology, geophysics, meteorology and oceanography are combined to promote a comprehensive understanding of the earth and its systems. Students and researchers have access to modern laboratories and innovative technologies that enable them to address current challenges in the field of geosciences. The university places great emphasis on interdisciplinary collaboration and sustainable development, which makes it an attractive place for students from all over the world.

UT is a full university covering virtually all areas in natural and social sciences giving the individual students much space for inter/transdisciplinary projects. The University is one out of eleven excellence Universities and has the largest Department for terrestrial geosciences in Germany providing state-of-the-art laboratory and field facilities in a new building from 2020. Tübingen is located in hilly south-western Germany, the bike gets you everywhere you need to go and it is one of the most sought-after student locations in Germany.

NKUA is one of the oldest and most prestigious universities in Greece, founded in 1837. Located in the heart of Athens, it offers a wide range of undergraduate and postgraduate programmes across various fields, including humanities, sciences, law, and medicine. NKUA is known for its rich academic tradition, vibrant student life, and commitment to research and innovation. The university attracts students from around the world, fostering a diverse and inclusive environment. With its historical significance and modern facilities, NKUA continues to play a vital role in shaping the educational landscape of Greece and beyond

11.1 The vision of the study track

Students will acquire a comprehensive understanding of the climate system including past and present climate variability as well as ongoing climate change. They will gain focussed knowledge about how climate is studied using remote sensing atmospheric and climate

science and geophysics, ecosystem responses and feedbacks, as well as vegetation and soils in the climate system. Extending beyond the natural sciences, students will learn about sustainability in its broader sense (including renewable energies), and about climate policies. Students will apply the multi-disciplinary skills they have learned about in the study track by conducting a research internship projects in climate science.

11.2 Target group of students: Entry requirements

Prerequisite for Study Track 6 is a bachelor's degree in natural sciences or engineering. In addition, performance must also have been achieved in the following subjects of the bachelor's programme in particular:

- 6 CP in mathematics or statistics,
- 6 CP in physics,
- 6 CP in geology or chemistry or equivalent*.

To take part in the Study Track, applicants must also document knowledge of English at least at the level of B2 of the Common European Framework of Reference for Languages (CEFR). Requirements can be met with an English test, for example an overall IELTS score of 6.5 with no subtests under 6.0 or a TOEFL score of 90 overall with Reading 20; Listening 19; Speaking 19; Writing 21.

** These competences may also be acquired in the first or second semester.*

11.3 Intended learning outcomes of the study track

The intended learning outcomes of this Study Track, in addition to the overarching learning outcomes of the programme, are listed below.

Knowledge and understanding

- demonstrate a comprehensive understanding of the Earth's climate system, including its components (atmosphere, hydrosphere, biosphere, lithosphere) and the interactions between them.
- demonstrate insights into climate change policies, international agreements (e.g., Paris Agreement), and the role of governmental and non-governmental actors in climate change mitigation and adaptation.

Competence and skills

- plan and undertake appropriate field and advanced laboratory techniques to quantify environmental processes in the various compartments
- develop, interpret, and evaluate climate models, including regional and global climate projections, with a focus on uncertainty, data limitations, and predictive capacity.

Judgement and approach

- critically evaluate the scientific principles underlying climate change, including greenhouse gas emissions, feedback loops, and the physical and chemical processes driving global warming.
- analyse and propose effective mitigation and adaptation strategies for addressing climate change, considering technological, policy, and behavioural approaches at the local, national, and global levels.
- reflect on the ethical implications of climate science and policy decisions, and demonstrate an understanding of global responsibilities in the context of climate change and sustainability.

12 Structure overview of Study Track 6

12.1 Semester periods of the study track

The study track takes place at Stockholm University (SU), National and Kapodistrian University of Athens (NKUA) and the University of Tübingen (UT). Below you will find an overview of the semester times of the participating universities:

Semester	University	Period
1st Semester	SU	Winter semester runs from Beginning of September to Mid-January (including exams) of the following year.
2nd Semester	NKUA	Summer semester runs from Mid-February to mid-June (including exams) of the following year.
3rd Semester	UT	Winter semester runs from 1 October to 31 March (including exams) of the following year.
4th Semester	SU	Summer semester runs from Mid-January to Beginning of June (including exams) of the following year.
	NKUA	Summer semester runs from Mid-February to mid-June (including exams) of the following year.
	UT	Summer semester runs from 1 April to 30 September (including exams) of the following year

12.2 Academic degree and grades of the study track

The study track is divided into four semesters of 30 ECTS each, for a total of 120 ECTS.

The cooperating universities award a joint degree "Master of Science" (abbreviated to "M. Sc.") with the title "Transdisciplinary Studies of Climate, Environment and Energy" on the basis of the successfully completed programme. The joint certificate, ToR and Diploma Supplement is issued by the coordinating partner university: Stockholm University.

The overall Master's degree grade (in the German and Greek grading system) for the programme is calculated from the average of all graded courses, as weighted by credit points. For the overall Master's degree grade on the Diploma Supplement, the grades are converted according to the following comparison table:

ECTS Grading Scale	NKUA	SU	UT
A	9-10	A	1,0-1,3
B	8-8,9	B	1,4-2,1
C	7-7,9	C	2,2-2,8
D	6-6,9	D	2,9-3,6
E	5-5,9	E	3,7-4,0
FX	0-5	FX	4,1-5,0
F		F	

12.3 Examination regulations of the study track

Examinations taken at the cooperating partner universities are carried out and assessed in accordance with the regulations that apply at the partner universities.

13 Study track content overview

The study track overview by study progress is presented below:

University	Type	Module Title	ECTS per Semester				Total ECTS
			S1	S2	S3	S4	
SU <i>Climate, Environment, and Energy – a Transdisciplinary Perspective</i>	Mandatory	Systems Thinking	3				30
	Mandatory	Climate, Environment and Energy – A Natural Science Perspective	9				
	Mandatory	Climate, Environment and Energy – A Social Science Perspective	9				
	Mandatory	Climate, Environment and Energy – A Humanities Perspective	6				
	Mandatory	Creating Knowledge Through Transdisciplinary Methods	3				
NKUA <i>Geoscience – The Atmosphere and Climate Dimension</i>	Mandatory	Climate, Climate Variability and Climate Change		9			30
	Mandatory	Energy and Climate Change: The Role of Renewable Energy Sources		9			
	Conditionally Elective	Select 2 courses from the list below: - Earth Observation for Climate Change (6 ECTS) - Design, Development and Implementation of a Research Project in GIS Environment (6 ECTS) - Science, Technology, Society: Environment and Sustainability (6 ECTS) - Climate Policies and Diplomacy (6 ECTS)		12			
UT <i>Geoscience - The Geosphere and Climate Dimension</i>	Mandatory	Physics of the Earth's Surface			6		30
	Mandatory	Modelling for Sustainable River Management			6		
	Conditionally Elective	Select 3 courses from the list below: - Data Analysis and Modelling Methods in Geoscience and Environmental Science (6 ECTS) - Physical Properties of Earth Materials (6 ECTS) - Advanced Geophysics (6 ECTS) - Glaciology (6 ECTS) - Inter- and Transdisciplinary Perspectives on Climate and the Environment (6 ECTS)			18		
SU / NKUA / UT <i>Master Thesis</i>	Mandatory	Master Thesis				30	30
			30	30	30	30	120

14 Your semester at Stockholm University (SU)

The services provided at Stockholm University for the semester within Study Track Climate Change Science are the same as those provided during the first semester (Common Core) listed in the student handbook.

15 Your semester at National and Kapodistrian University of Athens (NKUA)

15.1 Arrival and welcome activities

Each semester, the university organises **Arrival and Welcome Activities** to support and guide all incoming **Erasmus+, CIVIS, and international students**. These events take place **twice a year**, at the beginning of the winter and spring semesters, and provide essential information to help students settle into their academic and social life.

During these sessions, representatives from various departments introduce students to the university's academic programmes, support services, and extracurricular opportunities. Presentations include insights into elective courses, language learning options, student associations, and campus facilities, such as the gym and accessibility services. Additionally, student organisations, such as **ESN** (Erasmus Student Network), share information about social and cultural activities designed to enhance students' overall experience.

15.2 Housing

There are various ways for finding a flat in Athens, ranging from advertisements to agencies and digital services. Most apartments are unfurnished, while those near the city centre are usually old or recently renovated. Rent costs don't include public utility services (electricity, water, heating, telephone line, internet). There is also a typical extra cost, a building fee, which is shared with the tenants, for services such as cleaners, gardeners, elevator maintenance, electricity for shared building spaces, etc. Renting an apartment requires signing a lease contract, which is necessary for establishing tenant rights and responsibilities.

15.3 Living expenses

Mobile phone-Internet

Greece uses the same GSM system as other EU countries, Asia and Australia. However, USA and Japan use an incompatible mobile system to the European one. Acquiring a landline may be quite complicated, so most students simply have a mobile phone. The easiest payment method is through a prepaid card. All you need is to visit any provider store (Cosmote, Nova Greece, Q-Telecom, Vodafone Greece), buy a SIM card (with or without a device), load the account with a certain amount of money and receive a phone number verification in your name. You will need to show your student ID or passport. With your academic ID, you are eligible for student packages at a lower price. Alternatively, you may apply online to Vodafone, What's up (Cosmote), Nova or Q-Telecom providers and your SIM card will be sent by post to the residential address you suggested.

SIM Card costs start from 10€ and you can reload it either at the provider's store or by buying a prepaid card from kiosks or supermarkets.

Tax Identification Number (TIN/in Greek AFM)

It is necessary for foreign students to obtain a TIN number in order to open a bank account and accept the lease agreement in Taxisnet. In order to obtain your TIN number (AFM) and Key Code follow the next steps: 1. Submit an application on the digital portal myAADE under «TIN number (AFM) & Key Code (Act for myself)» without filling in the details of a residence permit and the personal details of a tax representative. 2. After submitting the application, you will receive an application number (Αρ. Αίτησης). Keep this number, as you will need it to schedule an online appointment with an AADE employee to obtain your TIN number and Key Code. 3. After the AADE employee confirms your application details and passport, your TIN number (AFM) and Key Code will be issued. The data (TIN number, passwords, and Key Code) will be sent to your email address in an encrypted file as specified in the application. For further

details on how to obtain your AFM and your username and password, please see the attached instructions.

15.4 **Bank**

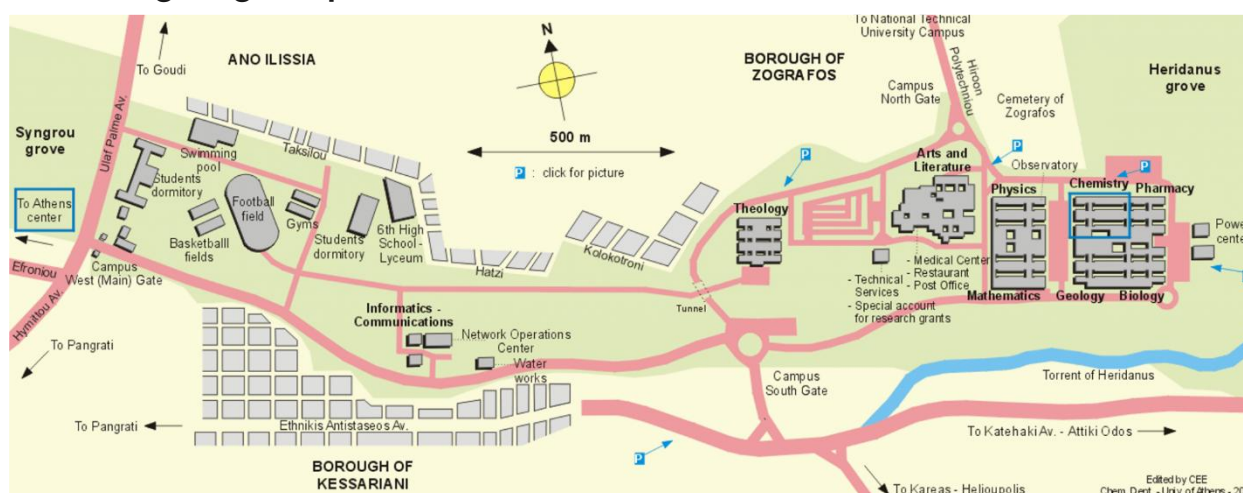
If you are a Greek resident for more than one or two semesters, maintaining a bank account in the country of origin may not be efficient because of high bank charges. In addition, a Greek bank account with e-banking username/password are necessary for applying for residence permit. Submitting the required documents is mandatory for the bank to open a new account for you and it is done by appointment at the branch of the bank, closest to your home.

15.5 **Transport**

In the Athens-Piraeus area and the airport, you may transport by Metro, Tram, Suburban railway, City Buses and, Electric trolley-buses. They run from 5:00 am. until midnight (12:00), and there are also some night bus lines. Information about lines: <https://www.oasa.gr/en/>, STASY | Athens Urban Rail Transport. For a detailed guide to public transport, please visit Athens Transport. There are two types of transportation fares: ATH.ENA Ticket for one or multiple routes and personalized cards (ATH.ENA Card), with which you can buy tickets for 30, 90, 180 or 360 days.

Students are entitled to a reduced price with an ATH.ENA Card, which can be acquired by (1) showing the Academic ID or proof of registration from your Department of studies, (2) a photo and (3) your ID or passport at Issuing Points for Personalised Cards.

15.6 **Navigating campus**



NKUA provisions and services

Advising & Counselling Services

- Student Ombudsman
- Psychosocial Intervention Unit
- Counselling Office - Department of Theology
- Counselling Office - Department of Psychology
- Mental Health Community Centre
- Psychological support hotline 10306

Support Services

- Accessibility Unit for Students with Disabilities
- Student Support Fund
- University Club
- Student Residences
- Student Meal Services

- Healthcare Services
- Scholarships - Funding
- Career Services

Study and Leisure Facilities

- 9 University Libraries
- 2 libraries at the University Club
- Computer and multimedia Centre
- Foreign Language Teaching Centre ('Didaskaleio')
- Modern Greek Language Teaching Centre
- University Gym and Athletics Centre
- Student Cultural Club • Erasmus+

15.7 Student health

Health Care Services

Undergraduate/postgraduate students and PhD candidates are fully eligible for medical, pharmaceutical and hospital healthcare, provided that they have not already chosen another Healthcare Insurance Plan. Healthcare Insurance includes healthcare services in Public Hospitals, University Hospitals, and Public Primary Healthcare Facilities which are part of the National Healthcare System (ESY/ΕΣΥ in Greek). In case of an emergency or an accident, students can also seek help from Municipal Medical Centres of the country, upon showing their Academic ID Card or AMKA number (Social Security Number). In addition, the University has its own services, which are located at the centre of Athens (15 Ippokratous Street), and at the University Campus in Zographou (12 Olof Palme Street, Panepistimioupoli, Ilisia), which provide Healthcare Services for the following medical specialisations (upon showing your Academic ID card):

- **General Practitioner**, Phone Number: (+30) 210 368 8241, (+30) 210 368 8243, Monday, Wednesday and Friday 08:00 – 14:30, Tuesday and Thursday 09:30 – 15:00
- **Eye Specialist**, Phone Number: (+30) 210 368 8240, Monday, Wednesday and Friday 08:30 – 13:30, Tuesday and Thursday 09:30 – 14:30
- **Dentist**, Phone Number: (+30) 210 368 8210-11, Monday to Friday 08:00 – 13:30
- **Dermatologist**
- **Psychiatrist**, 15 Ippokratous St., Monday, Thursday and Friday 09:00 – 14:00, Tuesday and Thursday 08:30 – 13:00 Phone Number: (+30) 210 368 8226, and at University Campus Zographou, Monday to Tuesday 09:00 – 14:00, Phone Number: (+30) 210 727 5580
- **Psychologist** 15, Ippokratous St., Monday to Friday 08:00 – 14:00, Phone Number: (+30) 210 368 8282, (+30) 210 368 8209, (+30) 210 368 8244 and at University Campus Zographou Monday to Friday 08:00 – 14:00, Phone Number: (+30) 210 727 5579, (+30) 210 727 5589

European Health Insurance Card (for EU Students)

The European Health Insurance Card is a free card that gives you access to medical state-provided healthcare, during a temporary stay in any of the 27 EU countries, Iceland, Liechtenstein, Norway and Switzerland or the United Kingdom under the same conditions and at the same cost (free in some countries) as people insured in that country.

The benefits concern chronic or other illnesses as well as pregnancy and childbirth. Cards are issued by the respective national health insurance provider in the country of origin, before leaving the country.

Private insurance contract for non-European Union students.

The insurance contract to be submitted with the application for residency permit or its extension, should include:

- Health care in public hospitals: 10.000€ annually with own-contribution of 20%.
- Permanent (total or partial) impairment insurance caused by an accident: 15.000€ annually with own-contribution of 20%.
- Illness or accident-related medical and pharmaceutical expenses: 1.500€ annually with own-contribution of 20%.

The contract should indicate that it covers expenses defined by the law/ministerial decision and should explicitly mention that it covers everything that might occur to the student during their stay in the country. If there has already been another insurance contract, from your country of origin, it can be used if officially translated into Greek, as long as it includes the above provisions.

In any other case, students may sign a Greek financial contract agreement with an insurance company. The cost starts from 80€ per year.

Social Security Number (AMKA in Greek)

An AMKA number is unique to an individual, making Health Security services available, and it is mandatory in case of employment.

Obtaining an AMKA number requires:

- A valid passport copy
- A residence permit for studying, which allows part-time market access (for third country students)
- A copy of employment contract
- A European citizen's registration certificate from the Police Department (in case of European Union students)

The National Social Security Provider (EFKA/ΕΦΚΑ in Greek) is the relevant department for obtaining your AMKA number. Students should address their local EFKA department directly (the one closer to residence).

15.8 Special needs and disability support

The National and Kapodistrian University of Athens operates an **Accessibility Unit**, which supports students with learning difficulties or severe illnesses. The main provisions involve adjusting the environment, supportive informatic technologies and accessibility services. NKUA aims at meeting Disabled Student's basic needs, such as interpersonal communication with academic community members, access to materials for note taking and writing assignments, and access to the university establishments, educational material, classroom boards and projectors, examinations and internet content.

15.9 Resting and contemplation rooms

15.10 Student organisations

Registering at the University

Beginning your studies requires registering at the relevant Department of the School. Registration provides access to all University facilities and services, and allows you to create your online student account and receive a student identity card (academic ID).

Please, submit the necessary documents and relevant certification to the Department Registry. For the countries which are part of the Apostille Convention, certification should bear the Apostille Stamp. For countries which do not participate in the convention, certification should bear a Consulate validation (visa) in case it has been issued in a foreign country.

Upon submitting the documents, you will receive:

- A registration certificate as a temporary academic ID, which you will need for applying for a residence permit at the Directorate of Foreigners and Immigration of the Decentralized Authority at the your area of residence.

- The registration certificate carries the registration number which you will need to create your online account.

Please, visit the following webpage for more information:

https://issu.uoa.gr/guide_for_all_students/getting_ready_for_your_studies/enrolment/

An incoming NKUA student is expected to create an online account using their student registration number (provided after registering) and their passport number.

For **creating** and **activating** this account, you may contact the NKUA account administration services.

- Undergraduate students can directly apply for a new account, while postgraduate students should send a signed application form to the Registrar's Office of their Department.
- After receiving a verification e-mail or SMS approving the application, you may check with the account administration services and activate your account.
- By activating your account, you gain access to <https://my-studies.uoa.gr> or <https://my-uni.uoa.gr>.
- You also gain access to the following internal services, networks, and external online resources of the University:
 - the online registration for individual courses and examinations
 - the e-class platform
 - the online library
 - the Pergamos application
 - the registration for receiving textbooks
 - the online application for an academic ID and other services.

Please visit the following webpage for more information:

https://issu.uoa.gr/guide_for_all_students/getting_ready_for_your_studies/enrolment/

All registered students are entitled to an Academic Identity Card (Paso in Greek).

Student discounts are available in all public transportation fares, cultural events, museums, trade fairs and many more, upon showing an academic ID.

When sitting for an exam at the end of each semester, you need to provide your academic ID.

After registering at the Department of your choice, please, apply for an Academic ID through the electronic service of the university, following the instructions of the Ministry of Education, Religious Affairs and Sports and providing a digital photo of yourself (.jpg, .png).

Points to consider:

- Please, DO NOT activate the option «I am already a graduate from another department of the University or Institute of Technology», at the beginning of the process, because this will NOT allow you to receive your Academic ID .
- You will be asked to fill in your Social Security Number (AMKA). If you already have one, please, fill it in. If not, you need to select the option: «I declare that I do not have a Social Security Number (AMKA)».
- Please, fill in and doublecheck your personal details carefully, where requested.
- Only in case you are a student at NKUA for a year or less, will you have to select the option: «Erasmus student (to be selected only by foreign students)».
- You will receive your academic ID from a Vodafone store. Once you fill in your address, a list of stores will appear for you to pick up your ID from. Please, select a point of delivery nearest to your home.

For more information, please, visit:

https://issu.uoa.gr/guide_for_all_students/getting_ready_for_your_studies/academic_id_card/

15.11 Language courses

The NKUA offers Greek language courses to Erasmus+ incoming students, in order to enable them to understand the Greek language. Even if many of the incoming students take courses in English, a basic knowledge of the Greek language will help them to get acquainted with everyday life in Greece.

The Greek Language Courses (for the first semester - Code: NGLT0001 and for the second semester - Code: NGLT0002) offer **6 ECTS** per semester (6hours/week) and are **free-of-charge for one semester**.

Students who have attended courses for the first semester and wish to attend the second semester's courses must register again and they have to pay the tuition fees on their own.

Important Note: Please make sure that you click on the programme that applies to Erasmus students- Title: **ERASMUS**.

For further information, please refer directly to the Modern Greek Language Teaching Centre's website (https://en.greekcourses.uoa.gr/program_of_courses/)

In order to fill in the online Application Form for the Greek Language Courses, you must have already received the Acceptance Letter from the Department.

16 Your semester at Eberhard Karls University of Tübingen (UT)

16.1 Arrival and welcome activities

Starting out can be difficult. In the first few weeks, you will experience many new things. We aim to help you find your way around the University.

As an international student, you are invited to our Welcome Programme, which includes a Help Desk, an academic writing workshop, a mini-workshop on study planning with the digital "Alma" system, and various peer-to-peer activities from students for students, for instance an advisory course on "How to study at a German university".

[welcoming and introductory sessionsLink](#) The University of Tübingen also offers specific welcome and introductory sessions where you can ask your questions directly. Further information: [Link](#)

The [Department of Geosciences](#) at the University of Tübingen includes almost 40 professorships from the general fields of geology, mineralogy, environmental sciences, geography, and archaeological sciences. It is thus one of the largest departments of its kind at German universities.

16.2 Housing

It is difficult to find a room or an apartment in Tübingen at the beginning of your studies. The university has responded to the particularly tight situation on the housing market. The most common types of accommodation are the following:

- *Student residences:* A room in a student residence hall / dormitory is good value for money. Note that in Germany, all student residences are self-catering – you usually share a kitchen as well as sanitary facilities and have a single room on your own. Still, life in dormitories differs widely: In some dorms, residents do a lot together in their free time and form a close community; in others, they tend to keep to themselves. Accommodation in Tübingen can be found in halls of residence run by the [Studierendenwerk](#).
- *Shared apartments:* A popular form of housing among students is sharing an apartment (Wohngemeinschaft, or WG for short). Similar to dormitories, life in WGs is various: Some apartments are shared by friends; in others, the flatmates aren't that close, but get together for joint activities from time to time. For some students, sharing a flat is an inexpensive way to live, but they are not that interested in forming a community. It's up

to you what you make of a shared apartment. Most-used websites for sharing/finding shared apartments are: www.wg-gesucht.de, www.kleinanzeigen.de.

Further information: [Link](#)

All residents in Germany must register their place of residence with the local Residents' Registration Office (called "Bürgerbüro" in Tübingen) within two weeks of moving into their new accommodation. Book an appointment in advance or complete the online registration using your online ID function. Both forms of registration require a confirmation from your housing provider ("Wohnungsgeberbescheinigung"), which can either be signed by your landlord and uploaded by you/handed in on site, or confirmed by your landlord electronically.

16.3 Living expenses

The necessary allowance of a university student at the University of Tübingen per month would be:

Cost of living (incl. transport)	467 Euro
Rent	500 Euro
Other expenditures (incl. health insurance)	134 Euro
Total expenses	1101 Euro

More Information for students at the University of Tübingen about student housing, canteens and cafeterias, studying abroad, student finances, studying with children, clubs and societies (music, the arts, theater, sport), mobility, insurances, and getting involved: [Link](#).

16.4 Transport

Students at the University of Tübingen are entitled to a discounted semester ticket for local public transport. The semester ticket is valid on all buses and trains in the NALDO public transport network, which includes the greater districts of Tübingen, Reutlingen, Zollernalbkreis and Sigmaringen. No-one else is allowed to use your semester ticket. If you lose it, you must buy another one. Further Information: [Link](#).

[Here](#) you can find more information on how to get to Tübingen.

16.5 Navigating campus

[mapAltstadtMorgenstellethe Klinikenthe Sand"Geo- und Umweltforschungszentrum"](#)The following map provides an overview of the campus. The campus is spread over the Altstadt, the Morgenstelle, the Kliniken and the Sand. The "Geo- und Umweltforschungszentrum" (Geo- and Environmental Centre) hosts all groups active in environmental geosciences. It is located in close vicinity to the university's other science departments.

In this [interactive virtual guided tour of Tübingen](#) (in German, produced in 2020, but still good for a first impression of the city), you can get to know some of the most relevant places in the city of Tübingen from the perspective of the students Amelie and Tony.

The University regularly hosts events that give interested members of the public, students and employees insights into topics being dealt with at the University. From concerts, exhibitions and conferences to public lectures - there is something for everyone. Further information: [Link](#).

16.6 Student health

Studying can pose many challenges, whether content-related, organisational or emotional. Psychologically difficult situations can arise at any stage of your studies. No matter whether you are dealing with study-related stress (e.g. coursework overload), with problems in your family or social life, or with economic or medical issues that may affect your mental health – the university offers you support through preventative services, counselling options, and competent contact points that you can turn to in situations of crisis. Further information: [Link](#).

16.7 Special needs and disability support

Services for students with a disability or (chronic) illness: It is estimated that there are more than 4,000 students at the University of Tübingen whose ability to study is affected by illness and/or disability. In order to support such students, the University of Tübingen offers special counselling services that can be used at any stage of studies, or even before the start of studies.

We can support you in deciding on the appropriate type of study and university, in planning and organising your studies, and in answering questions about possible alternatives. There is also the option of counselling in personally difficult situations. Important topics may also include financing your studies, getting access to necessary tools and resources, finding suitable housing, and assistance in everyday study routines. If you need an individual adjustment of study conditions, you can apply for disadvantage compensation ("Nachteilsausgleich"). Counselling is voluntary, confidential and open-ended. Further information: [Link](#).

16.8 Resting and contemplation rooms

Whether you are preparing a group presentation, working individually or conducting research - the University Library offers you a variety of different work spaces. For further information: [Link](#). Since 2013, the university library has housed a "Room of Silence" in the transition between the Bonatzbau and the main building. It was set up by the University of Tübingen to be open to members of all religions for individual prayer and meditation. However, it can also serve as a retreat for people without religious convictions for a moment of silence and pause. For further information: [Link](#).

In the Ammerbau on level 3 (A321), a resting and work room is available for students with disabilities or a (chronic) illness. The room is accessible without barriers and equipped with a height-adjustable desk, an armchair with stool and a yoga mat. For further information: [Link](#).

16.9 Student organisations

For students of all academic fields and study programmes: [Here](#) you can find all our counselling services, events and workshops, as well as a range of useful information for studying at the University of Tübingen. The Student Counselling Service is there for you throughout your studies. We support you at the beginning and during all stages of your study programme. We offer you a wide range of events, guidance materials, and of course individual counselling. We are a neutral service and will always treat your situation as confidential; i.e. the counselling is subject to professional discretion.

When do lectures start? Which courses can I take? And how do I take leave of absence? From planning your timetable, to expenses and paperwork, to getting assistance with your studies - the information below can help you get organised. For further information: [Link](#).

The University of Tübingen offers a number of different services which give helpful advice if you are planning to study in Tübingen or if you are already enrolled here - whether you are just beginning, are well into your studies, or are finishing your studies and planning a career. Directly below, you will find a list of these services, sorted according to topic as well as according to the different phases of studying. For further information: [Link](#).

Students at the University of Tübingen have various opportunities to become involved in University policymaking. The University of Tübingen is home to many student groups and initiatives which are active in the fields of politics, the environment, or in social policy. For further information: [Link](#)

The [University sports](#) programme opens for registration about a week before the semester begins and offers a wide range of options — from high-intensity fitness classes and team sports to stress-relief activities such as mindfulness training, nutrition seminars, and meditation workshops.

16.10 Language courses

Learning German at the University of Tübingen

- Are you interested in taking a summer course or an intensive course at a famous German university during your semester break?
- Would you like to take the German proficiency exam (DSH) and get ready to study at a German university? Or would you like to improve your German while studying in Germany?
- The common language in your lab, your working group or in your classes is English, but would you like to be proficient enough to successfully handle everyday situations in German?
- Would you like to learn more about Germany and its people?
- The department "German as a Foreign Language and Intercultural Programmes" offers German language classes, courses relating to the geography, history and institutions of Germany and language proficiency exams.

Learning foreign languages at the University of Tübingen

- Would you like to improve your language skills while studying and acquire important additional qualifications for your future working life?
- Do you need a UNIcert certificate or a country specific certificate in order to be able to account for your language level?
- Are you studying at the University of Tübingen and are interested in voluntary additional language training?

Language courses for students of the University of Tübingen are offered by the Foreign Language Centre (FSZ). You can find more information about the courses [here](#).

17 Description of the curriculum

Legend	
Grading System:	g = graded ng = not graded (pass/fail) nE = no exam
Type of Exam / Study Requirement:	WE = written assessment OE = oral assessment A = assignment / term paper, written report R = report, presentation LP = lab protocol / journal SP = successful participation PF = portfolio examination MT = Master thesis
Duration of Assessment:	Duration of the assessment in <i>min</i>
Weighting:	Weighting of grade for the module
CH:	Credit Hours
Status:	c = compulsory op = optional
Type of Lecture:	L = lecture S = seminar E = exercise/tutorial FC = field course LC = laboratory course PR = project
CR:	Credits (ECTS)

17.1 First semester at SU

Module Number: TRACEE_ST	Module Title: System Thinking				Type of Module: Mandatory				
Credits (ECTS)*	3 CP								
Workload* - Contact Time - Private Study	Workload: 90 h		Contact Time: Depends on the selected courses			Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				Stockholm University				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	• Definition and core concepts of systems thinking • Understanding complexity in environmental, social, and technological systems • Characteristics of complex systems: emergence, nonlinearity, self-organization, and adaptation • The role of uncertainty in systems analysis • Introduction to complexity science and its relevance to climate, environment, and energy studies • Integrating knowledge across disciplines: natural sciences, social sciences, engineering, and policy • Transdisciplinary research: involving stakeholders in system design and problem-solving • Designing sustainable systems using a systems thinking approach • Ethical considerations and ensuring equity in system design								
Qualification Goals*	Students will be able to discuss systems thinking and its history, central system concepts, as well as types of systems and their properties.								
	Students will develop a comprehensive understanding of system thinking principles. They will gain the ability to identify and analyze complex systems in the context of climate, environment, and energy.								
	Students will be able to apply system thinking frameworks to address interdisciplinary challenges related to climate change, environmental sustainability, and energy transitions. This includes recognizing the interdependencies between social, ecological, and technological systems.								
	Students will learn how to engage in transdisciplinary collaboration, integrating knowledge from diverse fields such as science, policy, engineering, and social sciences. They will enhance their ability to communicate complex system dynamics to both experts and non-experts.								
	Students will be trained to critically evaluate and design sustainable solutions to address global challenges. They will develop the ability to assess the long-term consequences of interventions within interconnected environmental, social, and energy systems.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	3	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

odule Number: TRACEE_NSP	Module Title: Climate, Environment and Energy – A Natural Science Perspective					Type of Module: Mandatory				
Credits (ECTS)*	9 CP									
Workload* - Contact Time - Private Study	Workload: 270 h		Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				Stockholm University					
Regular Cycle*	Every academic year									
Language	English									
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)									
Module Content*	• Introduction to Natural Science Perspectives on Climate, Environment, and Energy • Climate Science and its Drivers • The Earth System and Interactions • Biodiversity and Ecosystem Dynamics • Energy Systems and Natural Resource Use • Climate-Environment-Energy Interactions • Environmental Pollution and Contaminants • Climate Change Impacts on the Earth System • Climate Change Mitigation and Adaptation from a Natural Science Perspective • The Role of Natural Science in Environmental Policy and Global Governance • Emerging Topics in Natural Sciences and Environmental Change									
Qualification Goals*	Students will be able to describe energy and matter and their transfer within the Earth's system, as well as solutions for future energy supply. They can describe global biogeochemical cycles, ecosystem services, and biodiversity, as well as the risks they face due to global environmental changes.									
	Students will be able to explain the climate system, drivers and feedback mechanisms, as well as Earth's past, present, and future climate. They will develop the ability to explain key concepts such as the greenhouse effect, energy flow, carbon cycles, ecosystem dynamics, and the interactions between natural and human systems.									
	Students will be able to apply systems thinking to complex environmental and energy challenges, recognizing the interconnectedness of climate, ecosystems, and energy systems. They will be proficient in analyzing the interactions and feedbacks between natural systems, human activities, and technological interventions.									
	Students will develop the ability to effectively communicate complex scientific concepts related to climate, environment, and energy to both specialist and non-specialist audiences. They will be able to convey the significance of scientific data and findings to policymakers, stakeholders, and the general public in an accessible and compelling manner.									
	Students will be equipped to integrate scientific knowledge into environmental and climate policy development. They will learn how to use natural science data to inform decision-making processes, especially in the context of global climate negotiations, energy transitions, and sustainable development.									
	Students will develop interdisciplinary skills, collaborating with experts from various fields (e.g., social sciences, engineering, policy) to address complex climate and environmental issues. They will also refine their critical thinking skills to assess and challenge existing scientific theories and assumptions, contributing to more effective, evidence-based solutions.									
	Students will understand the ethical implications of environmental and climate science. They will develop a strong commitment to sustainability and social responsibility, considering the long-term impacts of scientific solutions on global ecosystems, human communities, and future generations.									
Prerequisites for the allocation of credits	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting	

/grades (if necessary weighting)*	<i>Selected Courses</i>	<i>various</i>	<i>c</i>	<i>-</i>	<i>g</i>	<i>Written or oral</i>	<i>-</i>	<i>g</i>	<i>-</i>
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: TRACEE_SSP	Module Title: Climate, Environment and Energy – A Social Science Perspective					Type of Module: Mandatory			
Credits (ECTS)*	9 CP								
Workload* - Contact Time - Private Study	Workload: 270 h	Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				Stockholm University				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	• Introduction to Social Science Perspectives on Climate, Environment, and Energy • The Political Economy of Climate Change and Environmental Issues • Environmental Policy and Governance • Social Movements, Public Opinion, and Climate Activism • Energy Systems and Social Equity • Ethics, Responsibility, and Climate Justice • Social Science Methods for Climate and Environmental Research • Future of Climate, Environment, and Energy Governance								
Qualification Goals*	Students will gain a deep understanding of the key concepts and theoretical frameworks from social sciences (e.g., sociology, economics, political science, anthropology) used to analyze climate change, environmental issues, and energy transitions.								
	Students can describe past, present, and future economics, politics, and policies on energy systems, environment, and climate change. They are able to discuss the international, European, and national legal framework for climate, environmental, and energy policies and the transition.								
	Students are able to discuss knowledge, behaviour and action in relation to climate change, as well as the role of communication and education in addressing environmental and climate challenges.								
	Students will develop the ability to assess the social implications of climate change, such as environmental justice, vulnerability, inequality, and power relations. They will analyze how social factors, including gender, race, class, and access to resources, intersect with climate impacts and energy systems.								
	Students will acquire the skills to analyze environmental and climate policies, governance structures, and institutions at local, national, and international levels. They will evaluate the effectiveness of different policy responses, such as carbon pricing, climate adaptation strategies, and renewable energy transitions, through a social science lens.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	g	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: TRACEE_HP	Module Title: Climate, Environment and Energy – A Humanities Perspective				Type of Module: Mandatory				
Credits (ECTS)*	6 CP								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				Stockholm University				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	• Introduction to Humanities Perspectives on Climate, Environment, and Energy • Environmental Ethics and Justice • Cultural Narratives and Climate Change • History of Environmental Thought and Action • Philosophy of Nature and Human-Nature Relationship • The Role of Art and Literature in Shaping Environmental Consciousness • Technology, Innovation, and Cultural Responses to Climate and Energy Challenges • Future Visions: Imagining Sustainable Futures								
Qualification Goals*	Students will develop a deep understanding of how the humanities (e.g., philosophy, history, literature, ethics, cultural studies) contribute to the analysis of climate change, environmental issues, and energy systems. Students can discuss historical, literary, aesthetic, and philosophical aspects of environmental thinking and addressing concerns about climate and the environment. Students will understand the historical roots of current environmental and energy crises, exploring past environmental transformations, colonialism, industrialization, and their lasting impacts on contemporary climate and energy systems. Students will explore how literature, art, and media have represented and influenced public perceptions of climate change, energy, and the environment. They will develop the ability to analyze environmental storytelling, symbolism, and cultural expressions of sustainability, environmental degradation, and the Anthropocene. Students will explore how climate change and environmental issues are framed through political, social, and economic discourse, and how these narratives shape public policy, scientific understanding, and collective action. They will analyze how different narratives (e.g., crisis, opportunity, denial) influence the public's perception of climate change and environmental issues, and how these narratives can be leveraged to promote climate action. Students will develop the skills to collaborate across disciplines, integrating humanistic perspectives with natural and social science research to address climate, environmental, and energy challenges. They will learn how to bridge the gap between scientific knowledge and societal values, ensuring that policy and solutions reflect not only technical feasibility but also cultural and ethical considerations. Students are able to analyse sociocultural paradigms and rhetorical strategies in climate and environmental communication.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	6	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: TRACEE_CK	Module Title: Creating Knowledge Through Transdisciplinary Methods					Type of Module: Mandatory			
Credits (ECTS)*	3 CP								
Workload* - Contact Time - Private Study	Workload: 90 h	Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				Stockholm University				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	• Introduction to Transdisciplinary Knowledge Creation • Methods and Tools for Creating Knowledge through Transdisciplinary Methods • Collaborative Knowledge • Creation in Transdisciplinary research: Case Studies								
Qualification Goals*	Students can describe methods for involving society in different cultural contexts for knowledge generation and case studies of transdisciplinary research.								
	Students will acquire a comprehensive understanding of the principles and practices of transdisciplinary research, particularly the role of community collaboration in generating knowledge. They will understand how integrating local and community-based knowledge with scientific expertise can lead to more effective solutions for climate, environment, and energy challenges.								
	Students will acquire skills to effectively translate and disseminate research findings in accessible formats for diverse community audiences, ensuring that research benefits are shared and understood by those directly affected. They will develop strategies for knowledge translation that respect community preferences and enhance local capacity for decision-making and action.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	3	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

17.2 Second semester at NKUA

Module Number: NKUA_1	Module Title: Climate, Climate Variability and Climate Change					Type of Module: Mandatory			
Credits (ECTS)*	9 CP								
Workload* - Contact Time - Private Study	Workload: 270 h		Contact Time: Depends on the selected courses			Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				National and Kapodistrian University of Athens				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	• Introduction of the main mechanisms and processes of the climate system as well as their variability/change in space and time. • Examination of the climatic system and its components as Climatic scales of time and space and climatic factors. • Analysis of the planetary radiation and energy budgets • Study of greenhouse gases and their role in global warming potential. • Understanding planetary circulation and climate systems including phenomena like El Niño, La Niña, ENSO. • Investigation of climate variability and sensitivity vulnerability and resilience. Forcing and feedback mechanisms. Climate models. • Exploration of the assessment of the impact of climate change to the natural and anthropogenic environment. • Understanding extreme climate events. • Review of international framework for the protection of climate.								
Qualification Goals*	• Students will gain in-depth knowledge of the mechanisms and processes governing the climate system and their variability across different spatial and temporal scales. • Students will develop the ability to identify and evaluate climatic factors such as planetary radiation, energy budgets, greenhouse gases, and their roles in influencing climate dynamics, including global warming potential. • Students will acquire insights into planetary circulation patterns, climate systems, and phenomena such as El Niño, La Niña, and the El Niño-Southern Oscillation (ENSO). • Students will be equipped to assess the impacts of climate variability and change on natural systems and human activities, considering factors like vulnerability, resilience, and sensitivity to environmental changes. • Students will comprehend the forcing mechanisms and feedback loops that drive climate change and variability, along with their implications for the Earth's climate system. • Students will develop the ability to analyze and interpret climate models, including their role in predicting future climate scenarios and assessing risks. • Students will understand the causes and consequences of extreme climate events and their significance in the context of a changing climate. • Students will familiarize with global efforts and international frameworks aimed at protecting the climate and mitigating climate change impacts. • Students will cultivate the ability to critically assess scientific data and engage in informed discussions about climate-related challenges and solutions.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	9	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: NKUA_2	Module Title:	Type of Module: Mandatory
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		Energy and Climate Change: The Role of Renewable Sources of Energy								
Credits (ECTS)*		9 CP								
Workload* - Contact Time - Private Study		Workload: 270 h	Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator		1 semester			National and Kapodistrian University of Athens					
Regular Cycle*		Every academic year								
Language		English								
Learning- / Teaching Forms*		Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*		• Review of current global and regional energy consumption patterns, with an emphasis on fossil fuel dependency and its environmental implications. • Understanding the relationship between energy systems and climate change, with a particular focus on the transition to renewable energy sources. • Examination of the role of greenhouse gas emissions in climate change and explore mitigation strategies, emphasizing energy's role in reducing emissions. Introduction to renewable energy sources—solar, wind, hydro, geothermal, and biomass—covering their principles of operation, advantages, and limitations. Review of innovations and emerging trends in renewable energy. • Comparison of the environmental impacts of renewable and non-renewable energy sources and analysis of the real-world examples of successful renewable energy projects. • Understanding the potential of emerging technologies, such as energy storage and hydrogen, in shaping a sustainable energy future								
Qualification Goals*		• Students will demonstrate an in-depth understanding of global and regional energy consumption patterns, with a focus on the environmental impacts of fossil fuel dependency. • Students will evaluate the relationship between energy systems and climate change, emphasizing the role of greenhouse gas emissions in driving global warming and the importance of energy transitions in mitigation strategies. • Students will develop a comprehensive understanding of renewable energy technologies—solar, wind, hydro, geothermal, and biomass—including their operational principles, benefits, and limitations. • Students will critically analyze and compare the environmental impacts of renewable and non-renewable energy sources, fostering a deeper understanding of sustainability challenges and opportunities. • Students will investigate emerging trends, innovations, and technologies in renewable energy, such as advanced energy storage systems and hydrogen solutions, and assess their potential to drive a sustainable energy future. • Students will examine real-world case studies and lessons from countries at the forefront of renewable energy transitions, understanding the factors behind their success and scalability. • Students will formulate and propose strategies for mitigating climate change through the adoption of renewable energy, demonstrating a practical understanding of policy, technology, and socio-economic considerations. • Students will integrate knowledge from diverse fields, including technology, environmental science, economics, and policy, to address complex challenges in energy transitions and climate change mitigation. • Students will cultivate the ability to critically assess current energy systems, identify areas for improvement, and contribute to academic or professional discourse on sustainable energy development. • Students will develop the expertise required to lead in roles related to energy policy, renewable energy project management, environmental consultancy, or research in sustainable energy systems.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*		Courses	Type of Lecture	Status	CH	CR	Type of Exam /	Duration of Exam	Grading System	Weighting
		Selected Courses	various	c	-	9	Written or oral	-	g	-
Applicability*		-								

Participation Prerequisites*	No prerequisites
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Module Number: NKUA_3	Module Title: Earth Observation for Climate Change					Type of Module: Elective			
Credits (ECTS)*	6 CP								
Workload* - Contact Time - Private Study	Workload: 180 h		Contact Time: Depends on the selected courses			Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				National and Kapodistrian University of Athens				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation, Research Internship (Will be informed at the beginning of the selected course)								
Module Content*	• In-depth understanding on the use of Earth Observation for climate change research and applications. • Principles of passive and active remote sensing. • Categories and characteristics of satellites and satellite sensors. • Satellite meteorology and climatology. • Digital image processing. • Climate and Climate • Change applications with the use of remote sensing.								
Qualification Goals*	• Students will acquire a comprehensive understanding of the principles of passive and active remote sensing, including their underlying physical and technological foundations. • Students will demonstrate knowledge of the categories, characteristics, and functionalities of satellites and satellite sensors, focusing on their relevance to meteorology, climatology, and environmental monitoring. • Students will develop the ability to process and interpret satellite-based data for applications in climate science, including weather forecasting, climate variability studies, and long-term monitoring of climate change. • Students will gain practical expertise in digital image processing methods, enabling the extraction and analysis of information from satellite imagery for climate-related research. • Students will utilize remote sensing tools to investigate and address climate change phenomena, such as temperature trends, sea-level rise, deforestation, and greenhouse gas monitoring. • Students will develop the ability to apply earth observation technologies in practical and innovative climate applications, including disaster management, urban heat island studies, and carbon cycle analysis. • Students will explore emerging trends and advancements in remote sensing technology, preparing for the future of earth observation in climate research and sustainable development. • Students will enhance critical thinking and problem-solving by cultivating the capacity to analyze complex climate challenges using earth observation data, integrating scientific knowledge with technical and computational skills. • Students will develop interdisciplinary expertise by connecting earth observation technologies with other disciplines, such as environmental science, data analytics, and policy-making, to create comprehensive solutions to climate-related issues.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	6	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: NKUA_4	Module Title:	Type of Module: Elective
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	Design, Development and Implementation of a Research Project in GIS Environment									
Credits (ECTS)*	6 CP									
Workload* - Contact Time - Private Study	Workload: 180 h		Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				National and Kapodistrian University of Athens					
Regular Cycle*	Every academic year									
Language	English									
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)									
Module Content*	• Learning research design, data collection, and geospatial data analysis strategies in the field of climate change adaptation. • Developing appropriate research questions and conceptual models, and applying them to climate change adaptation. • Introduction to the principles of Geographic Information Systems (GIS) and methods for processing vector and raster data. • Studying the theoretical background of key climate change issues and analysis techniques in a GIS environment, including the use of machine learning models on geospatial data. • Conducting a case study by selecting a climate change-related problem to be developed in a GIS environment using a variety of data sources. • Evaluating the results of the analysis and proposing solutions or measures to address the studied problem									
Qualification Goals*	• Students will gain skills to formulate Research Questions: by designing clear, focused, and impactful research questions tailored to climate change adaptation challenges. • Students will be able to create and apply conceptual models to address complex environmental and societal problems associated with climate change. • Students will gain a solid understanding of Geographic Information Systems (GIS) principles, including processing and analyzing vector and raster data. • Students will develop the ability to collect, organize, and integrate diverse data sources for geospatial analysis. • Students will be able to use GIS tools to analyze climate change phenomena, assess risks, and identify adaptation strategies. • Students will apply machine learning models to geospatial data for predictive analysis and modeling climate change impacts. • Students will identify and select real-world climate change issues, design geospatial methodologies, and conduct comprehensive analyses. • Students will gain abilities to critically interpret the results of GIS-based analyses and assess their reliability, accuracy, and significance. • Students will develop actionable solutions and measures to address the climate change problems analyzed, incorporating scientific, technical, and socio-economic perspectives.									
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting	
	Selected Courses	various	c	-	6	Written or oral	-	g	-	
Applicability*	-									
Participation Prerequisites*	No prerequisites									

Module Number: NKUA_5	Module Title: Science, Technology, Society: Environment and Sustainability	Type of Module: Elective
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Credits (ECTS)*	6 CP								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: Depends on the selected courses				Private Study: Depends on the selected courses			
Duration of Module* Module Coordinator	1 semester				National and Kapodistrian University of Athens				
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	The course focuses on enriching Science, Technology, Society Studies from these fields and vice versa. It consists of four (4) parts: the first part provides the conceptual and analytical framework for understanding the relationship between Science/Technology, Society and Environment, the second one examines the applications and variations The conceptual and conceptual framework and its applications and variations of this framework to the multiple relationships and interactions between humans and environment. Emphasis is placed on the role of science and technology in transformation of these relationships, the third examines the environmental impacts of the of major economic and development activities, the conflicts between the environment and the related conflicts and the ways in which science/technology and the fourth part provides some basic tools for critical assessment and understanding of governmental or transnational policies related to environment and sustainability.								
Qualification Goals*	• Students will be able to grasp the theoretical and analytical frameworks that explain the dynamic relationships between science/technology, society, and the environment. • Students will analyze how societal actions and technological advancements influence, and are influenced by, environmental processes. • Students will critically assess the role of science and technology in shaping human-environment interactions, including their role in promoting or mitigating environmental change. • Students will evaluate the potential of technological innovations to foster sustainable development and resolve environmental challenges. • Students will gain abilities to investigate the environmental consequences of major economic and developmental activities, including the conflicts they generate • Students will identify and propose strategies for reconciling economic development goals with environmental sustainability. • Students will develop the ability to critically evaluate governmental and transnational policies related to environmental governance and sustainability. • Students will understand the tools and methodologies used to assess the effectiveness of sustainability initiatives • Students will integrate insights from social sciences, environmental studies, and technological fields to address multifaceted environmental problems • Students will enhance the ability to critically analyze and evaluate the societal and environmental implications of scientific and technological developments.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	6	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

Module Number: NKUA_6	Module Title: Climate Policies and Diplomacy		Type of Module: Elective
Credits (ECTS)*	6 CP		
Workload* - Contact Time	Workload: 180 h	Contact Time: Depends on the selected courses	Private Study: Depends on the selected courses

- Private Study									
Duration of Module* Module Coordinator	1 semester	National and Kapodistrian University of Athens							
Regular Cycle*	Every academic year								
Language	English								
Learning- / Teaching Forms*	Seminar, group work, collaborative learning, case studies, presentation (Will be informed at the beginning of the selected course)								
Module Content*	This course aims to explore the state-of-the art of the climate policies of developed and developing countries, map them in the context of the international and European framework and highlight the challenges ahead to achieve just transition and climate neutrality by 2050 as well as building societal resilience to address the impacts that cannot be avoided. It views climate change not only as an environmental problem, providing for technical solutions, but also as a social problem where the solutions expand to include economic, political, cultural and institutional changes. Some of these solutions have the potential for transforming society in ways that address multiple goal challenges, including poverty and inequality, food insecurity, water insecurity, biodiversity loss and health crises.								
Qualification Goals*	• Students will gain an in-depth understanding of the climate policies of developed and developing countries within the context of international and European frameworks. • Students will have the abilities to analyze the pathways and challenges to achieving climate neutrality by 2050, with a focus on just transition principles • Students will understand climate change as both an environmental and a social problem, requiring solutions that span technical, economic, political, cultural, and institutional domains. • Students will recognize the links between climate solutions and other global challenges, including poverty, inequality, food and water insecurity, biodiversity loss, and public health crises. • Students will develop the ability to map, compare, and critique climate policies across various countries and regions. • Students will gain the abilities to formulate and propose effective strategies to enhance societal resilience and adaptation to climate impacts. • Students will be able to evaluate and advocate for policies that promote equity and inclusivity, ensuring a fair transition for vulnerable populations affected by climate change and mitigation efforts. • Students will explore the transformative potential of climate policies in addressing societal issues such as inequality and systemic injustice. • Students will apply interdisciplinary approaches to design solutions that integrate environmental, economic, social, and institutional considerations. • Students will assess the broader societal impacts of climate change policies and their implications for sustainable development goals.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Selected Courses	various	c	-	6	Written or oral	-	g	-
Applicability*	-								
Participation Prerequisites*	No prerequisites								

17.3 Third semester at UT

Module Number: M 301	Module Title: Physics of the Earth's Surface		Type of Module: Mandatory
Credits (ECTS)*	6		
Workload* - Contact Time	Workload: 180 h	Contact Time: 90 h / 6 SWS	Private Study: 90 h

- Private Study									
Duration of Module* Module Coordinator	1 semester	Glotzbach							
Regular Cycle*	Every winter semester								
Language	English								
Learning- / Teaching Forms*	This module includes a combination of lectures and exercises where the exercises include either computer exercises or scientific paper discussions related to the lecture topics.								
Module Content*	This module gives an introduction into the physics of Earth's surface, with emphasis on processes shaping the Earth's surface on human and geological timescales. Most importantly an overview of the relevant cycles (energy, water, relevant elements/gases) acting on Earth's surface will be given. Specific topics addressed in the lecture include: • Earth's surface energy balance • Carbon and hydrological cycle and mass balance • How and why tectonics, topography, and climate interact over short and long (million year) timescales. • Physical and mathematical approaches for understanding erosion and sedimentation by rivers, hillslopes, glacial, and biotic processes. Topics addressed in the exercises and discussion include: • Computer exercises using Arc or Q-GS to visualize and analyze Earth's surface • Computer exercises using Matlab and other software to investigate physical and geochemical processes discussed in lectures.								
Qualification Goals*	Goals of this class center around enabling students to: • Understand the physics and relations between Earth's shaping processes on different temporal and spatial scales • Visualize, quantify and model Earth's surface processes using computer software tools. • Develop skills in critically reading scientific literature.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Physics of the Earth's Surface	L	c	4	4	WE	90	g	0,7
		E	c	2	2	R		g	0,3
Applicability*	M.Sc. Geowissenschaften/Geosciences, M.Sc. Geoökologie/Geoecology, M.Sc. Applied & Environmental Geoscience This module compliments other geoscience, applied environmental geoscience and geoecology modules. Students are provided with the context for how the atmosphere (climate), hydrosphere, biosphere, and tectonic processes interact to produce the Earth's surface. It also complements modules in physical geo-graphy by providing a physics and math based understanding of surface processes active both human relevant, and geologic (million year) timescales.								
Participation Prerequisites*	Introductory geology.								

Module Number: M 236	Module Title: Modelling for Sustainable River Management				Type of Module: Mandatory				
Credits (ECTS)*	6								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: 60 h / 4 SWS				Private Study: 120 h			
Duration of Module* Module Coordinator	1 semester				Zarfl				
Regular Cycle*	Every summer semester								
Language	English								
Learning- / Teaching Forms*	Lecture and accompanying seminar (exercises, presentations, discussions)								
Module Content*	• Introduction into different mathematical modelling approaches to describe environmental processes with a specific focus on freshwater ecosystems (including differential systems but beyond), parameter estimation techniques and uncertainty analysis • Understanding interdependent environmental system dynamics within the (socio-)hydrological cycle across scales and system boundaries • Application of models to environmental challenges • Models as tools for decision/discussion support/ sustainable water management								
Qualification Goals*	The students are familiar with a variety of modelling approaches and their suitability for specific research questions related to environmental processes. They can deal with uncertainty in parameter values and model structure; evaluate model results and simulated system dynamics. They are aware of current developments in environmental systems analysis and can discuss strengths and weaknesses of applied model approaches. Drawing from a solid understanding of mathematical modeling and socio-hydrological interdependencies, they can critically analyse the role of conceptual and mathematical models in decision support and sustainable water management across spatial and temporal scales.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Modelling and Simulation for Environmental Process Understanding	L	c	2	6	A	-	g	0.5
		S	c	2		R	-	g	0.5
Applicability*	M.Sc. Geoökologie/Geoecologie, M.Sc. Applied & Environmental Geoscience								
Participation Prerequisites*	recommended: BSc course "Modellierung in den Geo- und Umweltwissenschaften"								

Module Number: M 317	Module Title: Data Analysis and Modeling Methods in Geo- and Environmental Sciences					Type of Module: Elective			
Credits (ECTS)*	6								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: 60 h / 4 SWS					Private Study: 120 h		
Duration of Module* Module Coordinator	1-2 semester							Drews	
Regular Cycle*	every semester								
Language	English								
Learning- / Teaching Forms*	Lectures and Computer Exercises for Data Analysis and Modeling								
Module Content*	World-wide technical advances in monitoring the surface and sub-surface result in a new data environment for modern Geo- and Environmental sciences. Problem solving increasingly requires rigorous models and also integration of observations varying in space and time. Extracting the relevant information is achieved with computational methods that also require an understanding of the underlying mathematical principles. It is subdivided into units, which include: • Finite Element Method • Fourier- and Laplace-Transform Techniques • Geographical Information Systems • Introduction Scientific Programming (Matlab) • Introduction Scientific Programming (Python) • Introduction to R • Introduction to Time Series Analysis • Machine Learning 1 • Machine Learning 2 • Principles of Model Calibration • Remote Sensing of River Systems Each unit counts for two credits. Students are free to select 3 units out of the units offered. Another 3 units can be used to fill a second container module M325 (Data-Analysis and Modeling Methods in Geo- and Environmental Sciences 2). The individual units are offered either over four weeks within the lecturing period of the semester, or as one-week block course. The selection of units may vary with the instructors from year to year. Some units require prior participation in other units of this module (check with instructors beforehand).								
Qualification Goals*	The goals of this module are • that students are able to understand selected mathematical concepts • that they can implement them computationally, that they can apply them to geo- and environmental related problems • develop relevant technical skills for data analysis and modelling • applied problem solving skills using Matlab / Python / R								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Variable Topics	L,E	c	2	2	R,A	-	g	1/3
	Variable Topics	L,E	c	2	2	R,A	-	g	1/3
	Variable Topics	L,E	c	2	2	R,A	-	g	1/3
Applicability*	Compulsory module in the MSc Geosciences, elective module in the MSc Geoecology and Applied & Environmental Geosciences This module compliments other geology, geoecology, and environmental sciences courses (e.g. geophysics, climatology and ecosystems, applied tectonics and surface processes, remote-sensing) by providing a background for quantitative data analysis and modelling.								
Participation Prerequisites*	(TBD w.r.t. Python, Matlab, R)								

Module Number: M 303	Module Title: Physical Properties of Earth Materials				Type of Module: Elective				
Credits (ECTS)*	6								
Workload* - Contact Time - Private Study	Workload: 180 h		Contact Time: 90 h / 6 SWS			Private Study: 90 h			
Duration of Module* Module Coordinator	1 semester				Bons				
Regular Cycle*	Every winter semester								
Language	English								
Learning- / Teaching Forms*	Lectures and practicals (microscopy, computer exercises)								
Module Content*	The course focuses on the mechanical properties of rocks and ice under natural conditions. It covers • An overview of the most important deformation mechanism and processes. • A derivation of the governing equations (flow laws) that describe the rheology of rocks and ice. • Description and interpretation of deformation (micro-) structures, with particular attention to recognising expressions of deformation processes and establishing the resulting mechanical properties. • Application of rock deformation theory for geological and glaciological problems. The course consists of lectures and practical exercises, including microscopy.								
Qualification Goals*	Main aim of the module is to make students acquainted with the deformation processes that occur in rocks and ice. This includes being able to: • recognize deformation structures; • interpret the processes that produced these structures; • infer conditions of deformation from these structures; • as well as the rheological properties of the materials at the time of deformation • apply the insights to better understand the evolution of glaciological and geological problems, such as the flow of ice sheets and glaciers, subduction systems, etc. In the end, the students will have gained the necessary skills to work in academic research, as well as applied research, where the mechanical behaviour of rocks and ice plays a role.								
Prerequisites for the allocation of credits / grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Physical properties of Earth materials	L	c	4	4	WE	120	g	0,7
		LC	c	2	2	A	-	g	0,3
Applicability*	M.Sc. Geowissenschaften/Geoscience The module provides advanced knowledge and skills in the fields of rock mechanics, rheology and of structural analysis and interpretation the recognition and interpretation of deformation structures. These are a necessary prerequisite of any field based-study, from basin analysis to the study of high-grade metamorphic or igneous complexes, as well as for the understanding of the behaviour of glaciers and polar ice sheets. The module is thus of direct practical relevance to all geoscience students, no matter whether they intend to pursue an academic or industrial career.								
Participation Prerequisites*	• BSc-module "Strukturgeologie und Tektonik" or equivalent. • Optical mineralogy/microscopy • English (read & write)								

Module Number: M 212	Module Title: Advanced Geophysics					Type of Module: Elective			
Credits (ECTS)*	6								
Workload* - Contact Time - Private Study	Workload: 180 h		Contact Time: 90 h / 6 SWS			Private Study: 90 h			
Duration of Module* Module Coordinator	1 semester				Drews				
Regular Cycle*	Every winter semester								
Language	English								
Learning- / Teaching Forms*	The module uses a combination of in-class lectures, in-class & applied exercises, and online videos.								
Module Content*	This module teaches advanced methods in geophysics including data acquisition, processing and modelling. In each semester we will typically explore one or two methods in-depth (e.g., refraction seismics, electrical resistivity tomography, ground-penetrating radar, magnetics) and develop a full processing chain from first principals, e.g., including survey planning, data acquisition, forward modeling and data integration using computational inverse techniques.								
Qualification Goals*	- Gain an advanced understanding for specific geophysical methods. - Understand the principals of forward and inverse modelling and apply it with computational methods. - Build-up transferable skills (e.g., signal analysis and numerical modeling) also applicable in many other geo- and environmental disciplines.								
Prerequisites for the allocation of credits / grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Advanced Geophysics	L	o	4	4	WE/OE	90	g	1
		FC	o	2	2				
Applicability*	M.Sc. Geowissenschaften/Geosciences, M.Sc. Applied & Environmental Geoscience								
Participation Prerequisites*	Solid understanding of basic geophysical sub-surface imaging taught at the BSc levels. Programming skills are helpful but not strictly essential and can also be acquired in class.								

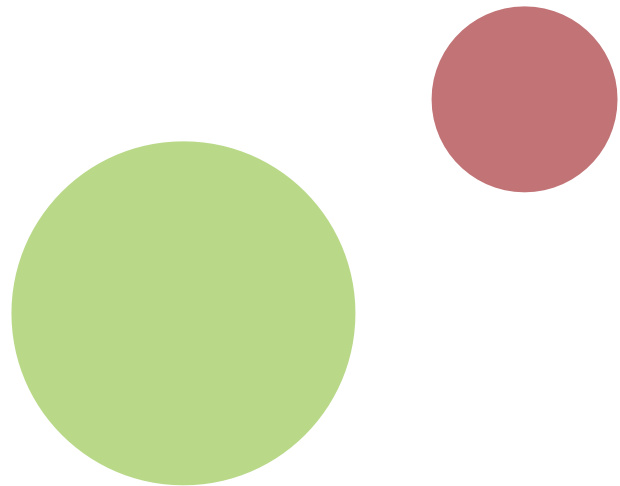
Module Number: M 315	Module Title: Glaciology				Type of Module: Elective				
Credits (ECTS)*	6								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: 90 h / 6 SWS				Private Studies: 90 h			
Duration of Module* Module Coordinator	1 Semester				Weikusat				
Regular Cycle*	Every winter semester								
Language	English/German (can be held in German depending on students)								
Learning- / Teaching Forms*	Two weeks block course including lectures, tutorials and exercises. Poster presentations								
Module Content*	Topics covered in lectures and exercises: • Components of the earth's cryosphere in recent and palaeo-time scales • Cryosphere and climate (sea level) • Ice cores (palaeo-climate records) • Material ice (modifications, crystal structure, defects, physical properties) • Micro-dynamics of ice (deformation and recrystallization mechanisms) • Formation processes of natural ice (e.g. meteoric glacial ice, sea ice, ice shelf ice, marine ice) • Mass balance of glaciers and ice sheets (ablation and accumulation measurements and processes, e.g. melting, calving) • Ice dynamics (stress and strain, deformation modes, flow features, flow law) Poster session on hot topics in glaciological research (exam): • basics poster preparation and presentation techniques • present a topic / recent research paper on a poster and a 5 min. oral presentation and 5 min questions / discussion								
Qualification Goals*	During the course the students will: • Gather general knowledge of the field about the cryosphere and the related glaciological subtopics • Develop an understanding of the physical processes relevant for the cryosphere • Acquire an up to date overview of current glaciological research topics and being able to evaluate conclusions in a critical way • Acquire expertise in assessing cryosphere related information with respect to modern climate change discussions • Gather practical experience in simple ice core data processing and ice dynamic modelling (exercises and tutorials).								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Glaciology	L	c	4	4	R	-	g	1
		E	c	1	1				
		S	c	1	1				
Applicability*	M.Sc. Geowissenschaften/Geosciences, M.Sc. Applied & Environmental Geoscience. The module covers topics related to the material of the core modules mineralogy, geodynamics and applied geosciences.								
Participation Prerequisites*	Fundamentals in geology/mineralogy and physics								

Module Number: ITP	Module Title: Inter- and Transdisciplinary Perspectives on Climate and the Environment					Type of Module: Elective			
Credits (ECTS)*	6 CP								
Workload* - Contact Time - Private Study	Workload: 180 h	Contact Time: 60 h / 4 SWS				Private Study: 120 h			
Duration of Module* Module Coordinator	1 semester				GUZ				
Regular Cycle*	Every wintersemester								
Language	English								
Learning- / Teaching Forms*	Lectures, collaborative projects, serious games, active learning exercises, discussion and interaction with international guest experts, civic engagement and service learning								
Module Content*	The module covers pressing global issues such as climate change, the water crisis and ecosystem degradation through an inter- and transdisciplinary approach that will equip students with skills needed to explore and address interconnected environmental and social challenges. At the intersection of Earth System Sciences and transdisciplinary real-world engagement, global planetary challenges are approached in a collaborative and solution-oriented way. Innovative teaching methods focus on bringing in diverse student perspectives from different study fields in an engaging way. By combining interdisciplinary insights with a global perspective, the module empowers participants to contribute meaningfully to solutions that respect planetary boundaries and contribute to a sustainable and just future. The module consists of at least two seminars addressing topics such as: • Nature-based solutions for carbon drawdown • Global policies on climate adaptation and mitigation measures • Environmental communication • Disaster risk and resiliency								
Qualification Goals*	• Analyse Earth surface and environmental processes and their societal impacts in different regions of the world • Discuss and explain climate action including mitigation and adaptation strategies • Communicate effectively about climate and environment to understand, motivate and empower public audiences, and inspire action in all sectors of society								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	Courses	Type of Lecture	Status	CH	CR	Type of Exam	Duration of Exam	Grading System	Weighting
	Elective Courses	S	c	4	6	-	-	g	-
Applicability*	-								
Participation Prerequisites*	-								

17.4 Fourth semester (Master's thesis) at SU or NKUA or UT

Module Number: TRACEE_MT	Module Title: Master Thesis		Type of Module: Mandatory
Credits (ECTS)*	30 CP		
Workload* - Contact Time - Private Study	Workload: 900 h	Contact Time: 30 h / 2 SWS	Private Study: 870 h
Duration of Module* Module Coordinator	1 semester		The Master's thesis can be completed at Stockholm University or University of Athens or University of Tübingen (according to the examination regulations by the respective partner university)
Regular Cycle*	During the third semester, students will be asked to submit a proposal for a thesis project. The TSTC (Transdisciplinary Stream and Thesis Committee) will communicate on the procedure for the submission of proposals and decide on students' project proposals for thesis and degree projects, with particular consideration to the transdisciplinary aspects and in accordance with specific regulations at SU or NKUA or UT where the student will carry out the thesis project.		
Language	English		
Learning- / Teaching Forms*	Master's thesis, Transdisciplinary Research Project, Colloquium, Presentation (according to the regulations of the respective partner university)		
Module Content*	Stockholm University: - Students at Stockholm University would register to the course: "Transdisciplinary Studies of Climate, Environment and Energy, Independent Project". - The independent project is 30 ECTS and aims to provide experience and advanced knowledge in scientific and transdisciplinary work within the fields of climate, environment, and/or energy. Key elements include planning, execution, and reporting. Additionally, students will practice literature review, writing a scientific report, and presenting research results orally in seminars. - The course is divided into two parts (More information is available in the syllabus of the course): - Part 1: Planning (5 ECTS). Assessment is based on a written report - Part 2: Implementation (25 ECTS). Assessment is based on an oral and written presentation of the independent project.		
	University of Athens - Students at National and Kapodistrian University of Athens would register to the course: "Transdisciplinary Studies of Climate, Environment and Energy, Development of Research Diploma Thesis". - The independent project is 30 ECTS and aims to provide experience and advanced knowledge in scientific and transdisciplinary work within the fields of climate, environment, and/or energy. Key elements include planning, execution, and reporting. Additionally, students will practice literature review, writing a scientific report, and presenting research results orally. - Students have to complete the following: - Contacting a supervisor for the Master's thesis topic - Compilation of a research proposal of the agreed topic - Preparation of the Master's thesis - Assessment is based on an oral and written presentation of the independent project		
	University of Tübingen - The independent research project is 30 ECTS and aims to provide experience and advanced knowledge in scientific and transdisciplinary work within the fields of climate, environment, and/or energy. Key elements include planning, execution, and reporting. Additionally, students will practice literature review, writing a scientific report, and presenting research results orally. - Students have to complete the following: - Contacting a supervisor for the Master's thesis topic - Compilation of a research proposal of the agreed topic - Preparation of the Master's thesis - Poster presentation of the thesis' results on the Master's Day - Presentation of the thesis' results in the research group		
Qualification Goals*	Students will be able to design, execute, and critically assess a transdisciplinary research project that integrates knowledge, methods, and perspectives from multiple disciplines to address relevant topics in the field of climate, environment, and energy challenges. Students will be able to critically review existing literature, and develop innovative, transdisciplinary frameworks. Students will be able to present their research findings in a clear, structured, and accessible manner, tailored to both academic and non-academic audiences, including policymakers, local communities, and other relevant stakeholders.		

	They may demonstrate the ability to communicate complex transdisciplinary concepts in diverse formats, including written reports, presentations, and policy briefs.								
Prerequisites for the allocation of credits /grades (if necessary weighting)*	<i>Courses</i>	<i>Type of Lecture</i>	<i>Status</i>	<i>CH</i>	<i>CR</i>	<i>Type of Exam</i>	<i>Duration of Exam</i>	<i>Grading System</i>	<i>Weighting</i>
	<i>Master Thesis</i>	<i>See regulation by the universities</i>	-	-	30	MT	-	g	100
Applicability*	-								
Participation	30 CP Modules of semesters 1								
Prerequisites*	30 CP Modules of semester 2+3								



Contact us

Do you have any questions?
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<https://www.su.se/english/education/course-catalogue/nc/nceeo>