



COURSE CATALOGUE SUSTAINABLE DEVELOPMENT 2023-2024

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Preface

Welcome to the Master's programme Sustainable Development!

The Master's programme Sustainable Development is part of the Graduate School of Geosciences and is organised by the Copernicus Institute of Sustainable Development. The programme aims to teach you the specialised knowledge and professional attitudes and skills you need to become a first class researcher in academic and professional organisations in the field of sustainable development. The close link to the excellent research of the Copernicus Institute of Sustainable Development, combined with the small scale of the groups, the international setting of the Master's programme, and the pleasant working atmosphere will contribute to this aim.

We hope this course catalogue will help you to find easily the relevant information you need as a student in the Master's programme. First a general description of the programme, the structure, the components and some organisational matters are presented. This is followed by information about procedures and the UU-time table is also included in the catalogue. The Education and Examination regulations 2023-2024 (OER) can be found in [Appendix 4.2](#) and the Regulations of the Board of Examiners in [Appendix 4.3](#).

At any time during your studies you will need two course catalogues: one of the year you started your Master's programme in Sustainable Development (this shows the exam programme that you need to follow) and one of the most recent academic year, which shows the current Rules & Regulations.

You can find more information on the [website](#) and in the Blackboard community for all Sustainable Development students.

If you have some (personal) questions, you can contact the student advisor of the programme.

On behalf of the staff I wish you an inspiring, pleasant and successful new academic year!

Dr. Frank van Laerhoven, Programme Leader Master Sustainable Development

and

Prof. dr. Karin Rebel, Director of Education Copernicus Institute of Sustainable Development

1 CONTENT OF THE PROGRAMME

1.1 INTRODUCTION

Over the past thirty years, sustainable development has grown both as a scientific field and as a political objective. The science of sustainable development is concerned with “the interactions between natural and social systems, and with how those interactions affect the challenge of sustainability: meeting the needs of present and future generations while substantially reducing poverty and conserving the planet's life support systems.”¹ This challenge is huge, as our world is facing unprecedented risks that may even endanger the fate of humanity. Intense heatwaves, droughts, wildfires, extreme storms, floods and pandemics are becoming more frequent, making our planet more risky, less predictable, and in the long run less hospitable. Such ecological challenges co-exist, however, with numerous economic, political, gender, racial and other forms of inequality, many of which have intensified over the years as well. We are thus at a historical juncture where demand for substantive action is becoming an imperative for governments, businesses, social movements and universities.

The Master's degree programme in Sustainable Development is intended to educate graduates who wish to understand and address these important challenges. The programme aims to educate scientists who will be able to make a contribution in the transition and transformation to sustainable and just societies through their research and their professional skills. The main focus of this Master's programme is the scientific analysis of the root causes, consequences, contestations, and processes of transformation towards sustainable and just societies. Adopting largely a systemic approach while paying attention to diverse sources of agency, the programme is concerned with the political, cultural, ecological, economic and technological aspects of sustainable development. These are studied from an interdisciplinary perspective that comprises the natural and social sciences. In an intensive two-year programme, students learn to critically apply scientific theories and methodologies in the areas of problem analysis, evaluation, and design. In addition, they are introduced to real-life strategies for intervention and will debate them as well as imagine alternative ones. The latter strategies include those needed to establish the interaction between science and society: trans-disciplinary research; drafting research impact pathways and other forms of participatory knowledge production. The programme devotes ample attention to the international dimension of sustainability issues, while catering also to regional and local dimensions.

We expect students who enroll in this programme to have a real interest in sustainable development issues from the local to the global level. Moreover, prospective students should be open to adopt an interdisciplinary perspective and be mindful of the pluralistic value context in which such approaches are developed and applied.

The programme consists of four interdisciplinary courses that are compulsory for all students, and four more specific tracks. The four general courses offer a comprehensive overview of different perspectives on sustainable development; approaches, tools and critiques to systems thinking in sustainability science; research design methods; and interaction with practitioners through a consultancy project.

The tracks offer a specialisation in a specific area of sustainable development, anchored in the expertise of the departments that jointly organise this programme. The four tracks are:

- *Environmental Change and Ecosystems*: Environmental Change and Ecosystems is a multidisciplinary natural science track focusing on the interaction between humans and the physical and biotic environment. The track brings together the fields of physical geography, hydrology, (landscape) ecology, mathematics, physics, and

¹ Kates, R.W. (2011). What kind of science is sustainability science? *PNAS* 108(49): 19449-19450.

chemistry. You will study changes in land use, the dispersal of substances (in water, soil, and air) and their impact on ecosystems, biodiversity and remediation options.

- *Energy and Materials*: Energy and Materials is a multidisciplinary natural and social sciences track that focuses on the analysis of energy and materials systems. Current systems are clearly unsustainable as they have a significant negative impact on the environment and are based on finite resources. In the track we study cleaner and renewable production options and a more efficient consumption of energy and materials needed for sustainable development. The focus of the track is both global and local, with examples and topics on global, European and national or provincial level. There is limited focus on specific challenges in developing countries.

- *Earth System Governance*: Earth System Governance is an interdisciplinary social science track focusing on the governance, policy, and politics of sustainability across all scales from local to global. The track examines actors, policies, and arrangements used to steer societies towards sustainability, spanning governments, businesses, and civil society. It also includes the performance of governance considering effectiveness, fairness, democratic legitimacy, and accountability. Ultimately, governance is focused on having a positive impact on sustainability issues such as climate change, biodiversity, agriculture, food, water, cities, material use, and many more. The track integrates knowledge from the fields of political science, policy studies, sociology, human geography, planning, economics, and law.

- *Politics, Ecology and Society*: Politics, Ecology and Society is an interdisciplinary social and natural sciences track focusing on the political, economic, cultural, material and social structures that underpin social and ecological injustices within and across global regions. This track emphasizes the co-constitution of ecological, social and political processes and addresses it by critically examining global socioecological interconnections and injustices, as well as interventions seeking to transform them. This track places emphasis on practical engagement, such as field work, and combines it with theoretically-informed analysis and empirical research, with insights from political ecology, anthropology, human geography, development studies, sociology, science and technology studies, ecology and environmental sciences.

The Master's degree programme Sustainable Development is organised by the department of Sustainable Development (Faculty of Geosciences), and also receives input from the departments of Human Geography and Spatial Planning, Earth Sciences and Physical Geography (also Faculty of Geosciences). Having earned a Master's degree, students can embark upon a PhD programme and further hone their academic skills, or access academic level positions outside the field of scientific research in consultancy, business, non-governmental organisations (NGOs) or policy roles, among others.

1.2 MISSION OF THE MASTER'S PROGRAMME

The aim of the Master's programme Sustainable Development is expressed in the following mission statement:

Educate scientists who will be able to make a substantial contribution in the transition and transformation to sustainable and just societies through their research and their professional skills.

Sustainable development requires a process of change in which different ecological, technological, economic, and social-cultural values and contestations around these values need to be accounted for, from the local to the global scale, and in the short and the long term. Academics play an important role in this process by asking questions, interrogating underlying assumptions, developing new knowledge, as well as integrating and applying existing knowledge. First of all, being curious about the world, asking questions about it, and developing new knowledge is fundamental for innovation and transformation. Second, integrating and applying the existing knowledge is needed to analyse, describe and explain sustainability issues and place these issues in their societal context. Third, knowledge integration plays a role in the generation, assessment,

and implementation of measures that enable transitions and transformations to sustainable societies. Developing these knowledge skills will allow graduates with a Master's degree in Sustainable Development to take various positions in research institutes, governments and inter-governmental organisations, businesses, and organisations in civil society.

1.3 RELATION BETWEEN THE MASTER'S PROGRAMME AND THE COPERNICUS INSTITUTE

The Master's programme is closely tied to the Copernicus Institute of Sustainable Development, which is affiliated with Utrecht University. The work of this research institute focuses on a wide range of issues related to sustainable development and innovation. The programme is connected with all major research themes of the institute. For more information on the research programme and its clusters of the Copernicus Institute, see: the [website](#).

1.4 COMPETENCE PROFILE AND OCCUPATIONAL PERSPECTIVES

The Master's programme prepares students for a PhD candidate position, as well as for employment in the private sector, consultancy firms, the public sector (national, regional, and local government), and NGOs.

This competence profile is achieved in the following ways:

- The programme devotes extensive attention to scientific theories (paradigms), theory building, theory testing and methodology.
- Students in the programme learn to apply and reflect upon the body of scientific instruments that is available for analysis, evaluation, and design in an intensive and critical manner. In addition, students develop a research attitude focused on accuracy, originality, critical thinking and creativity.
- The assignments give students the opportunity to learn how to work in interdisciplinary teams as well as individually.
- Students gain both a broad knowledge of sustainability approaches and specialised skills through their track specialisations.
- Students become acquainted with practical intervention strategies.
- Students write a Master's thesis that is intended to generate new scientific knowledge while addressing pressing societal challenges.

Career perspectives of our graduates are further described in section 3.9.

2 DEGREE QUALIFICATIONS, PROGRAMME AND TRACK

2.1 DEGREE QUALIFICATIONS

The following general qualifications apply to the programme Sustainable Development. Graduates can:

1. analyse challenges of sustainable development from both natural and social science perspectives
2. critically inquire, apply knowledge and research methods and propose interventions in broader contexts related to sustainable development
3. design and carry out scientific research into sustainable development in a creative and independent way
4. formulate fundamental critique on the scientific work of others and can engage in a scientific debate on the issue of sustainable development, based on specialised and broader academic knowledge as well as ethical considerations
5. apply knowledge and understanding in such a way that they demonstrate a professional approach to their work
6. communicate conclusions, as well as the knowledge, reasons and considerations underlying these conclusions, to an audience of specialists and non-specialist

2.2 PROGRAMME AND COURSE SCHEDULE 2023-2024

The programme consists of a general part, which is mandatory for all students, and of tracks, in which students specialise in a particular direction. The general programme is presented below (more specific programmes per track are given further down the text).

In the general part, the challenges of sustainable development are examined from various perspectives. Students become familiar with both natural science and social science approaches learning about feedbacks between natural and social systems and how to use indicators for sustainable development. Students are also trained to design research, and work in research teams where integration of knowledge and insights takes place aimed at analysing and solving real world sustainable development concerns in society.

The general part consists of the following mandatory courses (total 30 EC):

1. Perspectives on Sustainable Development (GEO4-2301)
2. Systems Thinking, Scenarios & Indicators for SD (GEO4-2331)
3. Research Design SD (GEO4-2314)
4. Consultancy Project SUSD and WSM (GEO4-2008)

In addition to the general courses each student pursues a specialisation track. The programme offers the following four tracks:

- Energy and Materials
- Environmental Change and Ecosystems
- Earth System Governance
- Politics, Ecology and Society

The tracks build on knowledge derived from various disciplines in the natural and social sciences. On these foundations interdisciplinary knowledge is built. Each track pays attention to different theoretical backgrounds, research methods and intervention methods. This is done in four mandatory courses per track (total 30 EC). Students can broaden or deepen that basis with elective courses (15 EC) that are part of the

other tracks (taking the prerequisite prior knowledge into account), or courses from other Master's programmes. The Board of Examiners must approve the choice of certain elective courses (see [Appendix 4.1](#)).

The programme culminates in a thesis of 45 EC. A research internship may be part of the final thesis project. After the thesis has been completed, students must present their research results to the faculty staff and students.

In addition to the Master's degree, SUSD-students can also obtain a Systems Profile certificate. Excellent students can apply for participation in the Young Innovators Programme ([see section 2.8](#)).

Table 1 Course calendar SD all tracks (cohort 2023)

Bold = mandatory SUSD
 Normal = mandatory track course
Italic = free elective

Year 1 (intake 2023)

Period 1	(A+B) Perspectives on Sustainable Development, GEO4-2301	EM: (C) Tools for E&M Analysis, GEO4-2326 ECE: (C) Global Environmental Change, GEO4-2310 ESG: (C) Foundations of ESG Research, GEO4-2306 PES: (C) Introduction to Political Ecology, GEO4-2344
Period 2	(C) Systems thinking, Scenarios & Indicators for SD, GEO4-2331	EM: (B) Squaring the Circular Economy, GEO4-2338 ECE: (D) Integrated Assessment of Climate Change, GEO4-2340 ESG: (D) Governance Theories, GEO4-2332 PES: (A+D) Natural Resource Management and Society, GEO4-2339
Period 3	(C) Research Design SD, GEO4-2314	EM: (B) Energy Supply Technologies, GEO4-2312 ECE: (B) Environmental Systems Analysis, GEO4-2303 ESG: (B) Research Strategies ESG, GEO4-2304 PES: (B) Research Methods for Politics, Ecology and Society, GEO4-2345
Period 4	(D) Consultancy Project SUSD and WSM, GEO4-2008	EM: (C) Policies for E&M Transitions, GEO4-2311 ECE: (B+C) Quantifying Ecosystem Resilience to Global Environmental Change, GEO4-2341 ESG: (C) Analysing Governance Practices, GEO4-2328 PES: (C) Social Innovation and Alternatives to Development, GEO4-2346

Year 2 (2024-25)

Period 1	Master's thesis SD, GEO4-2343 (45 EC) <i>Electives (15 EC)</i>
Period 2	
Period 3	

Period 4	
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Recommended electives do not need to be approved by the programme leader or the Board of Examiners. Some may have a limited number of places available. Please check before enrolling! For more recommended electives **see the academic progress report in OSIRIS**.

Possibly interesting recommended electives offered by the Copernicus Institute:

GEO4-2323: Environmental Ethics (1A)

GEO4-2009: Innovation and International Development (1A)

GEO4-2305: International Governance for SD (1B)GEO4-2522: Energy in the Built Environment (1B)

GEO4-6008: Sustainable Water Resources Management (1C)

GEO4-2010: Imagining the Future for Transformation (1C)

GEO4-2011: Data Analytics for Sustainability (2A+D)

GEO4-2005: Sustainable Food Systems (2C)

GEO4-2521: Bio-based Economy (3B)

GEO4-6007: Water Quality Management (3D)

2.3 TRACK ENERGY AND MATERIALS

The track Energy and Materials examines the production and consumption of energy and materials in society, and the possibilities for sustainable development within energy and material systems. One area of research concerns the description and explanation of historical developments; another looks towards the future and concerns possible technological and societal developments, including technological opportunities and policy development. To a large extent, this track makes use of a conceptual framework derived from the natural sciences, and also of knowledge and methods derived from the social sciences. Some courses build on specific foreknowledge. Students lacking this are responsible for acquiring this knowledge independently before entering such courses.

Graduates will be able to apply the knowledge, methods, and techniques of the natural sciences, and to a lesser extent those of the social sciences, when analysing energy systems and materials systems and the possibilities for a sustainable development of these systems. Furthermore, graduates will have insights in the importance of both the natural science and the social science aspects of sustainability issues and will have the skills needed to work in a multidisciplinary work environment.

The curriculum of the track Energy and Materials consists of the following elements:

Mandatory SUSU courses (75 EC):

- Perspectives on Sustainable Development (GEO4-2301) (7,5 EC)
- Systems Thinking, Scenarios & Indicators for SD (GEO4-2331) (7,5 EC)
- Research Design SD (GEO4-2314) (7,5 EC)
- Consultancy Project SUSU and WSM (GEO4-2008) (7,5 EC)
- Master's thesis SD (GEO4-2343) (45 EC)

Mandatory track courses (30 EC):

- Tools for Energy & Materials Analysis (GEO4-2326) (7,5 EC)
- Squaring the Circular Economy (GEO4-2338) (7,5 EC)
- Energy Supply Technologies (GEO4-2312) (7,5 EC)
- Policies for Energy & Materials Transitions (GEO4-2311) (7,5 EC)

Free elective courses (15 EC):

See paragraph 2.2 and your academic progress review in OSIRIS for recommended free electives

Table 2 Course calendar track E&M (cohort 2023)

Bold = mandatory SUSD course

Normal = mandatory track course

Year 1 (intake 2023)

Period 1	(A+B) Perspectives on Sustainable Development, GEO4-2301	(C) Tools for Energy & Materials Analysis, GEO4-2326
Period 2	(C) Systems thinking, Scenarios & Indicators for SD, GEO4-2331	(B) Squaring the Circular Economy, GEO4-2338
Period 3	(C) Research Design SD, GEO4-2314	(B) Energy Supply Technologies, GEO4-2312
Period 4	(D) Consultancy Project SUSD and WSM, GEO4-2008	(C) Policies for Energy and Materials Transitions, GEO4-2311

Year 2 (2024-2025)

Period 1/2/3/4	Electives (15 EC) Master's thesis SD, GEO4-2343 (45 EC)
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2.4 TRACK ENVIRONMENTAL CHANGE AND ECOSYSTEMS

The track Environmental Change and Ecosystems is concerned with the interaction between human activities and the quality of the physical and biotic environment. The multidisciplinary character of the programme appears from the integration of knowledge from the fields of physical geography, hydrology, landscape ecology, toxicology, mathematics, physics, and chemistry. Some of the relevant priority areas are the following: land use; dispersal of substances in water, soil, and air; impacts on ecosystems and biodiversity; possibilities for remediation; and the value assigned to the quality of nature and the environment. Some courses build on specific foreknowledge. Students lacking this are responsible for acquiring this knowledge independently before entering such courses.

Graduates will be able to apply the knowledge, methods, and techniques (for instance, mathematical simulation models) of the natural sciences in an effort to improve the quality of the environment and ecosystems by way of changes in human activities. Furthermore, graduates will have insight in the importance of conducting social science analyses of sustainability issues and will have the skills needed to work in a multidisciplinary team.

The curriculum of the track Environmental Change and Ecosystems consists of the following elements:

Mandatory SUSD courses (75 EC):

- Perspectives on Sustainable Development (GEO4-2301) (7,5 EC)
- Systems Thinking, Scenarios & Indicators for SD (GEO4-2331) (7,5 EC)
- Research Design SD (GEO4-2314) (7,5 EC)
- Consultancy Project SUSD and WSM (GEO4-2008) (7,5 EC)
- Master's thesis SD (GEO4-2343) (45 EC)

Mandatory track courses (30 EC):

- Global Environmental Change (GEO4-2310) (7,5 EC)
- Integrated Assessment of Climate Change (GEO4-2340) (7,5 EC)
- Environmental Systems Analysis (GEO4-2303) (7,5 EC)
- Quantifying Ecosystem Resilience to Global Environmental Change (GEO4-2341) (7,5 EC)

Free elective courses (15 EC):

See paragraph 2.2 and your academic progress review in OSIRIS for recommended free electives.

Table 3 Course calendar track ECE (cohort 2023)

Bold = mandatory SUSD course

Normal = mandatory track course

Year 1 (intake 2023)

Period 1	(A+B) Perspectives on Sustainable Development, GEO4-2301	(C) Global Environmental Change, GEO4-2310
Period 2	(C) Systems thinking, Scenarios & Indicators for SD, GEO4-2331	(D) Integrated Assessment of Climate Change, GEO4-2340
Period 3	(C) Research Design SD, GEO4-2314	(B) Environmental Systems Analysis, GEO4-2303
Period 4	(D) Consultancy Project SUSD and WSM, GEO4-2008	(B+C) Quantifying Ecosystem Resilience to Global Environmental Change, GEO4-2341

Year 2 (2024-25)

Period 1/2/3/4	Electives (15 EC) Master's thesis SD, GEO4-2343 (45 EC)
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2.5 TRACK EARTH SYSTEM GOVERNANCE

Earth System Governance is an interdisciplinary social science track focusing on the governance, policy, and politics of sustainability across all scales from local to global. The track examines actors, policies, and arrangements used to steer societies towards sustainability, spanning governments, businesses, and civil society. It also includes the performance of governance considering effectiveness, fairness, democratic legitimacy, and accountability. Ultimately, governance is focused on having a positive impact on sustainability issues such as climate change, biodiversity, agriculture, food, water, cities, material use, and many more. The track integrates knowledge from the fields of political science, policy studies, sociology, human geography, planning, economics, and law.

Graduates of this track will be equipped with research and intervention skills that they will need in their future professional career. More specifically, they will be able to apply paradigms, concepts and theories from the social sciences to analyse and explain issues of sustainable development and to design ecologically sensible and socially acceptable solutions. Furthermore, graduates will gain insights in the importance of conducting both social science and natural science analyses of sustainability issues and will have the skills needed to work in a multidisciplinary team.

The curriculum of the track Earth System Governance consists of the following elements:

Mandatory SUSD courses (75 EC):

- Perspectives on Sustainable Development (GEO4-2301) (7,5 EC)
- Systems Thinking, Scenarios & Indicators for SD (GEO4-2331) (7,5 EC)
- Research Design SD (GEO4-2314) (7,5 EC)
- Consultancy Project SUSD and WSM (GEO4-2008) (7,5 EC)
- Master's thesis SD (GEO4-2343) (45 EC)

Mandatory track courses (30 EC):

- Foundations of ESG Research (GEO4-2306) (7,5 EC)
- Governance Theories (GEO4-2332) (7,5 EC)

- Research Strategies ESG (GEO4-2304) (7,5 EC)
- Analysing Governance Practices (GEO4-2328) (7,5 EC)

Free elective courses (15 EC):

See paragraph 2.2 and your academic progress review in OSIRIS for recommended free electives.

Table 4 Course calendar track ESG (cohort 2023)

Bold = mandatory SUSD

Normal = mandatory track course

Year 1 (intake 2023)

Period 1	(A+B) Perspectives on Sustainable Development, GEO4-2301	(C) Foundations of ESG Research, GEO4-2306
Period 2	(C) Systems thinking, Scenarios & Indicators for SD (GEO4-2331)	(D) Governance Theories, GEO4-2332
Period 3	(C) Research Design SD, GEO4-2314	(B) Research Strategies ESG, GEO4-2304
Period 4	(D) Consultancy Project SUSD and WSM, GEO4-2008	(C) Analysing Governance Practices, GEO4-2328

Year 2 (2024-2025)

Period 1/2/3/4	Electives (15 EC) Master's thesis SD, GEO4-2343 (45 EC)
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2.6 TRACK POLITICS, ECOLOGY AND SOCIETY

Politics, Ecology and Society is an interdisciplinary social and natural sciences track focusing on the political, economic, cultural, material and social structures that underpin social and ecological injustices within and across global regions. This track emphasizes the co-constitution of ecological, social and political processes and addresses it by critically examining global socioecological interconnections and injustices, as well as interventions seeking to transform them. This track places emphasis on practical engagement, such as field work, and combines it with theoretically-informed analysis and empirical research, with insights from political ecology, anthropology, human geography, development studies, sociology, science and technology studies, ecology and environmental sciences. The curriculum of track Politics, Ecology and Society consists of the following elements:

Mandatory SUSD courses (75 EC):

- Perspectives on Sustainable Development (GEO4-2301) (7,5 EC)
- Systems thinking, Scenarios & Indicators for SD (GEO4-2331) (7,5 EC)
- Research Design SD (GEO4-2314) (7,5 EC)
- Consultancy Project SUSD and WSM (GEO4-2008) (7,5 EC)
- Master's thesis SD (GEO4-2343) (45 EC)

Mandatory track courses (30 EC):

- Introduction to Political Ecology (GEO4-2344) (7,5 EC)
- Natural Resource Management and Society (GEO4-2339) (7,5 EC)
- Research Methods for PES (GEO4-2345) (7,5 EC)
- Social Innovation and Alternatives to Development (GEO4-2346) (7,5 EC)

Free elective courses (15 EC):

See paragraph 2.2 and your academic progress review in OSIRIS for recommended free electives.

Table 5 Course calendar track PES (cohort 2023)

Bold = mandatory SUSD
 Normal = mandatory track course

Year 1 (intake 2023)

Period 1	(A+B) Perspectives on Sustainable Development, GEO4-2301	(C) Introduction to Political Ecology, GEO4-2344
Period 2	(C) Systems thinking, Scenarios & Indicators for SD, GEO4-2331	(A+D) Natural Resource Management and Society, GEO4-2339
Period 3	(C) Research Design SD, GEO4-2314	(B) Research Methods for PES, GEO4-2345
Period 4	(D) Consultancy Project SUSD and WSM, GEO4-2008	(C) Social Innovation and Alternatives to Development, GEO4-2346

Year 2 (2024-2025)

Period 1/2/3/4	Electives (15 EC) Master's thesis SD, GEO4-2343 (45 EC)
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2.7 ELECTIVE COURSES

For the acknowledgment of certain elective courses the student must obtain approval of the Board of Examiners in advance; the full rules and procedure are described in Appendix 4.1 of this course catalogue. A list of possibly interesting electives can be found in the student's academic progress review in OSIRIS and in paragraph 2.2 of this course guide.

In general, students are recommended to take elective courses from the other SUSD tracks or from one of the other Master's programmes offered by the department: Innovation Sciences (IS), Sustainable Business & Innovation (SBI), Water Science and Management (WSM) or Energy Science (ES) although, of course, only if they meet the course's entrance requirements.

Elective courses can also be followed at other universities. Please note that students with non-EEA nationalities may have to pay a steep fee in order to take elective courses at another (Dutch) university. This fee cannot be paid for or reimbursed by Utrecht University.

The Babel Talen Institute offers a short course in English for Academic Purposes. This course aims to practice the writing and presenting skills students need in their Master's programme. It does not offer any credits but you can take the course outside your SUSD programme, at your own expense. Please see the [website](#) for more details.

2.8 EXTRA-CURRICULAR PROGRAMMES

2.8.1 PROFILE COMPLEX SYSTEMS

The world around us is becoming more and more complex. A small change in one variable can have significant and unexpected impacts, resulting in e.g. traffic jams, a sudden epidemic or a financial crisis. Complex Systems

are often the driving force behind these phenomena. As a whole they possess characteristics which cannot be deducted simply from its individual parts, but only from the way in which they interact. Predicting a traffic jam, for example, is hardly possible by only studying the behavior of individual drivers. The whole is bigger than the sum of its parts.

The profile Complex Systems is an interdisciplinary profile for ambitious students from different Master's programmes, who want to work on modelling solutions within the field of Complex Systems. The profile gives you the opportunity to broaden your view and knowledge from an interdisciplinary angle and widens your opportunities for further development. It prepares you for a career in interdisciplinary fields in both business and science.

This profile can be fitted into your Master's programme, 30 EC in total. The total number of EC will NOT be increased by completing the Master profile Complex Systems.

For further information and to apply for this Master profile please contact the coordinator Complex Systems, [dr. Arie Staal](#). Also, see the [website](#).

2.8.2 YOUNG INNOVATORS PROGRAMME

Are you curious, innovatory, entrepreneurial, intellectually versatile and socially responsible? Do you want to get more out of your Master's programme and learn to work across disciplinary boundaries? Do you want to do both research and actively (co-)create innovative initiatives that will make the world a better place? And do you want to take ownership over your own learning process? Then the Young Innovators programme might be of interest to you!

As a Young Innovator you will be working on the three pillars the program is built upon: personal leadership, social innovation and being an impact community. One of the ways in which this takes place is by working on current societal challenges for at least the first half year, such as sustainable housing for refugees, food waste, off-label drugs, transition labs, how to make a city safer by art, accessible medicine and more. Together with an interdisciplinary team of students and inspiring sessions with coaches and experts you go through the journey of making this world a better place!

The programme is an English selective 15 EC honours course at graduate level, to be taken on top of any Master's programme. The programme is accessible to all UU Master's students.

If you want to know more or would like to apply, please visit the [website](#).

2.8.3 OTHER MASTER'S HONOURS PROGRAMMES

Other university-wide Honours programmes are:

- Graduate Honours Interdisciplinary Seminars (GHIS)
- Leadership Programme
- UniCity

See the [Master's Honours website](#) for more information.

2.9 MASTER'S THESIS

The Master's thesis ([GEO4-2343](#)) is a research project in which the student will learn to conduct independent research, whereby new methods are developed and/or applied or existing methods are applied to a new

problem. The research should be relevant from both a scientific point of view (it should expand the body of scientific knowledge) and a societal point of view (it should produce knowledge that can contribute to a better understanding or the solution of a problem). In total, the Master's thesis research accounts for 45 EC.

Information on procedures, entrance requirements, place of research, output etc. can be found in the course manual Master's thesis Sustainable Development, located on the Blackboard Community Sustainable Development.

The Master's thesis may be combined with an internship, as long as the internship doesn't interfere with the student's ability to execute their thesis research independently. Internship possibilities may be found on the Blackboard Community Sustainable Development. The Faculty of Geosciences has its own digital internships [database](#).

2.10 ENTRANCE REQUIREMENTS, OTHER RESTRICTIONS AND CONVERSION OF FORMER COURSES SUS D

Some courses in the SUS D programme require prior knowledge, to be gained by passing or at least attending certain previous SUS D-courses. In the tables on the next pages you will find which courses carry which entrance requirements or recommended prerequisites or may have other entrance restrictions.

In case of a discrepancy between the entrance requirements and/or recommended pre-requisites and/or other restrictions mentioned in this course catalogue and the ones mentioned in the electronic UU course offerings database OSIRIS, the entrance requirements and/or recommended pre-requisites and/or other restrictions mentioned in the tables below are leading.

Table 5 Entrance requirements SUS D

Course	Entrance requirement
Sustainable Food Systems (GEO4-2005)	Letter of acceptance of a Master's programme
Consultancy Project SUS D and WSM (GEO4-2008)	Letter of acceptance MSc Sustainable Development or MSc Water Science & Management. - At least 22,5 EC gained in the master SUS D or WSM, including Perspectives on Sustainable Development (GEO4-2301) or Sustainable Water Resources Management (GEO4-6008).
Innovation and International Development (GEO4-2009)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Imagining the Future for Transformation (GEO4-2010)	Letter of acceptance of a Master's programme
Data Analytics for Sustainability (GEO4-2011)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Perspectives on Sustainable Development (GEO4-2301)	Letter of acceptance MSc Sustainable Development
Environmental Systems Analysis (GEO4-2303)	Recommended prerequisites: For students from other programmes: mathematics and modelling, level 1; e.g. Wiskunde & Systemanalyse (GEO1-

	2202), please contact the coordinator before enrolment in Osiris.
Research Strategies ESG (GEO4-2304)	Letter of acceptance MSc Sustainable Development. Actively participated in Foundations of ESG Research (GEO4-2306) and Governance Theories (GEO4-2332) Recommended prerequisites: Basic research methodology skills. Knowledge of the main literatures on environmental governance.
International Governance for SD (GEO4-2305)	Letter of acceptance of a Master's programme (social science background). Recommended prerequisites: Knowledge on policy analysis and governance theories.
Foundations of Earth System Governance Research (GEO4-2306)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Global Environmental Change (GEO4-2310)	Letter of acceptance of a Master's programme
Policies for Energy & Materials Transitions (GEO4-2311)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Energy Science or MSc Sustainable Business & Innovation or MSc Water Science and Management or MSc Earth Sciences. Recommended prerequisites: Tools for Energy & Materials Analysis(GEO4-2326)
Energy Supply Technologies (GEO4-2312)	Recommended prerequisites: Applied Thermodynamics (GEO2-2212), Energy Analysis (GEO3-2223) or Tools for Energy & Materials Analysis (GEO4-2326) or equivalent courses. <i>This course is not available to Energy Science students.</i>
Research Design SD (GEO4-2314)	Letter of acceptance MSc Sustainable Development
Tailor-made course SUSD (GEO4-2320)	- Letter of acceptance MSc Sustainable Development, and - At least 45 EC passed within the programme Students in the SUSD-Joint Programme will need to have passed 45 EC, including one of the mobility tracks.
Master's Thesis SD (GEO4-2321)	- Only for cohort 2021 and earlier Letter of acceptance MSc Sustainable Development, and - At least 60 EC passed within the program, including: <ul style="list-style-type: none"> • Perspectives on SD (GEO4-2301) • Systems Thinking, Scenarios & Indicators (GEO4-2331) • Research Design SD (GEO4-2314)

	<p><i>And:</i></p> <ul style="list-style-type: none"> - at least two track-specific courses of which 1 methods course (at least 15 EC in total). These are specified per track: <p><u>For track E&M:</u></p> <ul style="list-style-type: none"> - Tools for E&M Analysis (GEO4-2326) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Energy Supply Technologies (GEO4-2312) - Policies for E&M Transitions (GEO4-2311) <p><u>For track ECE:</u></p> <ul style="list-style-type: none"> - Environmental Systems Analysis (GEO4-2303), and - Global Environmental Change (GEO4-2310) <p><u>For track ESG:</u></p> <ul style="list-style-type: none"> - Research Strategies ESG (GEO4-2304) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Foundations of ESG Research (GEO4-2306) - Governance theories (GEO4-2332) <p><u>For track ID:</u></p> <ul style="list-style-type: none"> - Advanced M&T Development Studies (GEO4-3518), or Research Methods for PES (GEO4-2345) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Development Themes (GEO4-3510) - Development Theories (GEO4-3505) <p>Students in the SUSD-Joint Programme will need to have passed 60 EC, including one of the mobility tracks.</p>
Environmental Ethics & Sustainable Development (GEO4-2323)	Letter of acceptance of a Master's programme
Tools for Energy & Materials Analysis (GEO4-2326)	<p>Recommended prerequisites: Energy Analysis (GEO3-2223) or similar course. <i>This course is not available to Energy Science students.</i></p>
Analysing Governance Practices (GEO4-2328)	Letter of acceptance MSc Sustainable Development. Actively participated in Foundations of ESG Research (GEO4-2306) and Governance Theories (GEO4-2332)
Systems thinking, Scenarios & Indicators for SD (GEO4-2331)	<p>Letter of acceptance MSc Sustainable Development or MSc Water Science and Management or profile Complex Systems.</p> <p>Recommended prerequisites: Perspectives on Sustainable Development (GEO4-2301), or Sustainable Water Resources Management (GEO4-6008)</p>

Governance Theories (GEO4-2332)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation.
Squaring the Circular Economy (GEO4-2338)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management. Recommended prerequisites: Basic background in natural sciences.
Natural Resource Management and Society (GEO4-2339)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management or MSc Environmental Biology.
Integrated Assessment of Climate Change (GEO4-2340)	Letter of acceptance of a Master's programme
Quantifying Ecosystem Resilience to Global Environmental Change (GEO4-2341)	Letter of acceptance MSc Sustainable Development Recommended prerequisite: Passed Global Environmental Change (GEO4-2310)
Master's thesis (GEO4-2343)	<p>- Only for cohort 2022</p> <p>- Letter of acceptance MSc Sustainable Development, and</p> <p>- At least 60 EC passed within the program, including:</p> <ul style="list-style-type: none"> • Perspectives on SD (GEO4-2301) • Systems Thinking, Scenarios & Indicators (GEO4-2331) • Research Design SD (GEO4-2314) <p><i>And:</i></p> <p>- at least two track-specific courses of which 1 methods course (at least 15 EC in total). These are specified per track:</p> <p><u>For track E&M:</u></p> <ul style="list-style-type: none"> - Tools for E&M Analysis (GEO4-2326) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Energy Supply Technologies (GEO4-2312) - Policies for E&M Transitions (GEO4-2311) <p><u>For track ECE:</u></p> <ul style="list-style-type: none"> - Environmental Systems Analysis (GEO4-2303), and - Global Environmental Change (GEO4-2310) <p><u>For track ESG:</u></p> <ul style="list-style-type: none"> - Research Strategies ESG (GEO4-2304) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Foundations of ESG Research (GEO4-2306) - Governance theories (GEO4-2332)

	<p><u>For track ID:</u></p> <ul style="list-style-type: none"> - Advanced M&T Development Studies (GEO4-3518), or Research Methods for PES (GEO4-2345) and - Development Themes (GEO4-3510)
Introduction to Political Ecology, GEO4-2344	Letter of acceptance MSc Sustainable Development
Research Methods for Politics, Ecology and Society, GEO4-2345	Letter of acceptance MSc Sustainable Development Actively participated in Introduction to Political Ecology (GEO4-2344) and Natural Resource Management and Society (GEO4-2339)
Social Innovation and Alternatives to Development, GEO4-2346	Letter of acceptance MSc Sustainable Development Actively participated in Introduction to Political Ecology (GEO4-2344)
Techniques of Futuring (GEO4-5501)	Letter of acceptance of a Master's programme

Table 6 Other restrictions courses SD

Period:	Course	Maximum	Other restrictions
2	GEO4-2005: Sustainable Food Systems	80	Open access
4	GEO4-2008: Consultancy Project SUSD and WSM	-	Only open for SUSD and WSM
1	GEO4-2009: Innovation and International Development	-	Only open for SUSD, IS, ES, WSM and SBI
1	GEO4-2010: Imagining the Future for Transformation	30	Open access
2	GEO4-2011: Data Analytics for Sustainability	-	Only open for SUSD, IS, ES, WSM and SBI
1	GEO4-2301: Perspectives on Sustainable Development	-	Only open for SUSD
3	GEO4-2303: Environmental Systems Analysis	-	Open access
3	GEO4-2304: Research Strategies ESG	-	Only open for SUSD
1	GEO4-2305: International Governance for SD	-	Open access (only social sciences)
1	GEO4-2306: Foundations of ESG Research	-	Only open for SUSD, IS, ES, WSM and SBI.
1	GEO4-2310: Global Environmental Change	90	Open access
4	GEO4-2311: Policies for Energy & Mat. Transitions	-	Only open for SUSD, IS, ES, WSM, SBI and MSc Earth Sciences
3	GEO4-2312: Energy Supply Technologies	-	Not for Energy Science
3	GEO4-2314: Research Design SD	-	Only open for SUSD
1234	GEO4-2320: Tailor made course SUSD	-	Only open for SUSD
1234	GEO4-2321: Master's thesis SUSD	-	Only open for SUSD, cohort 2021 and earlier
1234	GEO4-2322: thesis extension SD	-	Only open for SUSD, cohort 2021 and earlier
1	GEO4-2323: Env. Ethics	-	Open access
1	GEO4-2326: Tools for E&M Analysis	-	Not for Energy Science
4	GEO4-2328: Analysing Governance Practices	-	Only open for SUSD

2	GEO4-2331: Systems thinking, Scenarios & Indicators for SD	-	Only open for SUSU and WSM
2	GEO4-2332: Governance Theories	-	Only open for SUSU, IS and SBI
2	GEO4-2338: Squaring the Circular Economy	-	Only open for SUSU, IS, ES, WSM and SBI
2	GEO4-2339: Natural Resource Management and Society	-	Only open for SUSU, IS, ES, WSM, SBI and MSc Environmental Biology
2	GEO4-2340: Integrated Assessment of Climate Change	-	Open access
4	GEO4-2341: Quantifying Ecosystem Resilience to Global Environmental Change	-	Only open for SUSU
1234	GEO4-2343: Master's thesis SUSU	-	Only open for SUSU, cohort 2022
1	GEO4-2344: Introduction to Political Ecology	-	Only open for SUSU
3	GEO4-2345: Research Methods for Politics, Ecology and Society	-	Only open for SUSU
4	GEO4-2346: Social Innovation and Alternatives to Development	-	Only open for SUSU
2	GEO4-5501: Techniques of Futuring	30	Open access

Table 7 Exclusions Master's courses

Students that passed or have to take the course:	... are not allowed to take the course:
GEO4-2252	GEO4-2007
GEO4-2605	GEO4-2007
GEO4-2604	GEO4-2611 / GEO4-2610
GEO4-2603	GEO4-2610
GEO4-2302	GEO4-2008
GEO4-3518	GEO4-2345
GEO4-3521	GEO4-2345
GEO4-2321	GEO4-2343
GEO4-2322	GEO4-2343

Table 8 Conversion of former courses SUSU

Old course	New course 2023-2024
Transdisciplinary Case Study (GEO4-2302)	Consultancy Project SUSU and WSM (GEO4-2008)
Field Research Practical (GEO4-2342)	Individual arrangement; contact ID track coordinator
Advanced M&T for SD-ID (GEO4-3521)	Research Methods for Politics, Ecology and Society (GEO4-2345)

Activating education

The educational philosophy of the Master's programme is problem-oriented, which calls for a proactive teaching format. Problem-oriented education takes a concrete problem as the point of departure for the learning process. The acquisition of knowledge and skills is related to the analysis and/or solution of the problem in question. "Activating education" is a form of teaching whereby the students themselves are largely in control of the learning process. They take their education into their own hands by doing individual or group assignments, taking part in debates or simulation games, and applying the methods they have learned. A proactive educational format calls for intensive back-up on the part of the instructor in the form of study guidelines, instructions, manuals, and feedback on the students' performance. The students mainly work in small groups.

Active input of instructors and students

The objective of the Master's programme is to offer an inspiring and high-quality environment for study. The goal is to work together with the student to maximise the transfer of knowledge. All of the instructors and support staff involved in the programme operate on the assumption that if the student is fully dedicated to the study, they can offer the greatest possible guarantee that the student will pass all of the individual courses.

Required attendance

For various parts of the programme, attendance is mandatory. This applies to working groups, field trips, simulation games, etc. The course manual for each course stipulates exactly which sessions the student is required to attend. As stated in [article 4.4](#) of the Education and Examination regulations, exceptions to mandatory attendance can only be made if students can prove that their absence is due to reasons beyond their control (special circumstances due to e.g. illness or family circumstances).

Report absence in time

If students cannot attend a mandatory meeting, they must register their absence via this [form](#) *prior* to the meeting, and by 9.30 a.m. at the latest.

Absence or illness does not relieve you of your obligation to perform to the best of your ability. In other words, if you have not been able to complete a paper or give a presentation, contact the Course Coordinator to find out if it can be rescheduled for another date.

If the quality or quantity of your attendance has been insufficient, the Course Coordinator may exclude you from the remainder or part of the course.

Testing

There are multiple points during a course in which the student is tested. Thus, the final evaluation for a course does not depend solely on a final exam. As a rule, there are opportunities for feedback and improvement, depending on how the course is designed. These opportunities are set forth in the course manual. If during the course the student satisfies all the effort requirements and does not receive a satisfactory grade but does receive a final grade of at least 4,00 before rounding, they will be given one opportunity to take a supplementary test. To prevent freeriding behaviour in group assignments, it may be demanded that a sufficient grade (at least 5.50) is scored for certain individual, partial tests. The specifics can be found in the Education and Examination Regulations and the course manuals.

Plagiarism, Code of Originality

Sustainable Development is a research oriented Master's programme, which means that its students are taught how to perform scientific research and which demands their approach and results need to meet. Since

science is about developing new knowledge, in all phases of the Master's programme, much attention is paid to the originality of the students' achievements, for instance with the aid of advanced software. All scientific research, including that of a student, builds on the results of the work of other researchers, either in positive or in negative sense. Those other researchers deserve the credits for their work, in the form of a correct acknowledgement.

In short: quoting is allowed (and even necessary), but copying work from others (including AI software) and presenting it as if it were one's own, is plagiarism: a huge sin in science, and therefore students have to sign a Statement of Originality when they submit the Master's thesis. Students who plagiarise, run tremendous risks: in the worst case scenario they are expelled from the programme for a year. The Education and Examination Regulations of the programme lists the sanctions with which a student who is caught plagiarising will be confronted.

3.2 STUDY MANAGEMENT AND SUPERVISION

3.2.1 INTRODUCTION FOR NEW STUDENTS

There will be an [introduction](#) for Master novices in the first week of their first semester, organised by SUSD and its study association Storm. Both social issues and general information will be presented during this introduction. Its objective is to help new students feel at home at the Master's programme SUSD and the faculty, as soon as possible. Focus will be on meeting your fellow students, getting to know the SUSD-programme itself, its professors, mutual rights and obligations, information desks and the buildings where you will spend much of your time in the next couple of years.

3.2.2 STUDY PLANNING AND ADVICE

Four individuals play a key role in planning and supervising a student's study: the [programme leader](#) (dr. Frank van Laerhoven), your [track coordinator](#) and the [Study Advisors](#) (drs. Pieter Louwman and Sacha Handgraaf MSc).

The coordination between the common SD courses and between the four tracks is done by the programme leader. Naturally, you may contact the programme leader, but usually the professor of the course, the track coordinator or the Study Advisors will be able to help you.

The track coordinators advise their students on the programme they will be taking and the choices that can be made within that programme. These choices pertain to elective courses and options for internships and thesis research, for instance.

During your entire programme, you can go to the Study Advisors, drs. Pieter Louwman and Sacha Handgraaf MSc, for neutral and confidential advice on everything that is related to your studies. This can be on issues that are directly study-related, for example study planning, study delay, electives, dissatisfaction with the programme, or a potential conflict with a teacher or supervisor. But you can also discuss more personal issues that might be of influence on your progress, such as illness, disability, pregnancy, family circumstances, top-class sports, motivation issues, et cetera.

When necessary, the Study Advisors can refer you to a Student Counsellor, Student Psychologist, or for example a study skills class.

In the unfortunate situation that you expect to suffer study delay due to personal circumstances, it is important to contact one of the Study Advisors as early as possible. Together you can discuss how you could deal with these circumstances and perhaps the programme could offer you a concession (e.g. extra time for an exam or paper).

The contact information of the Study Advisors can be found on the [website of the master's programme](#). The Study Advisors are a member of the Dutch National Society of Study Advisors and work according to the code of conduct of this professional society, see the [website](#) for details.

3.3 COURSE ENROLMENT AND AUTOMATIC GRADUATION

3.3.1 SEMESTERS AND BLOCKS

Classes take place during two semesters, each of which can be divided into two blocks, or periods, of 9 or 10 weeks. In [Appendix 4.4 and 4.5](#) you will find the start and end dates of each block for this academic year.

3.3.2 TIMESLOTS

At Utrecht University a so-called timeslot model is used to schedule courses to fit into fixed parts of the week. Using this model prevents overlap in a schedule. In this way it is easy to see if two courses can be taken in the same period.

The Utrecht University timeslot model consists of five slots (A, B, C, D, E).

Timeslot A = Monday morning and Wednesday morning

Timeslot B = Tuesday morning and Thursday afternoon

Timeslot C = Monday afternoon and Thursday morning

Timeslot D = Wednesday afternoon and Friday

Timeslot E = Monday evening until Friday evening

Morning = 09.00-12.45 hours, afternoon = 13.15-19.00 hours, evening = 18.00-21.45 hours.

Periods and timeslots have been put into the course schedule (§ 3.12). Changes to the course schedule are still possible. The final scheduling (time and lecture room) of each course can be found four weeks in advance in [MyTimetable](#) (pc) or the [MyUU app](#) (smartphone/tablet). Also check the Blackboard e-learning environment of your course for the latest changes in the course programme.

3.3.3 COURSE ENROLMENT

In order to participate in a course, you need to be enrolled for it: if you are not, you will not have access to the course and its supporting facilities such as Blackboard; neither will results be registered. No enrolment = no participation = no result.

As a student, **course enrolment is your own responsibility!** You decide which courses (elective and mandatory) you want to take in each block. Keep in mind possible entrance requirements to a course; students that do not adhere to entrance requirements cannot enroll for the course and/or will be removed from the course.

Course enrolment is **only possible via OSIRIS**, and **only within the official enrolment periods**, which usually fall in the beginning of the previous block (for the dates of the Faculty of Geosciences, please see [Appendix 4.5](#)). Students that enroll on time are generally secured of a place in the course; however, courses that have a limited capacity have certain placement rules. Just before the start of the block, there are 2 days for late enrolment, in case you want to switch courses. Please note: this is only possible for courses that are not full yet; participation is therefore not guaranteed.

If you want to enroll for a course outside the Faculty of Geosciences, there could be different enrolment dates; at some Faculties, students enroll only once per semester.

Each period you can enroll for a maximum of two courses (15 EC) of the Faculty of Geosciences via OSIRIS (code GEO*-*). Any student that wants to take a third course, needs permission of the programme. If the 3rd

course is a course of one of the Master's programmes of the Copernicus Institute, you can fill out [a digital form](#).

Please note:

This enrolment form needs to be submitted during the regular enrolment period. **After the regular enrolment period and during late enrolment periods, no requests for taking a 3rd course will be dealt with** and therefore they will always be denied. You have to be enrolled for your other courses in OSIRIS before submitting your request for an additional course.

- The additional course should be a course from the Copernicus Institute.
- Students are not allowed to participate in more than one course in the same timeslot.
- Enrolment in an additional course may be declined by the Director of Education in case of insufficient study progress and/or insufficient capacity for a course.

Only as an exception and based on sufficiently important reasons will the programme allow a student to take three courses in one period. A request for taking a 3rd course will need to address the criteria mentioned below and these will be checked:

- Motivation: what is the student's motivation?
- Circumstances: are there any special, personal circumstances?
- Urgency: is it, at this point in time, necessary that the student takes three courses at once?
- Feasibility: can the student handle taking three courses at the same time? The following issues will be looked at in order to check this criterion:
 - o Study progress.
 - o Study results so far.
 - o Has the student taken three courses before and if so, were they all completed successfully?
- Is the Master's thesis one of the three courses the student wishes to take? If this is the case, the request will not be granted.
- Timeslot: if the 3rd course falls in the same timeslot as any of the other courses you will be taking, the request for a 3rd course will never be granted.
- Entry requirements: does the student fulfill the entry requirements of the 3rd course?

Students who do not adhere to the enrolment periods can only under very special circumstances be placed on a course after permission from the Student Affairs Office, which can be contacted via studentaffairs.geo@uu.nl. It is important that students always include their student number when communicating with the Student Affairs Office. The Student Affairs Office (NOT the lecturer of the course!) decides whether a reason for not enrolling during the enrolment period is valid. If the Student Affairs Office decides a student does not have a valid reason, this student will not be able to attend the course and no course results will be registered. In other words: enroll early, *as early as possible*, for the courses that you want to take in the next block! This also applies to the obligatory courses!

3.3.4 AUTOMATIC GRADUATION

When you are due to finish your programme, you will receive a message from the student administration about your graduation. After it has been verified that you have fulfilled all requirements of your programme, the Board of Examiners will be asked to judge your file. Please note: in order to graduate, you need to have fulfilled all requirements: all grades are known and registered in OSIRIS, you have paid all tuition fees, and you have uploaded your thesis to OSIRIS (after your thesis has been approved, it has to be uploaded into the thesis archive). Within one month after the grade has been registered in OSIRIS, you will receive a request by email to upload the reviewed thesis (in PDF format) through OSIRIS Case for the purpose of the thesis archive. The thesis archive is only accessible to employees.

Under certain conditions, it is possible to postpone your graduation, see article 6.1.6 of the [Education and Examination Regulations](#).

In order to actually receive your degree certificate or to pick it up at the Student Affairs office, you need to fill out an exam-registration form. If you want to attend a graduation ceremony, strict deadlines regarding registration and handing in of any documents will be maintained.

Automatic graduation does not mean you will be de-registered automatically from the programme. You will need to take care of this yourself and this cannot be done until you have received formal confirmation of your graduation from the Board of Examiners.

3.4 MYTIMETABLE AND MYUU APP

Utrecht University has two main channels that allow you to look into the schedule of your course. The schedules are published on those channels four weeks before the start of the course. Along with viewing the complete schedule of your courses it is also possible to check the schedule of your own group, as soon as the lecturer informed you on the division of the groups. You can log in with your Solis-ID and password.

You can make use of [MyTimetable](#) in your browser. Along with a more clear representation of the schedule, it is also possible to synchronise your own schedule with your diary.

On your smartphone you can use the [MyUU-app](#). Download this application and always have your schedules and grades from Osiris at hand. The MyUU-app is available for Android and iOS.

3.5 STUDY ABROAD

Studying abroad means broadening your horizon, meeting new people, exploring different cultures, and expanding your field of study. If you are interested in going abroad there are many possibilities. You can follow courses, do an internship or conduct research. Make use of what the university in general, but the Faculty of Geosciences in particular, has to offer you.

A lot to organise?!

Don't worry, just make sure to start planning your period abroad in time. Do you want to study abroad? Start via the International Office [Online](#).

Answer these questions:

- Where would you like to go to?
- What do you want to do?
- Does this university have an agreement with UU?
- Which courses would you like to attend?
- When would you like to go?

Once you have found an answer to these questions, contact your Study Advisor to connect your period abroad to your study plan in Utrecht. Please ask also permission from your Master's programme leader.

After you have consulted with your Study Advisor, The International Office of Geosciences is there to guide you through the process. Please click for [opening hours](#). It is also possible to make an appointment by email: international.geo@uu.nl. Besides, please visit our study association [EGEA](#) (Princetonplein 5; by appointment only). EGEA members generally have a lot of experience with studying abroad. They can help you out with a lot of practical matters (such as housing, experiences and tips & tricks). In October several orientation meetings take place, organised by the International Office. For more information or dates please look at this [website](#).

Practical matters

Once you've decided to study abroad, you can apply for an exchange in OSIRIS. You have to choose a top 3 of favorite universities. After selection, you will be nominated to the host university and you will receive an invitation to apply at this university. Please do keep in mind the deadlines for application! More information about how to apply and which deadline to bear in mind can be found on the [website](#). For faculty destinations, go to destinations and select Geosciences. For the Faculty International Office website, look [here](#)

Good to know

- Eligible for studying abroad during their master are all students with formal permission from their track coordinator (in case of taking courses at/being enrolled at a foreign university) or thesis supervisor (in case of thesis research abroad); see also 3.5.1. To obtain permission please use the '[study plan for studying abroad](#)'.
- After your track coordinator or thesis supervisor has signed the study plan, upload it in OSIRIS. Credits obtained at partner universities can quite often easily be transferred to your academic record in Utrecht: study abroad doesn't necessarily cause delay in your programme! It is necessary to request permission from the Board of Examiners to follow these subjects. You can ask for permission via OSIRIS Cases.
- If your destination is within Europe, either for courses (exchange) or an internship, you are eligible for an ERASMUS grant. Monthly financial support to make your study abroad easier than it already is. [More information](#)
- If your destination is outside Europe, please have a look at [here](#) and find out if you are eligible for the options mentioned.

If you're going abroad, you'd better put your public transport (OV) student chip-card on hold (public transport card for Dutch students). By doing this, you can apply for a monthly travel allowance. Forms for this allowance are to be signed by the Student Affairs office/International Office

3.5.1 GOING ABROAD: APPLY IN OSIRIS

If you go abroad for courses, an internship or thesis research it is mandatory to apply for it in Osiris.

- Go to [OSIRIS Student](#)
- Click on the 'Stay Abroad' tab*.
- Click on 'New request' (bottom left).
- Select the correct application request: 'Stay abroad other'.
- Fill out the form and upload your approval. In case of taking courses abroad (and being enrolled with a foreign university), request approval from the track coordinator (who needs to sign the form). In case you go abroad to execute (part of) your thesis project (and you are not enrolled at a foreign university), ask formal approval from your thesis supervisor (in this case an email suffices).
- Click on 'Submit'.

*A new window will open in the old OSIRIS student lay-out. In this window, please click on 'stay abroad' again. You may have to log in again in case your session has expired.

3.6 STUDENT AFFAIRS OFFICE GEOSCIENCES AND STUDENT SERVICES

The [Student Affairs Office Geosciences](#) is the primary point of contact for students in the Faculty of Geosciences. It provides students with general information and answers questions about topics such as enrolment for courses, course timetables, examinations, grades and credits.

Address

Victor J. Koningsberger Building

Budapestlaan 4a-b, Utrecht

Opening hours:

[Student Affairs Office Geosciences](#)

The opening hours may be limited during academic holidays

Phone number

+31 30 253 9559

Email:

studentaffairs.geo@uu.nl

[Student Services](#) may be contacted for information on a wide range of issues relating to studying and student life. These include admission, application and enrolment, tuition fees, financial assistance, working while studying, insurance, facilities for outstanding student athletes, student housing, student organisations and studying with a disability or chronic illness.

Address

Heidelberglaan 6, Utrecht

P.O. Box 80125, 3508 TC Utrecht, The Netherlands

Opening hours:

[Student Services](#)

The opening hours may be limited during academic holidays

E-mail:

Studentservices@uu.nl

For questions about ICT, please contact the Service Desk by email: servicedesk@uu.nl.

3.7 RESPONSIBILITY FOR THE PROGRAMME

Board of Studies

Within the Utrecht Graduate Division (UGD) the Master's programme Sustainable Development is part of the Graduate School of Geosciences, to which all Master students and PhD-students of the Faculty of Geosciences belong. The School supervises the quality of the programme and the admission of its students. All Directors of Education and Directors of Research of the Faculty of Geosciences are members of the Graduate Board of Studies, as well as a PhD student and a student from one of the MSc programmes of the Faculty. Chairman is the Dean of the Faculty, prof. dr. Wilco Hazeleger.

Master Education committee

This is a joint committee of chosen students and lecturers appointed by the dean to advise on the rules on teaching and examination and its implementation and about other matters concerning the study programmes. Its secretary is [Ms. Jantien Minderhoud MA](#). [More information](#)

Board of Examiners

The Board of Examiners is responsible for the examination of students. The Board of Examiners will determine the examination results as soon as the student has submitted sufficient proof of the tests taken. This Board also decides about deviations (e.g. exemptions) in the programme and the approval of certain elective courses

(see appendix 4.1 of this catalogue). Requests about exemptions, elective courses or other issues for the Board of Examiners, can be handed in via OSIRIS Case.

In 2023-2024 the Board of Examiners consists of:

- Prof. dr. M. Rietkerk (chair)
- Prof. dr. M. Gibescu
- Prof. dr. H. Runhaar
- Prof. dr. F. Avelino

The secretary to the Board of Examiners can be reached via [email](#).

Teaching Institute

The Teaching Institute of the Copernicus Institute of Sustainable Development is responsible for the organisation, coordination and quality assurance of the educational elements of the various courses offered by the department. The Director of Education, prof. dr. Karin Rebel, is the Teaching Institute's head and is assisted by a management team, which includes the programme leaders of the Bachelor's and Master's programmes. The programme's leader, [dr. Frank van Laerhoven](#) is responsible for the management of the programme Sustainable Development.

Complaints

If you have a complaint or a suggestion, there are various courses of action available. You may opt for an informal approach: finding out whether the faculty Student Services can deal with your complaint, suggestion or comment about education and related issues. If this is not possible in the short term, it will ensure that your complaint is passed on to the appropriate person. You can also approach the person who caused the problem and attempt to reach an amicable solution with them.

If you consider the complaint to be serious enough, or if it has not been solved to your satisfaction, you can submit a formal complaint. Formal complaints are submitted using the [digital complaints form](#). Your complaint will be dealt with by the faculty's complaints coordinator.

The formal complaints procedure will then take place as follows:

- A copy of the complaint will be sent to the person to whom the complaint refers.
- The complaints coordinator in the faculty of Geosciences will ask both you and the person you are complaining about for an explanation/reaction (i.e. you will both be 'heard').
- The complaints coordinator then draws up recommendations for the Dean of the faculty.
- The Dean will consider the complaint formally.

Dealing with the complaint must take no longer than 10 weeks.

It is, of course, possible for a solution to be found during the procedure. The procedure can then be terminated.

The Geosciences complaints coordinator is [Robert van Wijk](#), MSc.

More information on complaints, objections and appeals can be found [here](#).

Evaluation and quality assurance

The Faculty of Geosciences values the high quality of its programmes and has therefore set up a quality assurance system. Quality assurance provides information about the quality of individual courses and the

programme as a whole, study climate and students' progress and performance. Its most important goals are improving education and organization, and increasing the visibility of the quality of the programme.

One part of quality assurance with which you as a student will be dealing regularly is evaluations. Every course is evaluated afterwards and the results of this *course evaluation* are discussed in the Education committee and the Management team of the programme. Evaluations provide important information for the course coordinator and lecturers to improve their course. All Geosciences students are allowed to view the evaluation results of the Faculty of Geosciences on Blackboard.

During the course, we also work on improving quality. *Course feedback groups* are active in each course in order to mend any problems in an early stage. For each course, such a group consists of 4-5 students who will be meeting the lecturer in the break and will be talking about the course so far. The purpose is to find out what is appreciated, what is going well and what practical issues can be improved. This does not concern aspects which are already fixed, such as the choice of literature, set up of tutorials or class times. It is all about fine-tuning, e.g. are the lecture slides readable, can everyone hear the lecturer, has information been put on Blackboard on time, etc. In the study guide of the course you can find further information about the course feedback group in your course.

Finally, at the end of every other academic year (May/June) a written *year evaluation* will be carried out among the students. The year evaluation it is not about an individual course but about issues that transcend the course, such as coherence/set-up of the programme, electives, workload and effort, level, thesis supervision, challenge, atmosphere and lecturers. The results of the year evaluation will be discussed in panel meetings with the education director, programme leaders and a student delegation.

3.8 CAREER PERSPECTIVES AND CAREER SERVICES

The Master's programme prepares students for a PhD position, as well as for positions in the private and public sector.

A PhD position is a preferable option for students who want to pursue an academic career. Roughly 20% of our graduates pursue a PhD research. The PhD programme at the Copernicus Institute is accessible to well-qualified applicants with a Master's degree. The Copernicus Institute participates in the Dutch national research school Socio-Economic and Natural Sciences of the Environment (SENSE). Graduates of the Master's programme in Sustainable Development are also able to enter other research schools in the PhD programme. Other possibilities for conducting PhD research are other universities and research institutes in the Netherlands such as the Netherlands Environmental Assessment Agency (PBL), Energy Research Centre Netherlands (ECN) or comparable institutes in other countries.

The societal orientation of the Master's programme also makes it an excellent starting point for positions that do not directly involve academic research. Roughly 80% of our graduates find employment in the private sector (consultancy firms, companies), the public sector (national, regional, and local government), and NGOs. In the course of their career, the Sustainable Development graduates should be able to fill managerial positions, notably with respect to the integration of knowledge and policy and in the field of change management (particularly of complex processes of societal change).

Our graduates are also expected to be able to find good positions in the international market (international consultancy, EU, UN, NGOs). The Netherlands is one of the frontrunners in Europe concerning sustainability research and consultancy and in interdisciplinary education on the environment. So far, our graduates and PhD candidates have been fulfilling their expectations.

3.8.1 ALUMNI NETWORK

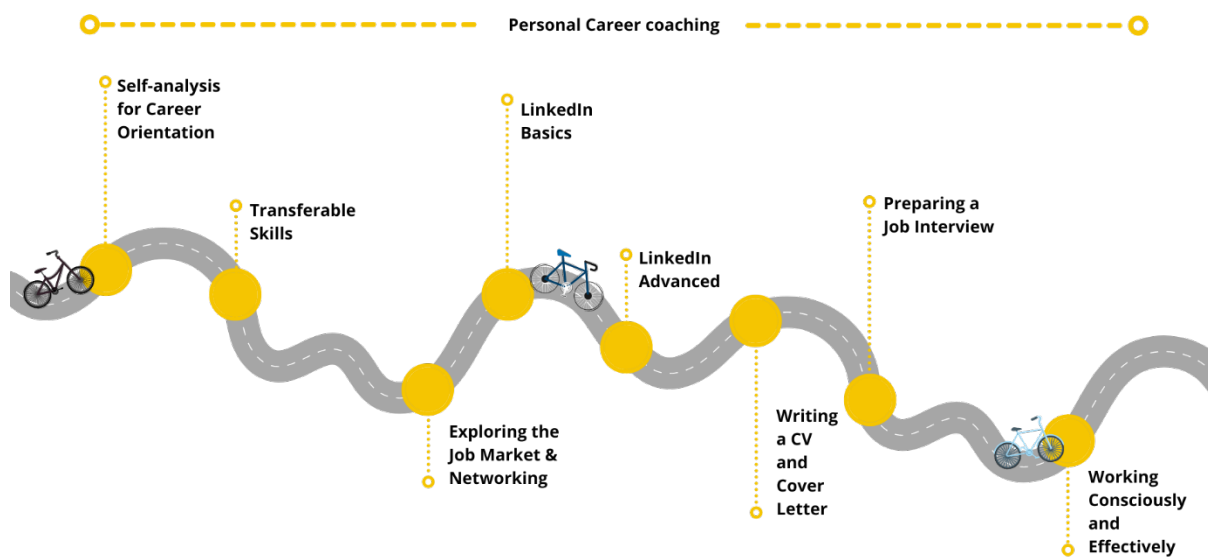
Our alumni have an active community, the Utrecht University Environmental Sciences Network ([UUESN](#)). You can follow them on LinkedIn. This group functions as a virtual meeting place for students, alumni and staff.

3.8.2 CAREER SERVICES

The start of your Master's programme will also be the start of your career. With the activities of Career Services you will be prepared for the future after your graduation.

Within your Master's programme job-market orientation will receive much attention. You will be invited to guest lectures, company visits and be given opportunities to meet alumni. During your Master you may follow an internship in which you will receive insights of what it could be like working for a company which shares your mission or values. It is a helpful experience to let you familiarise yourself with a company or organisation and the kind of work you want to do after your Master.

During your Master, Career Services offers [workshops](#) to guide you on your first steps towards the job market. Starting with mapping your interests, talents, (soft)skills and how transform this information into a CV and how to prepare yourself for a job interview. Apart from these trainings there will also be special Geosciences workshops with topics such as 'How to kickstart your sustainable career'.



You can also [book an appointment](#) to meet with your Career Officer to look at specific questions that you might have. You can also send an email to careerofficer.geo@uu.nl

On the [Career Services website](#) you can also find tests you can do about your personality, competencies, work values and many more.

Career Services also hosts several events during the year such as the Career days, which you can attend to get information about companies, organizations, and NGO'. You will be notified about these events throughout your Master.

Check the website of your Master's programme under [Career Services](#).

3.9 STORM, SD'S STUDY ASSOCIATION

Storm is the study association for Utrecht University students from the Bachelor's programme Global Sustainability Science and the Master's programmes Sustainable Development and Water Science and Management. Storm was founded in 1991 by a few enthusiastic students who thought that the environmental sciences programme deserved its own association, with the goal to improve the contact between students as well as between students and staff. Many Master students become a member of Storm. This is not only because of the variety of activities Storm organises, but also because of the discount on study materials which you can order via Storm, through the following [website](#).

You can become a member of Storm for only €10,- per year. In return, next to all other benefits that will be explained below, you can always come by our own association's room in the Buys Ballot building on the Utrecht Science Park to enjoy some free coffee and tea and meet other Stormers. On the Storm website, students can find all information related to events, education and career opportunities, such as vacancies. This is the place to check everything that's going on within Storm! You can subscribe to our Career Newsletter and be updated on more vacancies and interesting projects in the field of sustainability.

Storm has twenty five committees which provide a wide range of activities. At the start of each academic year, members can apply to join one of these committees. There are great parties, drinks, sports events, weekends away and other leisure time activities. In addition, Storm organises excursions, career events, and other study-related activities. Special attention to Master students is paid by Storm's Master Committee, which organises activities for Sustainable Development and Water Science and Management students, such as Master drinks, a barbeque, and other social and educational activities.

Since Storm is the study association for sustainability students, we also keep sustainability in mind. To spread the word, the 'Sustainability Committee' organises activities and challenges to make Stormers even more aware and sustainable. And to have an impact outside of the association, Storm supports a charity every year. This charity draws attention to sustainable development, which can be both natural and social.

Storm is the ideal place for students to combine study and leisure. Do you want to know more about environmental issues outside study hours, or do you want to get to know your fellow students and join interesting events? Then come by and see us, or contact us via phone or e-mail!

Contact information:

Buys Ballotgebouw 2.79
Telephone: +31 30 253 21 64
[website](#)

Princetonplein 5 3584 CC Utrecht
E-mail: bestuur@stormutrecht.nl
[Instagram](#)

4.1 RULES FOR CHOOSING ELECTIVE COURSES

1. Students in the Master's programme choose elective courses from another or their own Master's programme. Courses that are obligatory in the exam programme cannot be used as elective courses.
2. Honours programmes for Master's students (e.g. Young Innovators, GHIS, Leadership Programme) do not count towards the electives in the programme.
3. Electives as mentioned in the student's academic progress review in OSIRIS are pre-approved by the track coordinator and by the Board of Examiners. Students can enrol for those courses via OSIRIS. It remains the student's responsibility to make sure that the points mentioned under 6 d-f are met. If the course is from another department than the Copernicus Institute, it may be that other students have priority and that they are therefore placed on a waiting list.
4. It is possible to choose other courses than the pre-approved courses mentioned in OSIRIS. Any non-pre-approved elective courses must be subjected in advance to the track coordinator and the Board of Examiners for approval. The track coordinator will advise the Board in this matter.
5. The application for a non-pre-approved elective is done by a written request (application form) to the track coordinator. Written information on the content, the level, and the study load of the course (preferably by means of a copy of the course's description from the course catalogue) must be attached. The 'Application Form Elective courses Copernicus' can be found in the Blackboard community Sustainable Development.
6. The track coordinator tests the proposed elective course(s) on the following criteria:
 - a. It must be thematically linked to the Master's programme;
 - b. It concerns a course at master level (M);
 - c. There is no overlap in content with courses still to be taken or already taken.The student is responsible for making sure that:
 - d. The course is available to students of the SUSP programme;
 - e. The student fulfills the entrance requirements of the course (if applicable). Actual participation is only possible if students satisfy the course's entrance conditions; in case of doubt they should contact the course coordinator first;
 - f. The course is not taught in the same period and timeslot as another course the student has selected.
7. If the track coordinator has declared that the elective course(s) meet the criteria under 6a-c (by signing the application form or approval via an email message), the student sends the application form (signed or with the approval email attached) and the course information to the Board of Examiners via OSIRIS Case. The Board of Examiners takes the final decision on whether or not the elective is approved.
8. In the programme's course schedule, room has been reserved for taking electives. However, the student is free to deviate from this planning, e.g. because they wish to take an interesting elective course in another period. If this causes delay in the study planning, it is the responsibility of the student! Students are therefore advised to take their electives in the reserved periods and timeslots, or use a part of the time planned for their Master's thesis.

The Education and Examination Regulations set out the degree programme-specific rights and obligations of students on the one hand and of Utrecht University on the other hand. The University's [student charter](#) contains the rights and obligations that apply to all students.

These Regulations were adopted by the Dean of the Graduate School of the Faculty of Geosciences with the approval of the Faculty Council and the Education Committee on 2 May 2023.

This is a translated version of the officially valid Education and Examination Regulations in Dutch (Onderwijs- en Examenregeling).

SECTION 1 – GENERAL PROVISIONS

art. 1.1 – applicability of the Regulations

These Regulations apply to the teaching and examinations of the Master's degree programmes in Development Studies, Earth Sciences, Energy Science, Environmental Sciences, Geographical Sciences, Human Geography, Human Geography and Planning (research programme), Spatial Planning and Science and Innovation (hereinafter called the degree programmes) and to all students registered for these degree programmes and to all students who apply for admission to these degree programmes in the academic year 2023-2024.

The degree programmes and individual Master's programmes are run by the Graduate School of Geosciences within the Faculty of Geosciences.

art. 1.2 – definition of terms

In these Regulations, the terms below have the following meanings:

- a. academic vacation periods: periods without any teaching obligations for teaching staff and learning obligations for students, as laid down in the academic calendar for the degree programmes.
- b. academic calendar: the division of the academic year periodically determined by the Executive Board
- c. the Act: the Dutch Higher Education and Research Act 1992 (*Wet op het Hoger onderwijs en wetenschappelijk onderzoek 1992, WHW*).
- d. Board of Studies: the Board of the Graduate School of Geosciences.
- e. component: a unit of study (course) within the degree programme, as included in the prospectus and the University Course Catalogue.
- f. course: the whole of the education and testing of a component.
- g. course guide: document specifying for each course the aim and content of the course, the exit qualifications, effort requirements (such as the attendance and test requirements) that a student must meet to achieve the exit qualifications and to qualify for a final grade, required literature, the way in which the final grade is calculated, the timetable and the instructional formats, name and availability of the course coordinator.
- h. course period: part of the academic year, the start dates of which are laid down in the academic calendar and the number of weeks in the calendar of the degree programme.
- i. credit: a value expressed in EC, where the study load is expressed as one credit being equivalent to 28 hours of learning. The European Credit Transfer System (ECTS) ensures that credits are comparable within Europe.
- j. degree programmes: the Master's degree programmes referred to in Art. 1.1 of these Regulations, consist of a coherent whole comprised of units of study. A Master's degree programme may include several Master's programmes.
- k. Education provision: the provision granted by the Director of Education to a student with a disability or chronic illness, which outlines the necessary and reasonable facilities to which the student is entitled;

- l. effort requirements: phrase used for all the requirements that the student must meet during a course in order to be eligible for a final grade. These effort requirements are described in the University Course Catalogue and laid down in the course guide (see above).
- m. examination: the final examination of the degree programme that is passed if all obligations of the entire Master's degree programme have been fulfilled.
- n. examiner: an assessor whose competence has been determined by the Board of Examiners of the program.
- o. International Diploma Supplement: the annex to the Master's degree certificate, which includes an explanation of the nature and contents of the degree programme (partly in an international context).
- p. semester: part of the academic year (roughly 5 months), the start and end dates of which are laid down in the academic calendar. The academic year is divided in two semesters: semester 1 (course period 1 and 2) and semester 2 (course period 3 and 4).
- q. student: a person who is registered at the University to take courses and/or sit the tests and final examination of the degree programme.
- r. Student Affairs Geosciences: student information desk and student progress administration unit of the Faculty.
- s. test: interim examination as referred to in Art. 7.10 of the Act.

The other terms have the meanings ascribed to them in the Act.

SECTION 2 – ADMISSION

art. 2.1 – admission requirements of the degree programmes

1. The holder of a Dutch or foreign higher education degree, equivalent to a Dutch bachelor's degree, who possesses knowledge, understanding and skills as specified in the programme-specific component of the degree programme concerned, can be admitted to one of the Master's programmes.
2. Selection of students is based on a review of the following core competences of applicants as specified in the programme-specific component of the degree programme concerned.

art. 2.2 – English language (for Master's Degree Programmes taught in English)

1. Registration for the degree programmes is possible only after it has been demonstrated that the requirement of adequate command of the English language is fulfilled. Deficiencies in previous education in English must be made up before the start of the degree programme by sitting one of the following tests:
 - IELTS (International English Language Testing System), academic module. The minimum required IELTS score (overall band) is: 6.5 with at least 6.0 for the components 'writing, speaking, listening and reading'.
 - TOEFL (Test of English as a Foreign Language). The minimum required TOEFL score is 93 (internet-based test) with at least a score of 24 reading, 22 listening, 20 speaking and 20 writing.
 - Cambridge EFL (English as a Foreign Language) Examinations, with one of the following certificates:
 - Cambridge English C1 Advanced (CAE). Minimum score: 176 total, 169 writing.
 - Cambridge English C2 Proficiency (CPE). Minimum score: 180 total, 169 writing.
2. The holder of a university Bachelor's degree awarded in the Netherlands fulfils the requirement of adequate command of the English language.

art. 2.3 – admissions procedures

1. Responsibility for admission to the degree programmes of the Graduate School and the various Master's programmes lies with the Board of Admissions of the Graduate School.
2. In order to determine eligibility for admission to the degree programme, the Board of Admissions will consider and evaluate the knowledge, understanding and skills of the applicant. The Board may request experts within or outside the University to assess the applicant's knowledge, understanding and skills in particular areas, in addition to a review of written documents of qualifications gained.
3. In order to determine eligibility for admission to a programme within the Master's degree programme, the Board of Admissions will examine whether the applicant meets the admission requirements referred to in

Art. 2.1(1) or will meet them in time. In its review, the Board will include the applicant's core competences referred to in Art. 2.1(2), as well as the applicant's knowledge of the programme's language of instruction. On this basis the Board of Admissions will assess whether the candidate is able to achieve the exit qualifications of the Master's degree programme with sufficient effort within the nominal duration of the programme.

4. A request to be admitted to the Master's degree programme and a specific programme must be submitted to the Board of Admissions before the relevant deadline on the prospective student website (www.uu.nl/masters or www.uu.nl/internationalmasters). Requests submitted after these deadlines will not be considered. The decision not to process the request refers to the possibility of appeal to the Examination Appeals Board.
5. The applicant will receive written notification whether or not he or she has been admitted to the degree programme and a specific Master's programme. The possibility to appeal to the Examinations Appeal Board will be indicated in this notification.

art. 2.4 – conditional admission decision: pre-Master

1. If the outcome of the evaluation referred to in Article 2.3, paragraph 2, into the knowledge, insights and skills of the candidate is that the candidate does not yet meet the admission requirements referred to in art. 2.1, but will meet them after having passed a pre-master course tailored to the Master's Programme, the candidate will be given a conditional admission decision.
2. This conditional admission decision will state that the candidate concerned will be admitted to the Master's Programme if:
 - a. the pre-master course with the courses described therein and the study load, expressed in credits, has been passed
 - b. within the period stated in the admission decision.
3. The candidate will receive written confirmation of the conditional admission decision, which will point out the possibility to appeal to the Examinations Appeals Board.
4. After the conditions referred to in paragraph 2 (a) and (b) have been met, the conditional admission decision will be converted into a definitive admission decision.
5. After the expiry of the period referred to in paragraph 2(b), the student may no longer participate, or participate again, in the pre-master course of Utrecht University.
6. In the event of insufficient qualitative progress and/or participation in the defined deficiency programme, the Board of Admissions of the Graduate School may exclude the student from further or repeated participation.
7. The tailored package of courses, referred to in paragraph 1, is open only to candidates who hold the nationality of an EU/EER member state or Switzerland, or do not hold this nationality but do hold a residence permit that entitles them to statutory tuition fees.
8. The Board of Admissions may deviate from the requirements referred to in paragraph 4 in special cases. In any case, special dispensation will be given to refugees with residence status and refugees with a W-card, who have applied for asylum and have not yet received a final decision on their application. Deviation from the requirements is not possible if the candidate requires assistance from Utrecht University in applying for a visa, where the university acts as a sponsor.

SECTION 3 – CONTENTS AND STRUCTURE OF THE DEGREE PROGRAMMES

art. 3.1 – aim of the degree programmes

See degree programme-specific component of the degree programme concerned.

art. 3.2 – mode of attendance

The degree programmes in Development Studies, Earth Sciences, Energy Science, Environmental Sciences, Human Geography and Planning (research programme) and Science and Innovation are offered full-time. The degree programmes in Spatial Planning, Geographical Sciences and Human Geography are offered full-time as well as part-time.

art. 3.3 – language of instruction

All degree programmes are taught in English.

art. 3.4 – study load

The degree programmes in Earth Sciences, Energy Science, Environmental Sciences, Geographical Sciences, Human Geography and Planning (research programme) and Science and Innovation have a total study load of 120 credits. The degree programmes in Development Studies, Spatial Planning and Human Geography have a total study load of 60 credits.

art. 3.5 – programmes; start dates

1. The Graduate School of Geosciences offers the following Master’s degree programmes and Master’s programmes.

Master’s degree programmes	Master’s Programmes
Earth Sciences	Earth, Life and Climate
	Earth Structure and Dynamics
	Earth Surface and Water
	Marine Sciences
Energy Science	Energy Science
Environmental Sciences	Sustainable Development
	Water Science and Management
Geographical Sciences	Geographical Information and Management Applications
Human Geography and Planning	Global Urban Transformations

Science and Innovation	Innovation Sciences
	Sustainable Business and Innovation
Development Studies	International Development Studies
Spatial Planning	Spatial Planning
Human Geography	Urban and Economic Geography

The Master's degree programmes prepare students for undertaking research in one or more sub-fields of Geosciences.

2. All Master's degree programmes have one start date a year: 1 September.

art. 3.6 – components of the Master's programmes

See degree programme-specific component of the degree programme concerned.

art. 3.7 – courses taken at another Dutch research university

1. Courses provided by another Dutch research university qualify as optional programme components with the approval of the Board of Examiners. The credits and marks awarded by the other Dutch institution will be used.
2. The Board of Examiners will withhold approval if it is of the opinion that a replication of content exists in relation to courses already completed or yet to be completed by the student. In the event that courses are replicated in terms of their content, either wholly or in part, the Board of Examiners may limit the contribution of these courses to the examination through deduction of credits in proportion to the overlap.

art. 3.8 – courses taken at a foreign research university

1. Courses provided by a foreign research university qualify as optional programme components with the approval of the Board of Examiners. The Board of Examiners will decide whether these courses are at a sufficient academic level.
2. The Board of Examiners will withhold approval if it is of the opinion that a replication of content exists in relation to courses already completed or yet to be completed by the student. In the event that courses are replicated in terms of their content, either wholly or in part, the Board of Examiners may limit the contribution of these courses to the examination through deduction of credits in proportion to the overlap.
3. The degree programme will publish the procedure for contributing courses taken abroad on the student site:
 - stating at what moment and in what manner students may apply for approval for courses taken abroad;
 - giving students the option of applying for approval at such time that they have received a decision from the Board of Examiners by the start of their period abroad.
4. Conversion of credits achieved for courses taken abroad is as follows:
 - a. The credits will be taken over for courses provided by foreign universities within the European Union/European Economic Area that work with the European Credit Transfer System (ECTS) which have been approved by the Board of Examiners with regards to their content and level. Contrary to this, the Board of Examiners may decide to award a different number of credits if it is established that the credits awarded abroad do not correspond to the study hours.
 - b. The credits will be converted for courses provided by foreign universities outside the European Union/European Economic Area that do not work with the European Credit Transfer System (ECTS)

which have been approved by the Board of Examiners with regards to their content and level, in accordance with the university-wide conversion table. See www.uu.nl/credit-omrekentabel. The Board of Examiners may deviate from this in exceptional cases.

5. Conversion of grades achieved for courses taken abroad is as follows:
 - a. Foreign grades are converted into the alphanumeric results Pass/Fail; in addition, the original grades and assessment scale will be recorded in OSIRIS. Furthermore, the original results will be printed on the International Diploma Supplement referred to in Article 6.4, stating the information from Nuffic concerning the grading scales at foreign institutions www.nuffic.nl/onderwerpen/onderwijssystemen.
 - b. The foreign university will determine where the cut-off score lies for a pass, and records in the transcript whether the student has passed.
 - c. The foreign results will not count towards the student's average final mark.
 - d. The Board of Examiners will determine whether and how foreign results will count towards determining whether the student has passed with distinction (cum laude).

art. 3.9 – area with negative travel advice

1. Study components that require the student to travel to areas abroad or to the Caribbean territory of the Kingdom for which the Ministry of Foreign Affairs has issued a travel warning of classification red (do not travel) or orange (only necessary travel) that applies to the period that the study component is to be taken cannot be included in the degree programme.
This also applies if the Ministry of Foreign Affairs has issued a negative advice for travel from the Netherlands.
2. At the student's request, on behalf of the Dean the provisions of the first paragraph may be deviated from in exceptional circumstances. Such deviation is only possible if it has been declared on behalf of the Executive Board that there are sufficient guarantees that the health and safety of the student will be safeguarded.
3. In the event that the travel advice classification changes to red or orange while the student is already present in the area abroad or in the Caribbean territory of the Kingdom, the Executive Board may advise students to return to the Netherlands if, having taken account of the local risks and impact of travelling, the Executive Board deems it unwise to remain. Students who do not follow the urgent advice to return cannot include the study component in the degree programme, unless an individual exemption as referred to in paragraph 4 is granted.
4. Upon a request by the student for an exemption from the urgent advice to return, on behalf of the Dean the provisions of the third paragraph may be deviated from in exceptional circumstances. On behalf of the Dean an exemption from the advice to return may be granted. An exemption can only be granted if it has been declared on behalf of the Executive Board that there are sufficient guarantees that the health and safety of the student concerned will be safeguarded.

art. 3.10 – components taken elsewhere

1. The condition for gaining the degree certificate of the Master's examination of the programme is that at least half of the Master's degree programme is passed in components provided by Utrecht University.
2. Components passed elsewhere during the degree programme can only be incorporated in the student's examinations programme with prior permission from the Board of Examiners.
3. Exemption can be granted for components passed at an institute of higher education prior to the start of the Master's degree programme only on the basis of Art. 5.14.
4. Contrary to Art. 3.9.3, components that have been passed in a Master's degree programme at Utrecht University prior to the start of the Master's degree programme may be counted towards the student's examinations programme with the classification awarded.

art. 3.11 – actual teaching structure

The teaching structure of each course is shown in the University Course Catalogue and/or course guides and/or in the digital learning environment (Blackboard).

Students can view the timetables of the classes for which they are registered via [MyTimetable](#).

SECTION 4 – COURSES

art. 4.1 – course

All courses that are part of the degree programmes have been included in the prospectuses for the programmes and can be found at the [student site](#).

art. 4.2 – course admission requirements

See degree programme-specific component of the degree programme concerned.

art. 4.3 – registration for courses

1. Participation in a course is possible only if the student has registered for it before the deadline specified by the Board of Studies. Registration rules and closing dates will be published through the [student site](#).
2. All the courses that are listed in the University Course Catalogue will take place.
3. If fewer than 15 students register for a course, the course coordinator may decide, in consultation with the Director of Education, to offer the course in a different instructional format and/or assessment.
4. A student may register for a maximum of two courses of 7,5 EC or three courses of 5 EC per period.
5. An extra course must always be requested at the degree programme office. This extra course may only be chosen from the range of courses offered within a student's own degree programme; requests may be made only during the regular registration period.
6. If the student fails to make adequate progress on the course and/or there is insufficient capacity for a course, the Director of Education may exclude the student from registration for a third course within a single course period.
7. Subject to notification to the contrary, the student who has registered correctly and in time for a course will have a confirmed place on the course no later than 15 working days before the start of the course.
8. During the late registration days, a student may only register for the courses for which capacity is still available.

art. 4.4 – attendance and effort requirements

1. Students are expected to participate actively in the courses they registered for.
2. Besides the general requirement for the student to participate actively in the course the additional effort requirements for each component, such as attendance and test requirements, are listed in the University Course Catalogue and laid down in the course guide.
3. Students may be granted exemption from attendance for reasons demonstrably beyond their control (for instance as a result of illness or family circumstances), at the discretion of the course coordinator. Students must notify the study programme's secretariat of their absence in advance. The course coordinator may request the student to provide written evidence.
4. In the event of qualitatively or quantitatively inadequate participation, the course coordinator may exclude the student from further participation in the course or part of it.
5. Effort requirements (such as holding a presentation or writing a paper) can never expire. If students fail to meet an effort requirement in time for reasons beyond their control, they must report to the course coordinator immediately after the situation has arisen and, if instructed by the course coordinator, provide evidence of the exceptional circumstances (see also art. 5.6.1).
6. Students who wish to apply for special arrangements with regard to effort requirements as a result of chronic illness, disability or Outstanding Student Athlete status, may submit a request (see also Art. 7.3).

art. 4.5 – participate in courses; order of priority

1. If a course has a limited capacity, the University Course Catalogue and / or prospectus indicates how many students can register for the course.
2. Participation is only possible if the student is registered, students have priority on courses that belong to the compulsory and compulsory electives part of their study programme.

3. Apart from the general priority rule formulated in paragraph 2, admission to courses with a limited capacity will be based on the following placement rules:
 - a. students who are repeating a course because they did not successfully complete the course due to circumstances demonstrably beyond their control;
 - b. students for whom the course is compulsory or a compulsory elective;
 - c. exchange students accepted by the faculty who have registered in time under approval;
 - d. remaining students.
4. In the case of electives with a limited capacity, lots will be drawn. Students of the faculty (including accepted GEO exchange students) will be given priority over external students.
5. A student is expected to be aware of all information that is sent to the student's university email address, or that is published on the student site of the study programme and in the electronic learning environment. Information distributed in this manner is assumed to be known.

art. 4.6 – complete courses for international students before winter break

International exchange students have the opportunity to complete courses, selected by the Director of Education in course period 2, before the winter break.

art. 4.7 – evaluation of the quality of education

See degree programme-specific component of the degree programme concerned.

SECTION 5 – TESTING

art. 5.1 – general

1. During the course, the student will be tested for academic schooling and on the extent to which the student has sufficiently achieved the learning objectives set. The testing of the student will be concluded at the end of the course.
2. The University Course Catalogue and/or course guide describe the effort requirements the student must meet to pass the course, as well as the criteria on which the student is assessed. In the event of a difference of opinion, the course guide will be followed.
3. The course coordinator can indicate in the course guide for at most one test component that obtaining a sufficient grade of at least 5.50 is a condition for awarding a sufficient final grade. Only in special cases and with the approval of the Director of Education, this condition can be linked to more than one test component.
4. Subject to what is stated in article 5.5. and 5.6 each test component that is part of the final assessment of a course is taken and assessed once.
5. If a student repeats a course, the last classification gained will count.
6. Should a student pass a course, but still wishes to repeat the course, the complete course must be repeated.
7. The Regulations of the Board of Examiners describe the testing process (see: [student site](#)).

art. 5.2 – Board of Examiners

1. The Dean will establish a Board of Examiners for each degree programme or group of degree programmes and will ensure that the Board of Examiners can operate independently and professionally.
2. The Dean will appoint the chair and the members of the Board of Examiners for a period of three years on the basis of their expertise in the field of the degree programme(s) in question or the field of testing, in which:
 - at least one member comes from outside the degree programme or group of degree programmes concerned, and
 - at least one member is a lecturer on the degree programme or group of degree programmes concerned.

Re-appointment is possible. Before making this appointment, the Dean will consult the members of the Board of Examiners concerned.

3. Persons holding management positions that include financial responsibilities or who are wholly or partially responsible for Master's degree programmes are not eligible for appointment to the Board of Examiners or as chair of the Board of Examiners. These persons will in any event include the Dean, the Vice Dean, directors/heads/managers of a department, members of a department's management/governing team, members or chairs of the Board of Studies of the Graduate or Undergraduate School and the Director of Education.
4. Membership of the Board of Examiners will end on completion of the term of appointment. The chair and members of the Board may also be dismissed by the Dean at their own request. The chair and members of the Board will be dismissed by the Dean if they no longer meet the requirements of paragraphs 2 or 3 of this article. The Dean may also dismiss a chair or members found to be performing their statutory duties unsatisfactorily.
5. The Dean will announce the composition of the Board(s) of Examiners to students and lecturers.

art. 5.3 – assessment of traineeship or research assignment and thesis

1. A traineeship or research assignment will be assessed by the supervisor and also examiner in question and by one or more other internal and/or external experts.
2. Master's theses will be assessed by at least two examiners.

art. 5.4 – grades

1. Grades will be awarded on a scale of 1 to 10. The final assessment of a course is either pass or fail, expressed in numbers: 6 or higher and 5 or lower respectively.
2. The final course grade will be rounded to one decimal place. A partial course grade will never be rounded.
3. The final course grade of 5 will not have any decimal places. An average grade of 4.95 to 5.49 is a fail (5); an average grade of 5.50 to 5.99 is a pass (6).
4. The course guide sets out the way in which the final course grade is calculated.
5. Alphanumeric results are awarded in the following cases:
 - a student who is registered for a course and has not participated in one of the test modules will be given an NV (*Niet Verschenen* – No Show). If non-participation is for reasons beyond the student's control the student will be given an ND (*Niet Deelgenomen*– Not Participated);
 - a student who has not participated in all the test modules will be given an NVD (*Niet VolDaan* – Incomplete);
 - a student who failed to meet the condition of a sufficient minimum grade of 5,50 for a test component will be given an NVD (*Niet VolDaan* – Incomplete);
 - if the student has completed a module, but has not received a grade for it, he may be given a V (*Voldoende* – Satisfactory) as the result;
 - if the student has not completed a module but does not receive a numeric result, the student can be given an ONV (*ONVoldoende* - Unsatisfactory) as the result;
 - a student who has been granted exemption by the Board of Examiners will be given a VR (*VRijstelling* – Exemption);

art. 5.5– repeat exams: supplementary tests

1. If the student does not receive a pass grade but does receive a final grade of at least 4.00 before rounding, the student will be given a once-only opportunity to take a supplementary test.
2. If the student passes the individual supplementary test, a final grade of 6.00 for the entire course will be recorded in the student progress administration system. Partial course grades that the student has achieved will not be taken into account in establishing the final grade of the supplementary test.
3. If the student does not pass the supplementary test, the initial final grade will be entered into the student progress administration system, thus rendering all partial course grades no longer valid.
4. If the student cannot be awarded a sufficient final average grade of 5.50 or higher because the student has failed to pass one test component with the condition of a sufficient grade, the student will be given one opportunity to take a supplementary partial test. The content of this partial test serves to replace the test component for which the mandatory minimum grade of 5,50 or higher is not achieved.
5. If a supplementary partial test is adequately repaired, the grade 5.50 is assigned to the test component and the final average grade will be recalculated according to the conditions specified in the course guide.

6. If the student does not pass the supplementary partial test, the final grade NVD will be entered into the student progress administration system, thus rendering all partial course grades no longer valid.
7. The student will not qualify for a supplementary test if the student has not met all the effort requirements of the course.
8. The student will not qualify for a supplementary partial test if the student has been awarded a pass.
9. The lecturer will determine the form and content of the supplementary (partial) test.

art. 5.6– force majeure: replacement tests

1. Students who miss a test or part of a test owing to circumstances demonstrably beyond their control will be given only one opportunity to sit a replacement test. Only students reporting these circumstances beyond their control immediately after their occurrence to the course coordinator will be eligible to sit a replacement test (see also art. 4.4.).
2. The lecturer will determine the form and content of the replacement test.
3. If the student is not present at the replacement test, or fails to meet the terms of the replacement test in good time, the student will not be offered another opportunity.

art. 5.7 – type of test

1. Testing as part of a course will take place as stated in the course guide.
2. Upon request, the Board of Examiners may allow a test to be administered in a manner which departs from the provisions of the first paragraph.

art. 5.8 – oral tests

1. Only one person at a time may be tested orally, unless the Board of Examiners decides otherwise.
2. An oral test will be administered as far as possible by two examiners, for a maximum of 60 minutes.

art. 5.9 – provision for testing in special cases

1. If not providing for an individual testing possibility would result in a ‘special case of manifest unfairness’, the Board of Examiners may decide to grant an individual testing possibility.
2. Requests for a special possibility to sit a test must be submitted to the Board of Examiners as soon as possible, together with supporting documentary evidence.

art. 5.10 – time limit for grading tests

1. Within 24 hours of administering an oral test the examiner will determine the grade and provide the student with a written statement of the grade awarded.
2. The examiner will grade a written or differently administered test or partial test within 10 working days of the test date, and will make this grade known.
3. If the mark is not available within this period time for reasons of force majeure, the examiner must communicate this to the student, indicating when the mark will be determined. Force majeure may only be established in consultation with the Director of Education.
4. If there is a third examiner, a new assessment period of 10 working days will commence, immediately following the first period of 10 working days. It is not possible to commence a new period following this second period.
5. Time frames for assessment do not apply during academic vacation periods.
6. The written statement of the grade awarded must inform the student of the right of inspection referred to in Art. 5.12 and of the possibility to appeal to the Examination Appeals Board.

art. 5.11 – period of validity

1. The term of validity of courses passed is eight years between test date and exam date.
2. Notwithstanding this, in case of special circumstances the Board of Examiners may, if the student requests, determine an extended validity period for a course, or impose a supplementary or replacement test.

3. Partial tests and assignments passed in a course that was not successfully completed will expire at the end of the academic year in which they were passed. Partial tests and assignments expire at the end of the course period in which they were passed, if the course concerned is taught more than once per academic year.

art. 5.12 – right of inspection

1. Within 20 working days after the announcement of the result of a written or digital test, the student is allowed to inspect the student's graded work upon request. A copy of that work will be supplied to the student on request.
2. During the period referred to in the first paragraph, the student may inspect the questions and assignments of the test concerned, as well as the standards on which the grade was based.

art. 5.13 – retention of tests

1. The assignments, answers and the work assessed in the written tests will be kept in paper or electronic form for a period of two years following the assessment.
2. The thesis and its assessment will be kept in paper or electronic form for a period of seven years following the assessment.

art. 5.14 – exemption

At the student's request, the Board of Examiners may, after consulting the examiner in question, grant exemption from a programme component if the student:

- a. has already either completed a university or higher vocational programme component which is equivalent in content and level; or
- b. has demonstrated, through work or professional experience, sufficient knowledge and skills in relation to that component.

art. 5.15 – fraud and plagiarism

1. Fraud and plagiarism are defined as an action or omission on the part of students which produces an incorrect representation of their own performance as regards their knowledge, skills and understanding, which may result in the examiner no longer being able to assess the knowledge or ability of the students in a proper and fair manner.

Fraud includes:

- cheating during tests. The person offering the opportunity to cheat is an accessory to fraud;
- share answers with others while taking a test;
- seeking the help of third parties during a test;
- being in possession of (i.e. having/carrying) tools and resources during tests, such as pre-programmed calculators, mobile phones, smartwatch, smartglasses, books, course readers, notes, etc., unless consultation is explicitly permitted;
- having others carry out all or part of an assignment and passing this off as own work;
- gaining access to questions or answers of a test prior to the date or time that the test takes place;
- perform (or try to perform) technical changes that undermine the online testing system;
- fabricating survey or interview answers or research data;

Plagiarism is defined as including data or sections of text from others/the student's own work in a thesis or other paper without quoting the source. Plagiarism includes the following:

- cutting and pasting text from digital sources such as encyclopaedias and digital publications without using quotation marks and referring to the source;
- cutting and pasting text from the internet without using quotation marks and referring to the source;
- using excerpts from printed material such as books, magazines, other publications and encyclopaedias without using quotation marks and referring to the source;

- using a translation of the abovementioned texts without using quotation marks and referring to the source;
 - paraphrasing of the abovementioned texts without giving a (clear) reference: paraphrasing must be marked as such (by explicitly linking the text with the original author, either in text or a footnote), whereby the impression is not created that the ideas expressed are those of the student;
 - using visual, audio or test material from others without referring to the source and presenting this as own work;
 - resubmission of the student's own earlier work without source references, and allowing this to pass for work originally produced for the purpose of the course, unless this is expressly permitted in the course or by the lecturer;
 - using the work of other students and passing this off as own work. If this happens with the permission of the other student, the latter is also guilty of plagiarism;
 - in the event that, in a joint paper, one of the authors commits plagiarism, the other authors are also guilty of plagiarism, if they could or should have known that the other was committing plagiarism;
 - submitting papers obtained from a commercial institution (such as an internet site offering excerpts or papers) or having such written by someone else, whether or not in return for payment.
2. a. In all cases in which fraud or plagiarism is found or suspected, the examiner will inform the student and the Board of Examiners of this in writing.
 - b. The Board of Examiners will give the student the opportunity:
 - to respond to that in writing;
 - to be heard.
 3. The Board of Examiners will determine whether fraud or plagiarism has occurred and will inform the student of its decision in writing of any sanctions in accordance with the stipulations of the fourth paragraph, stating the possibility of appeal to the Examination Appeals Board.
 4. The Board of Examiners is authorized to impose sanctions. In doing so, the Board of Examiners shall ensure that the sanction is proportionate: the consequences of the sanction shall be in proportion to the degree and seriousness of the fraud or plagiarism committed.
 5. One or more of the following sanctions may be imposed, depending on the nature and extent of the fraud or plagiarism committed, and the circumstances in which the fraud or plagiarism was committed, as well as the student's study phase:
 - invalidation of the paper or test submitted;
 - reprimand, a note of which will be made in OSIRIS.
 - removal from the course;
 - no longer being eligible for a positive degree classification (cum laude) as referred to in article 6.2;
 - exclusion from participation in tests belonging to the course concerned for the current academic year, or for a maximum period of 12 months;
 - complete exclusion from participation in all tests for a maximum period of 12 months.
 6. In the case of extremely serious and/or repeated fraud or plagiarism, the Board of Examiners may recommend that the Executive Board permanently terminate the concerned student's registration for the programme.
 7. If the Board of Examiners determines that there has been widespread or organised fraud, on a scale which would affect the test results in their entirety, the Board of Examiners will decide without delay that the test concerned is invalid and that all the participants must resit the whole test at short notice. The Board of Examiners will set the date on which the test must be retaken. This date will be no later than ten working days after the fraud was established, so that the participants can still benefit from their preparatory work for the test.

art. 5.16 – control of plagiarism

1. For the purpose of controlling plagiarism handing in an electronic version of written assignments by the student (such as papers, theses) can be imposed as a compulsory condition by the examiner of the relevant course, whether or not they are using a designated plagiarism detection system. If the student does not submit an electronic version of the assignment in time, the assessor may decide not to assess the assignment.
2. In all cases, submitting an electronic version of the final thesis is mandatory for students.

3. By submitting a written assignment, the student gives permission in the broadest sense of the word for the control of plagiarism via a plagiarism detection system as well as for recording the written assignment in databases, to the extent necessary, for future plagiarism checks.
4. In the event that a particular course decides to disclose documents, students reserve the right not to disclose their written assignment other than for the purpose of plagiarism as referred to in paragraphs 1 and 2 of this article.

art. 5.17 – right of appeal

The student has a right to appeal decisions taken by the Board of Examiners or by examiners. The appeal must be made in writing, and explaining the basis for the appeal, to the Examination Appeals Board within six weeks of taking the test or examination, or of the decision being made, pursuant to Section 7.61 of the Higher Education Research Act 1992.

SECTION 6 – EXAMINATION

art. 6.1 – examination

1. As soon as a student has fulfilled the requirements of the examinations programme, the Board of Examiners will determine the result of the examination and award a certificate, as described in art. 6.4.
2. Prior to determining the result of the examination, the Board of Examiners may conduct its own examination of the student's knowledge of one or more components or aspects of the degree programme. The Board of Examiners will only conduct such an investigation if it establishes that there are certain facts or circumstances that leads it to the conclusion that the Board of Examiners cannot vouch for the student having obtained the exit qualifications for the course (as referred to in art. 3.1 of the Education and Examination Regulations).
3. Assessment of the examinations file constitutes part of the final examination. The date of examination will be the last working day of the month in which the Board of Examiners has determined that the student has fulfilled all the requirements of the examinations programme. The student must be registered for the degree programme on the examination date.
4. Conditions to pass the examination are:
 - all components are passed;
 - the composition of the course package completed meets the level requirements set.
5. A further condition for passing the examination and receiving the certificate is that the student was registered for the degree programme during the period in which the tests and the final examination were taken. If the student does not fulfil this condition, the Executive Board may issue a statement of no objection in relation to the passing of the examination and the issue of the certificate, after the student has paid the tuition fees and administration charges owing for the 'missing' periods.
6. A student who has passed the examination and is entitled to a certificate may request the Board of Examiners to not yet grant the certificate and to postpone the examination date referred to in paragraph 3. This request has to be submitted within 10 working days after the student has been informed of the result of the examination. The student will indicate in this request a preferred examination date.
7. The Board of Examiners will grant the request in any case if the student:
 - a. is to fulfil a management position for which Utrecht University has provided an administrative grant
 - b. is to do a traineeship or take a component of a programme abroad.

Postponement of the examination date is possible only once and for the duration of one academic year at the most. Postponement may only be granted for the duration of thirteen months for students who want to make use of tuition fee-board activities.

art. 6.2 – cum laude classification

1. If a student has demonstrated outstanding academic achievement in the student's Master's degree programme, the degree will be awarded cum laude; this classification will be noted on the degree certificate.

2. The cum laude classification will be awarded to the Master's examination if each of the following conditions have been met:
 1. the weighted average of the grades achieved for the Master's programme components is at least 8.00 before rounding.
 2. the student has received a minimum grade of 8.00 for the Master's thesis.
 3. the student has been granted no more than 7.5 credits in exemptions that do not count towards the examination programme (1-year programmes) or no more than 15 credits (2-year programmes).
 4. No decision has been reached by the Board of Examiners regarding commitment of fraud/plagiarism that would otherwise no longer qualify for a positive classification (cum laude).
 5. the Master's examination has been passed within one and a half years (one-year degree programmes) or three years (two-year degree programme).
3. The Board of Examiners may decide to award the cum laude classification even if not all the requirements referred to in paragraph 2 are met. Such a decision must be unanimous.
4. Classifications other than cum laude will not be noted on the degree certificate.

art. 6.3 – degree

1. The Master of Science degree will be awarded to the student who passes the examination.
2. The degree awarded will be noted on the examination certificate.

art. 6.4 – degree certificate and International Diploma Supplement (IDS)

1. The Board of Examiners will award a certificate as proof that the examination was passed.
2. The Board of Examiners will add the International Diploma Supplement in the English language to this certificate, which provides (international) insight into the nature and contents of the completed degree programme.

art. 6.5 – grading tables

1. The International Diploma Supplement gives the student's cumulative average mark and an ECTS Grading Table.
2. The cumulative average mark shows the student's academic performance on a scale of 1 to 10. It is calculated based on the final results for the courses the student has successfully completed within the degree programme. Courses that are not assessed on a numerical basis are not included in the calculation. The cumulative average mark is weighted based on the number of credits for each course.
3. The ECTS Grading Table gives a clear picture of Utrecht University's marking culture for educational institutions and employers outside the Netherlands. Based on the Grading Table, they can convert the results into their own marking system. The ECTS Grading Table is an institution-wide table for all Master's Degree programmes. This table uses a ten-point scale where only the marks from 6 to 10 are shown, as only passing marks are included in the Grading Table. The marks are expressed only as whole or half points. The percentage given with each mark indicates how frequently each mark is awarded.

The ECTS Grading Table is calculated on the basis of:

1. all final passing marks in courses undertaken towards the degree, excluding alphanumerical results;
2. not weighted according to study load;
3. in the three most recent academic years;
4. of students who were registered for a Master's Degree programme at Utrecht University.

SECTION 7 – STUDENT COUNSELLING

art. 7.1 – student information system

1. The Faculty must record the individual study results of the students and make them available through Osiris-student.
2. Certified student progress files may be obtained from Student Affairs Geosciences.

art. 7.2 – academic advice and support

1. The Faculty is responsible for providing an introductory programme and student counselling to students registered for the degree programmes.
2. Student counselling encompasses:
 - encouraging students to feel part of the community;
 - supervising programme choices;
 - assisting a student to familiarise himself with the job market.
 - an introductory programme in the first week of the first semester of the first year of study
 - referring and assisting students who encounter difficulties during their studies.

art. 7.3 – disability and chronic illness

Students with special needs are afforded the opportunity to take classes and sit tests in the manner agreed in their Education provision. Requests for a provision are submitted to the student adviser via OSIRIS-student.

SECTION 8 – TRANSITIONAL AND FINAL PROVISIONS

art. 8.1 – safety net arrangements

In those cases not provided for in these regulations, or not provided for sufficiently clearly, the decision will be made:

- a. by the Board of Examiners if on the basis of Articles 7.3j (permission for flexible study programme), 7.11 (award and postponement of degree certificate) and 7.12b (statutory powers of the Board of Examiners) of the Act or on the basis of Articles 3.6 to 3.9 (composition of optional course profile, optional courses), 5.5 to 5.11 (decisions on tests), 5.14-5.16 (exemption, fraud and plagiarism) and 6.1-6.2 (examination and cum laude) of these Education and Examination Regulations this falls within the competence of the Board of Examiners;
- b. in all other cases by the dean or an officer appointed for this purpose on behalf of the dean, after the Board of Examiners has expressed its view.

art. 8.2 – hardship clause

In accordance with the rules laid down in these Education and Examination Regulations, the Board of Examiners will decide, unless this would have manifestly unreasonable consequences for the student that due to special circumstances are disproportionate to the purposes to be served by the rule.

art. 8.3 – amendments

1. Amendments to these Regulations will be laid down by the Dean after having heard the advice of the Education Committee and after consultation with the Faculty Council and the Education committees, in separate resolutions.
2. An amendment to these Regulations is not to be applied to the current academic year, unless it is reasonable to assume that it will not harm the interests of the students.
3. Furthermore, an amendment may not have an adverse effect for students on any other decision the Board of Examiners has taken pursuant to these Regulations with respect to a student.

art. 8.4 – publication

The Dean will publish these Regulations, as well as each amendment, on the internet.

art. 8.5– effective date

These Regulations take effect on 1 September 2023.

4.3 PROGRAMME-SPECIFIC PART OF THE EER 2023-2024 GRADUATE SCHOOL OF GEOSCIENCES: MASTER'S DEGREE PROGRAMMES IN ENVIRONMENTAL SCIENCES

The Master's degree programme *Environmental Sciences* offers the programmes *Sustainable Development* and *Water Science and Management*.

Art. 2.1 – Admission requirements

1. The following conditions for admission apply:

Sustainable Development

Admission to the *Sustainable Development* programme is granted to students with a Dutch or a foreign diploma confirming that they have acquired the knowledge, insights and skills at university Bachelor's level. Furthermore, students need to prove that they have gained the following specific knowledge, insights and skills:

- a) knowledge in the field of *Environmental Sciences*, *Natural Sciences* or *Social Sciences* at the advanced level of a major in *Earth Sciences*, *Physics*, *Chemistry*, *Biology*, *Economics*, *Public Administration and Organisational Science* or *Social Sciences* at Utrecht University, or equivalent to this level
- b) knowledge in the field of sustainability issues
- c) basic knowledge of physical processes in the environment
- d) basic knowledge of mathematics at Bachelor's level
- e) insight into *Environmental Sciences*, *Natural Sciences* or *Social Sciences* at the advanced level of a major in *Earth Sciences*, *Physics*, *Chemistry*, *Biology*, *Economics*, *Public Administration and Organisational Science* or *Social Sciences* at Utrecht University, or equivalent to this level.
- f) academic and research skills of a major in *Earth Sciences*, *Physics*, *Chemistry*, *Biology*, *Economics*, *Public Administration and Organisational Science* or *Social Sciences* at Utrecht University, or equivalent to this level.

Water Science and Management

Admission to the *Water Science and Management* programme is granted to students with a Dutch or a foreign diploma confirming that they have acquired the knowledge, insights and skills at university Bachelor's level. Furthermore, students need to prove that they have gained the following specific knowledge, insights and skills:

- a) knowledge in the field of *Earth Sciences*, *Environmental Sciences* or *Natural Sciences*, at the advanced level of the major *Earth Sciences* or *Environmental Sciences* at Utrecht University, or equivalent to this level
- b) insight into *Earth Sciences*, *Environmental Sciences* or *Natural Sciences* at advanced level of the major *Earth Sciences* or *Environmental Sciences* at Utrecht University, or equivalent to this level
- c) academic and research skills of the major *Earth Sciences* or *Environmental Sciences* at Utrecht University, or equivalent to this level

2. Students will be selected based on objective standards regarding:
 - a) their previous academic performance in a relevant subject area or areas
 - b) relevant skills

- c) their command of the language or languages used in the programme
- d) the following additional selection criteria with proven relevance for the opinion on the suitability of the candidate:
 - motivation
 - average grade

This information is used to consider whether the student concerned will be able to complete the Master's Programme successfully within the set time period.

The admission requirements have been formulated clearly and transparently so that candidates know in advance which requirements must be met in order to qualify for selection.

Art. 3.1 – Aim of the degree programmes

1. The degree programme aims to:

- provide students with specialised knowledge, skills and understanding in the field of *Environmental Sciences* so that they can achieve the final qualifications as mentioned in Article 3.1.2
- prepare students for professional employment in one or more disciplines of *Environmental Sciences*
- prepare students for training as researchers in the field of *Environmental Sciences*

2. Graduates in *Environmental Science*

1. have advanced knowledge and understanding of the field of *Environmental Sciences* in its societal context
2. can conduct research in the field of *Environmental Sciences* in a creative and independent way
3. can apply knowledge and research methods as well as problem-solving abilities in broader contexts related to the dynamics and challenges of *Environmental Sciences*
4. have insight into the complex interactions between science, sustainability and society and are able to reflect critically upon the roles of science and sustainability in society.
5. have professional and academic skills, particularly in relation to the dynamics and challenges of *Environmental Sciences*
6. can apply knowledge and understanding in such a way that they demonstrate a professional approach to their work
7. can communicate their conclusions, as well as the knowledge, reasons and considerations underlying these conclusions, to an audience of specialists and non-specialists alike
8. are able to study and work independently and explore new areas of interest in the field of the programme or related fields and demonstrates a professional approach to their work.

More programme-specific qualifications are listed in the prospectuses of the different programmes.

Art. 3.6 – Composition of the programmes

1. Appendices 1, 2 and 3 describe the required courses of the programmes including their course load.
2. Students may choose optional courses. The course load of the optional courses are listed in Appendices 1, 2 and 3. The rules for choosing optional courses are listed in Appendix 5.
3. The requirements for the Annotation Complex Systems (only for SUSU) can be found in Appendix 8.
4. The prospectus gives a detailed description of the content and type of courses in the different programmes, including prior knowledge that is required to participate successfully.

Art. 4.2 – Entry requirements of courses

The Executive Board decides the order in which the required components of a Master's degree programme must be completed. This has been listed in Appendix 6.

Art. 4.7 – Evaluation of quality of the education

1. The Director of Education monitors the quality of education, and ensures that both the courses and the curriculum are evaluated. The Director takes into consideration the advice and suggestions given by the Education Committee regarding improving and ensuring the quality of the programme.
2. Students are informed of the outcomes of the course and curriculum evaluations.

Appendices

Appendix 1: Exam programme Sustainable Development (cohort 2023)

1. Compulsory components (75 EC)

- Perspectives on Sustainable Development	7.5 EC
- Systems thinking, Scenarios & Indicators for SD	7.5 EC
- Research Design SD	7.5 EC
- Consultancy Project SUSd and WSM	7.5 EC
- Master's thesis	45 EC

2. Obligatory optional components (30 EC)

Environmental Change & Ecosystems (30 EC)

- Global Environmental Change	7.5 EC
- Environmental Systems Analysis	7.5 EC
- Integrated Assessment of Climate Change	7.5 EC
- Quantifying Ecosystem Resilience to Global Environmental Change	7.5 EC

Energy & Materials (30 EC)

- Tools for Energy & Materials Analysis	7.5 EC
- Energy Supply Technologies	7.5 EC
- Policies for Energy and Materials Transitions	7.5 EC
- Squaring the Circular Economy	7.5 EC

Earth System Governance (30 EC)

- Foundations of ESG Research	7.5 EC
- Governance Theories	7.5 EC
- Research Strategies ESG	7.5 EC
- Analysing Governance Practices	7.5 EC

Politics, Ecology and Society (30 EC)

- Introduction to Political Ecology	7.5 EC
- Natural Resource Management and Society	7.5 EC
- Research Methods for Politics, Ecology and Society	7.5 EC
- Social Innovation and Alternatives to Development	7.5 EC

3. Other optional components (15 EC)

Students should select additional optional courses for 15 EC.

- Environmental Change & Ecosystems	15 EC
- Energy & Materials	15 EC
- Earth System Governance	15 EC
- Politics, Ecology and Society	15 EC

4. Conversion of former courses

<i>Old course</i>	<i>New course 2023-2024</i>
Transdisciplinary Case Study (GEO4-2302)	Consultancy Project SUSD and WSM (GEO4-2008)
Field Research Practical (GEO4-2342)	Individual arrangement; contact ID track coordinator
Advanced M&T for SD-ID (GEO4-3521)	Research Methods for Politics, Ecology and Society (GEO4-2345)

Appendix 2: Exam programme Sustainable Development (cohort 2022)

1. Compulsory components (60 EC)

- Perspectives on Sustainable Development	7.5 EC
- Systems thinking, Scenarios & Indicators for SD	7.5 EC
- Research Design SD	7.5 EC
- Consultancy Project SUSD and WSM	7.5 EC
- Master's thesis	30 EC

2. Obligatory optional components (30 EC)

Environmental Change & Ecosystems (30 EC)

- Global Environmental Change	7.5 EC
- Environmental Systems Analysis	7.5 EC
- Integrated Assessment of Climate Change	7.5 EC
- Quantifying Ecosystem Resilience to Global Environmental Change	7.5 EC

Energy & Materials (30 EC)

- Tools for Energy & Materials Analysis	7.5 EC
- Energy Supply Technologies	7.5 EC
- Policies for Energy and Materials Transitions	7.5 EC
- Squaring the Circular Economy	7.5 EC

Earth System Governance (30 EC)

- Foundations of ESG Research	7.5 EC
- Governance Theories	7.5 EC
- Research Strategies ESG	7.5 EC
- Analysing Governance Practices	7.5 EC

International Development (30 EC)

- Development Themes	7.5 EC
- Natural Resource Management and Society	7.5 EC
- Advanced M&T for SUSD-ID	7.5 EC
- Field Research Practical	7.5 EC

3. Other optional components (30 EC)

Students should select additional optional courses for 30 EC.

- Environmental Change & Ecosystems	30 EC
- Energy & Materials	30 EC
- Earth System Governance	30 EC
- International Development	30 EC

4. Conversion of former courses

Not applicable in 2023-2024

Appendix 3: Exam programme Water Science and Management

1. Compulsory components (67.5 EC)

- Sustainable Water Resources Management	7.5 EC
- Principles of Groundwater Flow	7.5 EC
- Quantitative Water Management	7.5 EC
- Research in WSM	7.5 EC
- Water Quality Management	7.5 EC
- Water, Governance and Law	7.5 EC
- Drinking Water and Sanitation	7.5 EC
- Consultancy Project SUSD and WSM	7.5 EC
- Land Surface Hydrology	7.5 EC

2. Obligatory optional components (52.5 EC)

Choice 1 of 2:

- Systems thinking, Scenarios & Indicators for SD	7.5 EC
- Unsaturated Zone Hydrology	7.5 EC

Choice 1 of 2:

- Master's thesis (30 EC) + other optional courses (15 EC)	45 EC
- Extended Master's thesis	45 EC

3. Conversion of former courses

<i>Old course</i>	<i>New course 2023-2024</i>
Transdisciplinary Case Study (GEO4-2302)	Consultancy Project SUSD and WSM (GEO4-2008)

Appendix 4 : Grade conversion tables Joint Programme

FROM GRAZ TO UTRECHT

Definition	GU	UU
Passed	≤4,0 Sehr gut Gut Befriedigend Genügend	Pass
Considerable further work is required, failed	> 4,0 Nicht genügend	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM LEIPZIG TO UTRECHT

Definition	LU	UU
Passed	≤4,0 Sehr gut Gut Befriedigend Ausreichend	Pass
Considerable further work is required, failed	> 4,0 Mangelhaft	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM CA' FOSCARI VENICE TO UTRECHT

Definition	CU	UU
Passed	18-30	Pass
Considerable further work is required, failed	< 18	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM BASEL TO UTRECHT

Definition	BU	UU
Passed	4,0-6,0	Pass
Considerable further work is required, failed	< 4,0	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM HIROSHIMA TO UTRECHT

Definition	HU	UU
Passed	S A B C	Pass
Considerable further work is required, failed	D	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM STELLENBOSCH TO UTRECHT

Definition	SU	UU
Passed	>=50%	Pass
Considerable further work is required, failed	<50%	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

FROM TERI TO UTRECHT

Definition	TERI	UU
Passed	A+ A B+ B C+ C D	Pass
Considerable further work is required, failed	F	Fail
Utrecht University transfers no specific grades but only pass/fail into their own system for credits acquired abroad.		

Appendix 5: Rules for choosing elective courses

1. Students in the Master's programme choose elective courses from another or their own Master's programme. Courses that are obligatory in the exam programme cannot be used as elective courses.
2. Honours programmes for Master's students (e.g. Young Innovators, GHIS, Leadership Programme) do not count towards the electives in the programme.
3. Electives as mentioned in the student's academic progress review in OSIRIS are pre-approved by the track coordinator and by the Board of Examiners. Students can enrol for those courses via OSIRIS. It remains the student's responsibility to make sure that the points mentioned under 6 d-f are met. If the course is from another department than the Copernicus Institute, it may be that other students have priority and that they are therefore placed on a waiting list.
4. It is possible to choose other courses than the pre-approved courses mentioned in OSIRIS. Any non-pre-approved elective courses must be subjected in advance to the track coordinator and the Board of Examiners for approval. The track coordinator will advise the Board in this matter.
5. The application for a non-pre-approved elective is done by a written request (application form) to the track coordinator. Written information on the content, the level, and the study load of the course (preferably by means of a copy of the course's description from the course catalogue) must be attached. The 'Application Form Elective courses Copernicus' can be found in the Blackboard community Sustainable Development.
6. The track coordinator tests the proposed elective course(s) on the following criteria:
 - a. It must be thematically linked to the Master's programme;
 - b. It concerns a course at master level (M);
 - c. There is no overlap in content with courses still to be taken or already taken.
The student is responsible for making sure that:
 - d. The course is available to students of the SUSD programme;
 - e. The student fulfills the entrance requirements of the course (if applicable). Actual participation is only possible if students satisfy the course's entrance conditions; in case of doubt they should contact the course coordinator first;
 - f. The course is not taught in the same period and timeslot as another course the student has selected.
7. If the track coordinator has declared that the elective course(s) meet the criteria under 6a-c (by signing the application form or approval via an email message), the student sends the application form (signed or with the approval email attached) and the course information to the Board of Examiners via OSIRIS Case. The Board of Examiners takes the final decision on whether or not the elective is approved.
8. In the programme's course schedule, room has been reserved for taking electives. However, the student is free to deviate from this planning, e.g. because they wish to take an interesting elective course in another period. If this causes delay in the study planning, it is the responsibility of the student! Students are therefore advised to take their electives in the reserved periods and timeslots, or use a part of the time planned for their Master's thesis.

Appendix 6: Entrance requirements 2023-24

Sustainable Development:

Course	Entrance requirement
Sustainable Food Systems (GEO4-2005)	Letter of acceptance of a Master's programme
Consultancy Project SUSd and WSM (GEO4-2008)	Letter of acceptance MSc Sustainable Development or MSc Water Science & Management. - At least 22,5 EC gained in the master SUSd or WSM, including Perspectives on Sustainable Development (GEO4-2301) or Sustainable Water Resources Management (GEO4-6008).
Innovation and International Development (GEO4-2009)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Imagining the Future for Transformation (GEO4-2010)	Letter of acceptance of a Master's programme
Data Analytics for Sustainability (GEO4-2011)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Perspectives on Sustainable Development (GEO4-2301)	Letter of acceptance MSc Sustainable Development
Environmental Systems Analysis (GEO4-2303)	Recommended prerequisites: For students from other programmes: mathematics and modelling, level 1; e.g. Wiskunde & Systemanalyse (GEO1-2202), please contact the coordinator before enrolment in Osiris.
Research Strategies ESG (GEO4-2304)	Letter of acceptance MSc Sustainable Development. Actively participated in Foundations of ESG Research (GEO4-2306) and Governance Theories (GEO4-2332) Recommended prerequisites: Basic research methodology skills. Knowledge of the main literatures on environmental governance.
International Governance for SD (GEO4-2305)	Letter of acceptance of a Master's programme (social science background). Recommended prerequisites: Knowledge on policy analysis and governance theories.
Foundations of Earth System Governance Research (GEO4-2306)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Global Environmental Change (GEO4-2310)	Letter of acceptance of a Master's programme
Policies for Energy & Materials Transitions (GEO4-2311)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Energy Science or MSc Sustainable Business & Innovation or MSc Water Science and Management or MSc Earth Sciences. Recommended prerequisites: Tools for Energy & Materials Analysis(GEO4-2326)
Energy Supply Technologies (GEO4-2312)	Recommended prerequisites: Applied Thermodynamics (GEO2-2212), Energy Analysis (GEO3-2223) or Tools for Energy &

	Materials Analysis (GEO4-2326) or equivalent courses. <i>This course is not available to Energy Science students.</i>
Research Design SD (GEO4-2314)	Letter of acceptance MSc Sustainable Development
Tailor-made course SUSD (GEO4-2320)	- Letter of acceptance MSc Sustainable Development, and - At least 45 EC passed within the programme Students in the SUSD-Joint Programme will need to have passed 45 EC, including one of the mobility tracks.
Master's Thesis SD (GEO4-2321)	- Only for cohort 2021 and earlier Letter of acceptance MSc Sustainable Development, and - At least 60 EC passed within the program, including: <ul style="list-style-type: none"> • Perspectives on SD (GEO4-2301) • Systems Thinking, Scenarios & Indicators (GEO4-2331) • Research Design SD (GEO4-2314) <p><i>And:</i></p> <p>- at least two track-specific courses of which 1 methods course (at least 15 EC in total). These are specified per track:</p> <p><u>For track E&M:</u></p> <ul style="list-style-type: none"> - Tools for E&M Analysis (GEO4-2326) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Energy Supply Technologies (GEO4-2312) - Policies for E&M Transitions (GEO4-2311) <p><u>For track ECE:</u></p> <ul style="list-style-type: none"> - Environmental Systems Analysis (GEO4-2303), and - Global Environmental Change (GEO4-2310) <p><u>For track ESG:</u></p> <ul style="list-style-type: none"> - Research Strategies ESG (GEO4-2304) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Foundations of ESG Research (GEO4-2306) - Governance theories (GEO4-2332) <p><u>For track ID:</u></p> <ul style="list-style-type: none"> - Advanced M&T Development Studies (GEO4-3518), or Research Methods for PES (GEO4-2345) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Development Themes (GEO4-3510) - Development Theories (GEO4-3505) <p>Students in the SUSD-Joint Programme will need to have passed 60 EC, including one of the mobility tracks.</p>
Environmental Ethics & Sustainable Development (GEO4-2323)	Letter of acceptance of a Master's programme

Tools for Energy & Materials Analysis (GEO4-2326)	Recommended prerequisites: Energy Analysis (GEO3-2223) or similar course. <i>This course is not available to Energy Science students.</i>
Analysing Governance Practices (GEO4-2328)	Letter of acceptance MSc Sustainable Development. Actively participated in Foundations of ESG Research (GEO4-2306) and Governance Theories (GEO4-2332)
Systems thinking, Scenarios & Indicators for SD (GEO4-2331)	Letter of acceptance MSc Sustainable Development or MSc Water Science and Management or profile Complex Systems. Recommended prerequisites: Perspectives on Sustainable Development (GEO4-2301), or Sustainable Water Resources Management (GEO4-6008)
Governance Theories (GEO4-2332)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation.
Squaring the Circular Economy (GEO4-2338)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management. Recommended prerequisites: Basic background in natural sciences.
Natural Resource Management and Society (GEO4-2339)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management or MSc Environmental Biology.
Integrated Assessment of Climate Change (GEO4-2340)	Letter of acceptance of a Master's programme
Quantifying Ecosystem Resilience to Global Environmental Change (GEO4-2341)	Letter of acceptance MSc Sustainable Development Recommended prerequisite: Passed Global Environmental Change (GEO4-2310)
Master's thesis (GEO4-2343)	<p>- Only for cohort 2022</p> <p>- Letter of acceptance MSc Sustainable Development, and</p> <p>- At least 60 EC passed within the program, including:</p> <ul style="list-style-type: none"> • Perspectives on SD (GEO4-2301) • Systems Thinking, Scenarios & Indicators (GEO4-2331) • Research Design SD (GEO4-2314) <p><i>And:</i></p> <p>- at least two track-specific courses of which 1 methods course (at least 15 EC in total). These are specified per track:</p> <p><u>For track E&M:</u></p> <ul style="list-style-type: none"> - Tools for E&M Analysis (GEO4-2326) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Energy Supply Technologies (GEO4-2312) - Policies for E&M Transitions (GEO4-2311) <p><u>For track ECE:</u></p>

	<ul style="list-style-type: none"> - Environmental Systems Analysis (GEO4-2303), and - Global Environmental Change (GEO4-2310) <p><u>For track ESG:</u></p> <ul style="list-style-type: none"> - Research Strategies ESG (GEO4-2304) <p>And 1 out of 2:</p> <ul style="list-style-type: none"> - Foundations of ESG Research (GEO4-2306) - Governance theories (GEO4-2332) <p><u>For track ID:</u></p> <ul style="list-style-type: none"> - Advanced M&T Development Studies (GEO4-3518), or Research Methods for PES (GEO4-2345) and - Development Themes (GEO4-3510)
Introduction to Political Ecology, GEO4-2344	Letter of acceptance MSc Sustainable Development
Research Methods for Politics, Ecology and Society, GEO4-2345	Letter of acceptance MSc Sustainable Development Actively participated in Introduction to Political Ecology (GEO4-2344) and Natural Resource Management and Society (GEO4-2339)
Social Innovation and Alternatives to Development, GEO4-2346	Letter of acceptance MSc Sustainable Development Actively participated in Introduction to Political Ecology (GEO4-2344)
Techniques of Futuring (GEO4-5501)	Letter of acceptance of a Master's programme

Water Science and Management:

Course	Entrance requirement
Principles of Ground Water Flow (GEO4-1434)	<ul style="list-style-type: none"> - Letter of acceptance MSc Earth Sciences or MSc Water Science and Management. - BSc or equivalent in Earth Sciences, Applied Sciences, or related fields. - basic knowledge of physics, calculus, ordinary and partial differential equations. <p>Recommended prerequisites:</p> <ul style="list-style-type: none"> - basic knowledge of hydrology, introductory geology and/or environmental sciences.
Sustainable Food Systems (GEO4-2005)	Letter of acceptance of a Master's programme
Consultancy Project SUSD and WSM (GEO4-2008)	Letter of acceptance MSc Sustainable Development or MSc Water Science & Management. - At least 22,5 EC gained in the master SUSD or WSM, including Perspectives on Sustainable Development (GEO4-2301) or Sustainable Water Resources Management (GEO4-6008).
Innovation and International Development (GEO4-2009)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Imagining the Future for Transformation (GEO4-2010)	Letter of acceptance of a Master's programme
Data Analytics for Sustainability (GEO4-2011)	Letter of acceptance MSc Sustainable Development or MSc Innovation Sciences or MSc Sustainable

	Business & Innovation or MSc Energy Science or MSc Water Science and Management.
Systems thinking, Scenarios & Indicators for SD (GEO4-2331)	Letter of acceptance MSc Sustainable Development or MSc Water Science and Management. Recommended prerequisite: Perspectives on Sustainable Development (GEO4-2301), or Sustainable Water Resources Management (GEO4-6008)
Land Surface Hydrology (GEO4-4404)	Letter of acceptance MSc Earth Sciences or MSc Water Science and Management. Recommended prerequisites: Basic knowledge of quantitative analysis, including statistics, mathematics (differentiation, integration) and physics (mechanics).
Unsaturated Zone Hydrology (GEO4-4417)	Letter of acceptance MSc Earth Sciences or MSc Water Science and Management. Recommended prerequisites: <ul style="list-style-type: none"> - Knowledge of groundwater hydrology: GEO2-4203 Physical hydrology or GEO4-1434 Principles of groundwater flow (or equivalent); - basic physics/mathematics skills.
Quantitative Water Management (GEO4-6001)	Letter of acceptance of a Master's programme. Recommended prerequisites: <ul style="list-style-type: none"> - A bachelor level natural sciences background. - One or more of the following courses: GEO2-4203 Physical Hydrology; GEO3-4307: Fluid mechanics 1; GEO4-1434 Principles of groundwater flow. Students without a natural science Bachelor's degree should contact the course coordinator <i>before</i> registering for the course.
Water, Governance and Law (GEO4-6002)	Letter of acceptance of a Master's programme.
Drinking Water and Sanitation (GEO4-6003)	Letter of acceptance MSc Water Science and Management.
Master's thesis (Internship) (GEO4-6004; GEO4-6006)	Letter of acceptance MSc Water Science and Management. At least 60 EC passed within the programme.
Tailor made course WSM (GEO4-6005)	Letter of acceptance MSc Water Science and Management. At least 45 EC passed within the WSM programme.
Water Quality Management (GEO4-6007)	Letter of acceptance of a Master's programme. Recommended prerequisite: Basic knowledge of chemistry at 1 st year bachelor level
Sustainable Water Resources Management (GEO4-6008)	Letter of acceptance MSc Water Science and Management or MSc Sustainable Business and Innovation or MSc Innovation Sciences or MSc Energy Science or MSc Sustainable Development or MSc Earth Sciences or MSc Physical Geography.
Research in WSM (GEO4-6009)	Letter of acceptance MSc Water Science and Management.
Techniques of Futuring (GEO4-5501)	Letter of acceptance of a Master's programme

Appendix 7: Annotation Complex Systems (SUSD only)

Description

The Master's profile Complex Systems is an interdisciplinary profile for students who are interested to broaden their knowledge and expertise within the field of Complex Systems. In this research field societal issues, such as a financial crisis, a sudden epidemic or climate change are studied from a quantitative modelling perspective. Students will get an understanding of the various models used in the complexity field and the behaviour (i.e. transitions, predictability) of these models.

The aim of the Complex Systems Profile is for students to develop or improve their

- affinity for quantitative approaches in order to address societal issues,
- ability to build models that are amenable to quantitative approaches,
- familiarity with standard (quantitative) methods in the toolbox for analysing complex systems, and
- ability to work in interdisciplinary teams.

Learning outcomes

Upon completion of the Master's profile the student

- is able to recognise the complex systems aspects when confronted with a societal problem,
- is able to develop models of complex systems and/o has a good overview of model-building for complex systems,
- has a good overview of the methods in the complex systems toolbox, can apply them to models and extract quantitative results, and
- communicate/explain complex-systems models and methods to (interdisciplinary) teammates.

Programme

The Master's profile comprises 30 EC and consists of the following parts:

- Two electives (7.5 EC each) from the following courses (**one of these electives need to be from 1-3 below**, which are termed as **core courses** for Complex Systems):
 1. Introduction to Complex Systems (WISM484)
 2. Advanced Topics in Climate Physics16 (NS-MO411)
 3. Computational Aspects of Machine Learning17 (NS-EX426M)
 4. Mathematical Biology18 (WISL411)
 5. A Complex Systems labelled course listed under a master programme that is **different** from the one to which the student is admitted (see list below). **Note on this list:** some programmes may require one of their own primary elective courses, labelled as Complex Systems course to be taken; the student **cannot** count them as primary electives **as well as** Complex Systems master profile courses. More information can be found in the specific programme description section of the Education and Examination Regulations.
- A Research Project on a Complex Systems topic (15 EC, Osiris code GSNS- CSRP), for which focus should be on interdisciplinary aspects and at least two supervisors from two different departments/faculties must be involved.

The topic should not correspond to the topic of the master thesis, however if the master research project deals with a complex system subject – currently available only for Theoretical Physics, Experimental Physics and

Climate Physics Master programmes at Utrecht University – it is permitted to combine the research project of the master’s profile Complex Systems (15 EC) with the master thesis project. In case the master research project deals with a complex system subject, the complex systems aspects must be separately assessed and a supervisor from a different department or faculty other than the department related to the student’s master programme needs to be involved in assessing the complex system aspects of the research project.

The topic must be approved by the coordinator of the profile as well as by the coordinator of the master programme to which the student is admitted.

The total number of EC of each master’s programme will NOT be increased by completing the master profile Complex Systems. Students receive a certificate by completing the Master’s profile Complex Systems.

List of courses labelled as a complex systems course:

Master’s programme	Course	Osiris code
Artificial Intelligence	Evolutionary Computing	INFOEA
Climate Physics	Waves in Geophysical Fluids	NS-MO447M
Computing Science	Network Science	INFOMNWSC
Data Science	Data Mining	INFOMDM
	Pattern Recognition and Deep Learning	INFOMPRDL
Energy Science	Energy Systems Modelling	GEO4-2515
Experimental Physics	Modelling and Simulation	NS-TP432M
	Fundamentals of Biophysics AND	NS-TP464M AND
	Advanced Methods in Biophysics†	NS-EX433M
Game and Media Technology	Pattern Recognition and Deep Learning	INFOMPR
	Crowd Simulation	INFOMCRWS
Mathematical Sciences	Inverse Problems in Imaging*	WISL435
	Introduction to Numerical Bifurcation Analysis of ODEs and Maps*	WISL606
Nanomaterials Science	Toy Models	SK-MTOYM
	Modelling and Simulation	NS-TP432M
Sustainable Development	Systems Thinking, Scenarios and Indicators	GEO4-2331
	Environmental Systems Analysis	GEO4-2303
	Integrated Assessment of Climate Change	GEO4-2340
Theoretical Physics	Modelling and Simulation	NS-TP432M
	Fundamentals of Biophysics AND	NS-TP464M AND
	Stochastic Processes in Biophysics†	NS-TP465M
Multidisciplinary Economics	Algorithms in Finance	ECMAF
	The Triumph of the City	ECRMTCE

† These two courses can only be taken in combination with each other since individually they are 3.75 EC courses

* Registration via elo.mastermath.nl

Entry Requirements

- The student belongs to one of the participating master programmes
- Upon consultation with the coordinator for the profile, it is also possible for students from outside Utrecht University to participate in the profile, when their master programme has an affinity to complex systems

Participating Master's programmes

- Climate Physics
- Computing Science
- Energy Science
- Artificial Intelligence
- Experimental Physics
- Game and Media Technology
- Mathematical Sciences
- Nanomaterials Science
- Sociology and Social Research
- Sustainable Development
- Theoretical Physics
- Multidisciplinary Economics

Legacy issues

The following courses were labelled as Complex Systems courses in the past academic years (noted in parenthesis).

Master's programme	Course	Osiris code
Artificial Intelligence	Seminar Social Simulation (2018-19)	INFOMSOCs
Core courses	Algorithms in Finance (2018-19, 2019-20)	WISM410
	Complex Networks (2020-21)	
	Seminar Applications of Mathematics in Radiation Research (2018-19, 2019-20)	WISL115 WISM409
	Understanding Complexity: Economy and the Planet (2018-19, 2019-20)	NS-MO450M
	Mathematical Neuroscience	WISL413
Computing Science	Evolutionary Algorithms (2018-19, 2019-20), Evolutionary Computing	INFOEA
	Data Mining (2020-21, 2021-22, 2022-23)	INFOMDM
	Pattern Recognition (2020-21, 2021-22, 2022-23)	INFOMPR
Experimental Physics	Biophysics	NS-EX430M
Game and Media Technology	Games and Agents (2017-18)	INFOMGMAG

Mathematical Sciences	<p>Interacting particle systems: Theory and applications (2018-19)</p> <p>Introduction to Numerical Bifurcation Analysis of ODEs and Maps (2019-20, 2021-22)</p> <p>Inverse Problems in Imaging (2020-21)</p> <p>Laboratory class for scientific computing (2018- 19)</p> <p>Mathematical Biology (2017-18, 2019-20, 2021-22)</p> <p>Mathematical Neuroscience (2020-21)</p> <p>Nonlinear Waves (2017-18)</p> <p>Numerical bifurcation analysis of large-scale systems (2018-19, 2020-21, 2021-22)</p>	<p>WISL431</p> <p>WISL606</p> <p>WISL430</p> <p>WISM454</p> <p>WISL411</p> <p>WISL413</p> <p>WISL409</p> <p>WISL425</p>
Multidisciplinary Economics	Advanced behavioural and experimental finance (2018-19)	ECRMABEF
Sustainable Development	Sustainability Modelling and Indicators (2018-19, 2019-20)	GEO4-2331

4.4 REGULATIONS OF THE BOARD OF EXAMINERS 2023-2024

Regulations of the Board of Examiners adopted by the Board of Examiners for the Undergraduate and Graduate School of Geosciences at Utrecht University, on 6 June 2023.

Valid from 1 September 2023.

Disclaimer: This translation is provided for information purposes only. Inevitably, differences may occur in translation, and if so, the Dutch version will prevail.

Preamble

The Board of Examiners of the Undergraduate School of Geosciences and the Graduate School of Geosciences consists of a central Board of Examiners and three executive panels.

The chairs of the executive panels, together with an external member, form the Board of Examiners of the Undergraduate School of Geosciences and the Graduate School of Geosciences.

The Board of Examiners acts as a framework-setting and supervisory body that:

- determines the examinations policy;
- establishes frameworks in the form of regulations and procedures;
- adopts these regulations of the Board of Examiners (which apply to everyone who is enrolled in this academic year and/or takes courses of the program in this academic year);
- monitors the quality of the decisions and the implementation of the examination policy by the executive panels.

The executive panels independently implement examinations policy, within the framework set by the Board of Examiners. Requests to the Board of Examiners are received centrally and are subsequently assigned to the executive chambers. The appendix specifies which executive panel processes requests.

As a subcommittee Central Board of Examiners, the Assessment Committee investigates the quality of assessment within the framework of the faculty assessment policy and is accountable to the Central Board of Examiners.

PARAGRAPH 1 – GENERAL STIPULATIONS

Art. 1.1 – scope of application

These regulations apply to the tests and examinations of the study programmes of the Graduate and Undergraduate School of Geosciences. These regulations do not apply to the PhD programmes.

The terms defined in the Education and Examination Regulations of these study programmes also apply to these regulations.

Art. 1.2 – Board of Examiners

1. The Dean appoints the chair and the members of the Board of Examiners (see EER art. 5.2.2)
 - a. the chair is in charge of managing the daily course of affairs of the Board of Examiners.
 - b. the chair appoints a vice chair, excluding the external member, to replace the chair in case of absence.
2. The Board of Examiners will take decisions by an ordinary majority of votes. If the votes are equal, the chair, or their replacement, has a casting vote.

3. The chair and all members of the Board of Examiners, excluding the external member, are authorized signatories.
4. The Board of Examiners takes a decision within six weeks of receipt of an application. During academic vacation and fieldwork periods this term can be exceeded.
5. The Board of Examiners is supported in its work by an official secretary. This official secretary is not a member of the Board of Examiners. The official secretary is responsible for:
 - preparing, convening and taking minutes of the meetings;
 - monitoring the implementation of decisions taken;
 - communicating decisions to students and other stakeholders;
 - preparing periodic reports;
 - archiving processed requests, objections and decisions taken.
6. The Board of Examiners can mandate the official secretary to communicate and sign decisions on behalf of the Board of Examiners. To this end, the Board of Examiners issues a written mandate to the official secretary, containing the frameworks and general instructions regarding the exercise of the mandated authority.
7. The Board of Examiners can mandate the official secretary to check on its behalf whether all units of study belonging to the examination programme of the degree programme have been successfully completed and the student has therefore passed the examination. To this end, the Board of Examiners issues a written mandate to the official secretary, containing the frameworks and general instructions regarding the exercise of the mandated authority.

Art. 1.3 – standards

In its decisions, the Board of Examiners will be guided by the following standards:

- a. the retention of quality criteria in an examination or test;
- b. efficiency requirements, expressed *inter alia* in efforts to:
 - limit as far as possible loss of time for students, who can thereby make rapid progress with their studies;
 - encourage students to terminate their studies as quickly as possible, if it is unlikely that they will pass an examination or test;
- c. protecting students from themselves in the event that they wish to take on an excessive study load;
- d. leniency towards students who, through no fault of their own, have experienced delays in the progress of their studies.

Art. 1.4 - examiners

1. Based on the “examiner’s profile” (Appendix 2), the Board of Examiners appoints members of the academic staff who are responsible for teaching a course as examiners. The Board of Examiners can appoint other members of the academic staff and experts from outside the degree programs as examiners in accordance with the criteria laid down in the examiner’s profile.
2. The Board of Examiners may withdraw the appointment as an examiner in the event that the examiner fails to comply with the applicable legislation or regulations or guidelines of the Board of Examiners, or if the competence of the examiner concerning the making, administering or marking of tests repeatedly proves to be of insufficient quality.
3. The Board of Examiners registers all examiners, so that it is known which persons are authorized to administer tests and to determine the results.

PARAGRAPH 2 – ORGANIZATION OF TESTS AND PROPER PROCEDURE

Art. 2.1 – times of tests

1. Written tests are to be administered at times set by the course examiner at least 14 days before the start of the term in question.
2. In setting the times of the tests any overlap of tests must be prevented as far as possible.
3. Changes to times set may be made only in cases of force majeure.
4. If possible, oral tests are to be administered by the examiner(s) in question at a time set after consulting with the student.
5. The times of written supplementary and replacement tests will be determined and announced at least two weeks in advance. At least five working days will pass between the announcement of the results and the supplementary test.

Art. 2.2 – registration for tests

When registered correctly for a course, students are also signed up for the course test(s).

Art. 2.3 – order during an examination or test

1. The examiner will ensure that an adequate number of invigilators are appointed for the written examinations. These invigilators will ensure that the test proceeds properly.
2. The students must identify themselves on request by or on behalf of the Board of Examiners by valid proof of the student's identity. Admission to the test will be denied if students are unable to identify themselves.
3. The student must follow instructions of the Board of Examiners, or the examiner or invigilator, which are given before, during and immediately after the test.
4. Should the student fail to follow one or more instructions as referred to in Art. 2.3.3, the student may be excluded by the Board of Examiners or examiner from further participation in the test in question. As a consequence of the exclusion, no result will be determined for that test. The Board of Examiners must give the student the opportunity to be heard on the matter before it takes a decision.
5. The duration of a test must be such that students reasonably have enough time to answer the questions.
6. Latecomers will be admitted to a test no more than 30 minutes after the start of the test. If a student is prevented by force majeure from being present within this time limit, the Board of Examiners, or examiner, will decide whether the student can still be admitted to the test. Latecomers may not claim extra time for the test.
7. Students may not leave the room where the test is being administered within 30 minutes of the start of the test.
8. After one or more participants have left the room, no latecomers will be admitted to the test.
9. Students must hand over their bags, coats and electronic devices to the invigilators at the start of the test.

PARAGRAPH 3 – ASSESSMENT OF TESTS, THESIS

Art. 3.1 – marking of test

1. The Board of Examiners will ensure that written tests are to be marked on the basis of predetermined, written standards, possibly adjusted on the basis of a correction.
2. The weighting of the interim results in reaching the end result is laid down in the course manual.
3. If more than one examiner is involved in the marking of a test, the course coordinator must ensure that all examiners mark it on the basis of the same standards.
4. The manner of marking must be such that the student can check how the result of the test was reached.
5. With only one examiner present a recording of an oral test is made. In case of more than one examiner present, one of the examiners makes notes listing the topics that are being addressed and whether the students masters the subject(s). Recordings or notes are kept by the examiner for three months and can be viewed or listened to by the student who took the oral test.
6. If, in case of assessing, several students contribute towards a single joint project, the following rules apply:
 - a. the guideline for the individual or collective marking of group work must be established beforehand by the lecturer and notified to the student;
 - b. the supervisor will regularly check that all students make a proportional contribution to the end product;
 - c. students may be marked individually on the basis of the work they have performed.
7. If several students contribute to a thesis or master's research, the following additional guidelines apply:
 - d. the Examination Board ensures that assessment criteria for the thesis are established and that these laid down in the study guide.
 - e. agreements about the division of tasks for the work to be performed by the students are laid down in writing by the responsible examiner(s) before the work commences;
 - f. students are assessed individually on the basis of the work they have performed.
8. The last mark given will apply in assessing the result of a test/course.

Art. 3.2 – assessment of theses

1. The assessment of theses and final papers takes place on the basis of the assessment method with associated assessment criteria laid down in the course guide for the component.
2. The assessment is done by two assessors. Both assessors are designated as examiners, with at least one examiner being a member of the academic staff of the program and in possession of a Basic Teaching Qualification (BKO).
3. If the first and second examiners fail to reach agreement, the Board of Examiners will appoint a third assessor, who will issue a binding final assessment.
4. The assessors both use an assessment form to provide insight into the way in which the assessment was made.
5. The student receives one motivated final assessment on behalf of all assessors.

Art. 3.3 – subsequent evaluation

1. As soon as possible after the result of an oral test is made known, if a student so requests or on the initiative of the examiner, a subsequent evaluation will take place between the examiner and the student, in which the examiner will give reasons for the decision.
2. During a period of 30 days, starting on the day after the results of a written test were made known, the student may request an evaluation with the examiner. The evaluation will take place at a place and time determined by the examiner.
3. If a collective evaluation is organized, the student can submit a request as referred to in the second paragraph only if the student was present at the collective evaluation and the student substantiates their request, or if the student was prevented by force majeure from attending the collective evaluation.
4. The provisions of the preceding paragraph will apply by analogy if the examiner offers the student the opportunity to compare the answers with model answers.

Art. 3.4 – recording the final results

Final results of a course unit will be entered in Osiris following authorization by the examiner.

PARAGRAPH 4 – ASSURING THE QUALITY OF EXAMINATIONS

Art. 4.1 – assuring the quality of testing

The Board of Examiners will ensure that:

- a. a testing policy/testing plan is in place, and that this is implemented;
- b. tests are compiled in line with the learning objectives and final attainment levels for the course in question;
- c. uniform agreements are made on the way in which tests are compiled.

Art. 4.2 – determining the quality of testing

1. The Assessment Committee is tasked with providing analysis and advice concerning the quality of the tests. To this end, it will test the quality of individual tests on the basis of random samples – and following complaints, evaluation of results, pass rates, et cetera– in relation to the validity (do tests measure knowledge, skills and competences) and reliability (are tests consistent and accurate) and will inform the Board of Examiners of their findings.
2. The Board of Examiners may ask the Assessment Committee to provide information, undertake research and make proposals concerning the structure of the tests. The Assessment Committee is obliged to follow these instructions. The Assessment Committee is accountable to the Board of Examiners for carrying out these instructions.

Art. 4.3 – assuring the quality of examinations (final level of the graduates)

1. If it becomes apparent that the test has such serious quality shortcomings that it cannot be ascertained whether and to what extent students have achieved the learning objectives of the course, by virtue of its quality assurance role pursuant to Section 7.12b (1)(a) of the Higher Education and Research Act, the Board of Examiners may decide immediately that the examination concerned is invalid, and that all participants must repeat the entire examination as soon as possible. The Board of Examiners will set the date on which the examination will be repeated. This date will be no later than two weeks after establishing the quality shortcomings, so that the participants will still be able to benefit from their preparations for the examination.

2. Except in the event of fraud or plagiarism, as referred to in Art. 5.15 of the Education and Examination Regulations, the Board of Examiners may no longer declare a test invalid if the final test results have already been published.

Art. 4.3a – declaring void online proctored exam in case of irregularities

1. The Board of Examiners can declare the online proctored exam of one or more students invalid if, during the exam, there was insufficient insight into the possibility of fraud or if there were circumstances that enabled fraud.
2. If the situation described in section one of this article is the consequence of a irregularity at the expense and risk of the student, the student will not be offered an extra possibility to take the exam.
3. In case of force majeure, reported by the student during the exam, the student can submit a request for an extra exam. If the irregularity is at the expense and risk of the university, a new exam will be offered.
4. The irregularity is at the expense and risk of the student when the student has not followed the instructions of the online proctored exam.

Art. 4.4 – assuring the quality of examinations (final level of the graduates)

The Board of Examiners will ensure that:

- a. the exit qualifications for the course as described in the Education and Examination Regulations are translated into testable learning objectives for each course;
- b. it is systematically examined whether there is a sufficient connection between the course objectives and the final attainment levels, or the sum of the learning objectives for each course corresponds to the exit qualifications for that course.

Art. 4.5 – Board of Examiners’ own investigation to maintain quality of examination

1. A student has passed the examination if all parts of the examination programme have been successfully completed. Contrary to this, the Board of Examiners may decide that in order to pass the examination the student must have complied with the requirements relating to the Board of Examiners’ own investigation as referred to in Section 7.10(2) of the Higher Education and Research Act into the knowledge, understanding and competence of the student.
2. The Board of Examiners will only conduct such an investigation if it establishes that there are certain facts or circumstances leading to the conclusion that the Board of Examiners cannot vouch for the student having obtained the exit qualifications of the programme (as referred to in Art. 3.1 of the Education and Examination Regulations).
3. If the Board of Examiners exercises its authority to conduct an investigation as referred to in the first paragraph, it will inform the student(s) concerned in writing of its decision, giving reasons and drawing the student’s attention to the option to submit an appeal to the Examination Appeals Board.

PARAGRAPH 5 - EXEMPTIONS, APPROVAL OF COURSE UNITS

Art. 5.1 – exemption

1. Students who wish to receive one or more exemptions, must submit a request with argumentation to the Board of Examiners. The request must be signed and contain:
 - the student's name, address and student number;
 - a description of the reasons on which the exemption is being requested;
 - for which course(s) the exemption is being requested;

- an authenticated copy of the student's diploma, examination results or proof of tests previously taken;
 - and/or a description of the knowledge and experience the student has obtained outside of higher education, accompanied by the relevant documents showing this.
2. The Board of Examiners will forward the request for advice to the examiner(s) in charge of teaching the course(s) for which the exemption is being requested.
 3. The Board of Examiners will decide within six weeks of the date of receipt of the request on whether the exemption will be granted. With the exception of academical holidays as laid down in the academical calendar and during fieldwork periods.

Art. 5.2a – approval of course units bachelor

1. Students wishing to include course units, which require prior permission of the Board of Examiners on the grounds of the Education and Examination Regulations, must submit a substantiated request to the Board of Examiners. The request must be signed and contain:
 - the student's name, address and student number;
 - a description of the contents, level and assessment of the courses for which approval is being sought;
 - an indication of the way in which the student wishes to include the course(s) in the education programme.
2. The Board of Examiners will, if necessary, forward the request for advice to the programme coordinator or a specialist lecturer of the programme.
3. The Board of Examiners will decide within six weeks of the date of receipt of the request. With the exception of academical holidays as laid down in the academical calendar and during fieldwork periods.
4. If approval concerns course units outside UU, following their completion the student will submit a certified transcript or a document detailing the student's progress.
5. Based on the certified transcript, course content description(s) and, if so requested, further substantiation by the student, the Board of Examiners grants course level 1, 2 or 3 to a course taken outside UU in accordance with the UU teaching model.
6. If the course information (as referred to in art. 5.2.5) proves to be insufficient to determine course level and EC, the Board of Examiners will grant level 1 and/or 1 EC.
7. The Board of Examiners does not grant a course level (1, 2 or 3) to courses taken abroad.
8. Contrary to the provisions of 5.2a.7, at least the level of the course to be replaced will be granted if the Board of Examiners decides to approve courses taken abroad as a replacement component in the major.
9. If a student can demonstrate that they cannot meet the course level requirements of the elective course profile, they have to submit a substantiated request to the Board of Examiners to grant level 2 or 3 to the courses required to meet the course level requirements.
10. The Board of Examiners will decide about the request (as referred to in art. 5.2.9), if necessary after consulting the programme coordinator or a specialist lecturer of the programme.

Art. 5.2b – approval of course units master

1. Students wishing to include course units, which require prior permission of the Board of Examiners on the grounds of the Education and Examination Regulations, must submit a substantiated request to the Board of Examiners. The request must be signed and contain:
 - the student's name, address and student number;
 - a description of the contents, level and assessment of the courses for which approval is being sought;
 - an indication of the way in which the student wishes to include the course(s) in the education programme.
2. The Board of Examiners will, if necessary, forward the request for advice to the programme coordinator or a specialist lecturer of the programme.
3. The Board of Examiners will decide within six weeks of the date of receipt of the request. With the exception of academical vacation periods as laid down in the academical calendar and during fieldwork periods.

4. If approval concerns course units taken outside UU, following their completion the student will submit a certified transcript or a document detailing the student's progress.
5. Based on the certified transcript, course description(s) and, if so requested, further substantiation by the student, the Board of Examiners grants a number of credits to a master's course taken elsewhere.
6. If the course information (as referred to in art. 5.2b.5) proves to be insufficient to determine a number of credits the Board of Examiners will grant 1 EC.

PARAGRAPH 6 – COMPLAINTS

Art. 6.1 - complaints about testing and marking

1. The first point of contact for students who have a complaint about testing and marking is the lecturer, who as examiner is responsible for determining the result of the test. If there are several examiners for the course, the course coordinator is the first point of contact as the 'representative' for all examiners involved in the test (provided that the course coordinator is also an examiner). The lecturer or course coordinator will endeavour to reach a solution in an informal manner.
2. 'Testing and marking' is understood to mean all situations where there is a formal assessment moment that leads to a mark or an alphanumerical result relating to learning objectives and exit qualifications that are laid down in the Education and Examination Regulations.
3. If the quality of the test is at issue and the complaint has implications for the result of the test, the lecturer and/or course coordinator will ensure that a quality analysis is carried out to assess whether the test meets the general quality requirements as referred to in paragraph 4. In the case of wide-ranging complaints or complex issues concerning content, third parties will be consulted if necessary, such as a specialist lecturer, a testing expert or the faculty's Assessment Committee. The quality analysis will be conducted as soon as possible, preferably before the test results are published.
4. If the quality analysis reveals that the test does not meet one or more quality requirements, the lecturer and/or course coordinator may decide to adjust the marks and the standard. If the final test result has already been published, the amended result may no longer be to the disadvantage of one or more students.
5. The Board of Examiners may make use of its statutory authority pursuant to Section 7.12b (1)(b) of the Higher Education and Research Act: *'to lay down guidelines and rules from within the framework of the education and examination regulations (...), to assess and establish the result of tests and examinations'*. The lecturer and/or course coordinator will observe the guidelines and rules laid down by the Board of Examiners.

Art. 6.2 - appeal against decisions concerning testing and marking

1. Students may submit an appeal against the decisions of examiners or the Board of Examiners to the Examination Appeals Board within six weeks of publication of the mark/alphanumerical result. See <https://students.uu.nl/en/practical-information/policies-and-procedures/complaints-objections-and-appeals/examination-appeals-board>
2. Art. 54 of the Administration and Management Regulations of UU stipulates that a formal complaint will not be dealt with if it concerns conduct against which the person involved may lodge an appeal. Since an appeal may be submitted to the Examination Appeals Board against decisions relating to testing and marking, complaints about testing will not be dealt with according to the formal complaints procedure of Utrecht University. This means that the complaints procedure described in Art. 6.1 is not formal in nature.

PARAGRAPH 7 – FINAL PROVISIONS

Art. 7.1 – annual report

1. The Board of Examiners will draw up an annual report of its activities for each academic year and send this to the dean.
2. The annual report will contain the following parts:
 - a. composition of the Board of Examiners;
 - b. monitoring of quality of the tests and examinations (final level of the graduates):
 - description of procedures and guidelines for marking and setting standards for tests; way in which it is ascertained that these are applied;
 - description of guidelines for marking and setting standards for research assignments and theses; way in which it is ascertained that these are applied;
 - way in which and number of times that the quality of the tests has been examined.
 - c. quantitative information, numbers:
 - diplomas awarded (plus number with distinction (*cum laude*));
 - requests for exemption or approval;
 - requests for a special examination dispensation;
 - cases of fraud;
 - binding study advice.
 - d. interpretation of trends and recommendations.

Art. 7.2 – amendments

1. Amendments to these regulations will be laid down by the Board of Examiners in a separate decision.
2. Any amendment to these regulations does not relate to the current academic year, unless the interests of the students are not harmed as a result in all reasonableness.

Art. 7.3 – entering into force and publication

1. These regulations enter into force on 1 September 2023.

The Board of Examiners will ensure the publication of these regulations, as well as any amendment thereto, via the internet.

APPENDIX 1

Overview of the executive panels to the Board of Examiners

Executive panel Earth Sciences (ES)

Undergraduate school (bachelor degree programme):

Aardwetenschappen

Graduate school (master degree programme):

Earth Sciences

Executive panel Sustainable Development (SD)

Undergraduate school (bachelor degree programmes):

Global Sustainability Science

Natuurwetenschap en Innovatiemanagement

Graduate school (master degree programmes):

Energy Science

Environmental Sciences

Science and Innovation

Executive panel Human Geography and Planning (HGPL)

Undergraduate school (bachelor degree programme):

Sociale Geografie en Planologie

Graduate school (master degree programmes):

Development Studies

Geographical Sciences

Human Geography

Human Geography and Planning

Spatial Planning

APPENDIX 2

Examiner's profile Board of Examiners Geosciences

The Geosciences Examination Board assesses against a number of criteria before proceeding to appoint an examiner:

- a. The nominated person has a permanent or fixed-term contract with Utrecht University.
- b. The nominated person is in possession of a BKO or an SKO.
- c. The nominee has at least a PhD degree.
- d. The nominated person is an expert in the field covered by the examination component. The Board of Examiners assesses whether the person nominated has a PhD or has other demonstrable experience in the field covered by the examination component.
- e. The nominated person has not been stripped of his examinership in the academic year preceding the intended academic year.

If a nominated person does not meet the above criteria, the Board of Examiners may make an exception with regard to the criteria referred to under a - e. An additional substantiation will have to follow with the nomination. The Board of Examiners will include the following questions in its assessment:

- Does the nominated person have sufficient knowledge of the field?
- Does the nominee have sufficient knowledge of testing?
- Is the nominated person affiliated with a (Dutch) university?
- If it concerns a bachelor's or master's thesis, who is the intended first or second examiner besides the nominated person?
- If the examinership was withdrawn, are the grounds for the removal of the examinership still present?

Adopted by the Board of Examiners on: 26 April 2021

4.5 TEACHING PERIODS COPERNICUS INSTITUTE OF SUSTAINABLE DEVELOPMENT 2023-2024

PERIOD 1	36	37	38	39	40	41	42	43	44	45		
	1	2	3	4	5	6	7	8	9	10		
	4-10/9	11-17/9	18-24/9	25/9-1/10	2-8/10	9-15/10	16-22/10	23-29/10	30/10-5/11	6-12/11		
	GEO Intro					11/10 Master open day				break		
											Blue = Dept. of SD	Red = GEO wide
PERIOD 2	46	47	48	49	50	51	52	1	2	3	4	5
	1	2	3	4	5	6	Xmas break	Xmas break	7	8	9	10
	13-19/11	20-26/11	27/11-3/12	4-10/12	11-17/12	18-24/12			8-14/1	15-21/1	22-28/1	29/1-4/2
				5/12 repair exams p1	12/12 repair exams p1							break
PERIOD 3	6	7	8	9	10	11	12	13	14	15	16	
	1	2	3	4	5	6	7	8	9	10	11	
	5-11/2	12-18/2	19-25/2	26/2-3/3	4-10/3	11-17/3	18-24/3	28-31/3	1-7/4	8-14/4	15-21/4	
	8/2 Career day			27/2 repair exams p2	5/3 repair exams p2			29/3 Good Friday	1/4 Easter Monday	12/4 break	break	
	9/2 Master Open Day											
PERIOD 4	17	18	19	20	21	22	23	24	25	26	27	28
	1	2	3	4	5	6	7	8	9	10	11	12
	22/4-28/4	29/4-5/5	6-12/5	13-19/5	20-26/5	27/5-2/6	3-9/6	10-16/6	17-23/6	24-30/6	1-7/7	8-10/7
			9/5 Ascension day	14/5 repair exams p3	21/5 repair exams p3						break	8-14/7 repair exams p4
			10/5 Break		20/5 Pentecost							

4.6 UU-TIME TABLE 2023-2024

Teaching periods

Semester I:

- Period 1: Monday 4 September 2023 – Friday 10 November 2023
- Period 2: Monday 13 November 2023 – Friday 2 February 2024

Semester II:

- Period 3: Monday 5 February 2024 – Friday 19 April 2024
- Period 4: Monday 22 April 2024 – Friday 12 July 2024

Timeslots

- A Monday morning and/or Wednesday morning
- B Tuesday morning and/or Thursday afternoon
- C Monday afternoon and/or Thursday morning
- D Wednesday afternoon, Friday morning and/or Friday afternoon
- E Monday evening, Tuesday evening, Wednesday evening, Thursday evening and/or Friday evening

Course enrolment (only via Osiris Student: www.uu.nl/osirisstudent)

Period 1 (Start courses: Monday 4 September 2023)

Course enrolment: Tuesday 30 May 2023 till Friday 23 June 2023

Late enrolment: Monday 21 August 2023 and Tuesday 22 August 2023

Period 2 (Start courses: Monday 13 November 2023)

Course enrolment: Monday 18 September 2023 till Friday 29 September 2023

Late enrolment: Monday 23 October 2023 and Tuesday 24 October 2023

Period 3 (Start courses: Monday 5 February 2024)

Course enrolment: Monday 30 October 2023 till Friday 24 November 2023

Late enrolment: Monday 22 January 2024 and Tuesday 23 January 2024

Period 4 (Start courses: Monday 22 April 2024)

Course enrolment: Monday 29 January 2024 till Friday 23 February 2024

Late enrolment: Tuesday 2 April 2024 and Wednesday 3 April 2024